

**SUMMARY OF THE BASIS FOR MDE’S DECISION TO REISSUE NONTIDAL  
WETLANDS & WATERWAYS PERMIT NO. 12-NT-0433/201261660**

NiSource/Columbia Gas Transmission LLC

Name of Applicant

12-NT-0433/201261660

Application Number

Cheryl Kerr/Phatta Thapa

Project Manager

August 8, 2015

Date of Decision

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**I. BACKGROUND: NONTIDAL WETLANDS AND WATERWAYS PERMIT NO. 12-NT-0433/201261660 ISSUED ON APRIL 21, 2014**

On November 13, 2012, NiSource/Columbia Gas Transmission LLC<sup>1</sup> (Columbia) submitted an application to the Maryland Department of the Environment (MDE or the Department) requesting authorization to conduct regulated activities as a result of its Line MB Extension Project in Baltimore County and Harford County. Specifically, Columbia proposed to construct an extension of an existing 26-inch natural gas pipeline (Line MB) for 21.1 miles from the Owings Mills Metering and Regulating (M&R) Station in Baltimore County to the Rutledge Compressor Station in Harford County (the Project). Line MB already exists south of the Owings Mills M&R Station and north of the Rutledge Compressor Station. This Project proposed to close that 21.1 mile Line MB gap from Line MB at the Owings Mills M&R Station to Line MB at the Rutledge Compressor Station.

In addition to the 21.1 miles of pipeline installation, the Project includes: (1) construction of two 26-inch mainline valves (MLVs) along the Line MB extension, to be installed parallel to the existing MLVs on Line MA; (2) installation of a new bi-directional pig launcher/receiver, including valves and fittings at the Owings Mills M&R Station; and (3) installation of a second bi-directional pig launcher/receiver at the Rutledge Compressor Station. At the time the application was submitted, Columbia proposed to cross all streams by open-cut trenching.

During the 18-month application review process, the Department pressed Columbia to avoid and minimize impacts to all regulated resources. This resulted in the project crossing fewer wetland areas than initially proposed, and reducing the extent of temporary and permanent impacts in every category of regulated resource. The Department also coordinated with the Maryland Department of Natural Resources (DNR) and the Baltimore County and Harford County Soil Conservation Districts, which resulted in further avoidance and minimization measures and increased protections to natural resources.

At the end of the review process, on April 21, 2014, the Department issued Nontidal Wetlands and Waterways Permit Number 12-NT-0433/201260660 (“the 2014 Permit”). The 2014 Permit authorized impacts to nontidal wetlands, nontidal wetland buffers, streams, and the 100-year floodplain in connection with the Line MB Extension Project:

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<sup>1</sup> As of July 1, 2015, Columbia is no longer a subsidiary of NiSource, but is a subsidiary owned by Columbia Pipeline Group, Inc. Throughout this document, the Department will refer to “NiSource/Columbia Gas Transmission LLC” and “Columbia Gas Transmission” – as “the Permittee” or “Columbia.”

The 2014 Permit imposed a number of special conditions on Columbia, including: hiring an independent environmental monitor to report to MDE (2014 Permit, Special Condition A); time-of-year restrictions for HDD and open-cut trenching crossings for Use III, Use III-P, and Use IV-P streams (2014 Permit, Special Condition D); crossing three streams by the horizontal directional drilling (HDD) method pending further geotechnical subsurface investigations (2014 Permit, Special Conditions E and F); developing and following an HDD Contingency Plan (2014 Permit, Special Condition G); prohibiting any draining of waters of the State while constructing pipeline installation through streams and nontidal wetlands (2014 Permit; Special Condition H); constructing open-cut stream crossing during periods of low or no flow and conducting weather forecasting prior to a crossing (2014 Permit, Special Condition I); implementing enhanced and advanced best management practices (BMPs) that went above and beyond MDE's typical BMPs for working in wetlands and waterways (2014 Permit, Special Conditions J and K); implementing a Didymo plan to prevent the spread of invasive species (2014 Permit, Special Condition N); planting disturbed stream banks in compliance with a Stream-Side Planting Plan (2014 Permit, Special Condition O); and conducting Tier II biological stream sampling at one location downstream of the Little Gunpowder Falls crossing (2014 Permit, Special Condition P).

## **II. JUDICIAL REVIEW CHALLENGES TO THE 2014 PERMIT**

### **A. Petitions for Judicial Review (May 21, 2014)**

On May 21, 2014, several petitioners filed Petitions for Judicial Review challenging MDE's decision to issue the 2014 Permit to Columbia. The Petitioners, the Gunpowder Riverkeeper ("the Riverkeeper"), and Kenneth T. Bosley, Phyllis Bunker Bosley, and Balama Farms, Inc. (collectively, "the Bosleys"), filed identical petitions in the Circuit Court for Harford County and the Circuit Court for Baltimore County. After the Department provided the required notice to the interested persons that the petitions had been filed, two additional petitioners filed judicial review petitions in the Circuit Court for Baltimore County – Sarah Merryman and Hayfields, Inc. The Circuit Court for Baltimore County granted Columbia's Motions to Dismiss Merryman and Hayfields for lack of standing. The Circuit Court for Harford County granted the Department's and Columbia's Motion to transfer the Harford County cases to Baltimore County so that the remaining actions were consolidated in Baltimore County.<sup>2</sup> The parties filed their memoranda and had oral arguments in February 2015.

### **B. Circuit Court for Baltimore County Opinion and Remand Order (April 30, 2015)**

On April 30, 2015, the Circuit Court for Baltimore County issued its Opinion and Order remanding the 2014 Permit to the Department for additional proceedings on three issues – public notice, historical properties, and water quality – while upholding key components to the Department's review of the application.

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<sup>2</sup> *Kenneth T. Bosley, et al. v. Maryland Department of the Environment, et al.*, Circuit Court for Baltimore County, Case Nos. 03-C-14-5417, 03-C-14-5438, 03-C-14-10780, 03-C-14-10741.

For example, the Opinion confirmed many parts of the project and the Department's review and conclusions.

- The Court determined that MDE had authority to issue the Water Quality Certification<sup>3</sup> (WQC) for this project, and that Petitioner Riverkeeper's appeal of the WQC was premature.
- The Court upheld MDE's determination, after it had compared impacts from several proposed alternative routes, that there is no practicable alternative to the project.
- The Court also found that MDE's decision to require HDD for certain stream crossings was supported by substantial evidence.
- The Court rejected the claim that MDE had incorrectly applied the law on application requirements, when MDE determined that the project will not cause or contribute to a degradation of surface or groundwater.
- The Court concluded that the Department complied with the law for the data requirements for assimilative capacity.

However, the Circuit Court remanded the matter to the Department to confirm that the application review process and the final decision to issue a permit complied with three requirements:

- Compliance with § 5-204(b) of the Environment Article;
- Compliance with State water quality regulations and the Clean Water Act; and
- Compliance with the Maryland Historical Trust Act.

The Court found that the 2014 Permit set forth "general rather than specific requirements, rendering it impossible for this Court to determine whether the Permit complies with State and federal water quality regulations. In addition, the Permit fails because it did not afford a meaningful opportunity for public notice and comment. Finally, there is not substantial evidence on the record to support MDE's determination that the Maryland Historic [Trust] reviewed the Project and determined that there would be no adverse impacts on historic properties." (Op. at 2).

### **C. Work Completed by Columbia Under the 2014 Permit Prior to the Remand**

Columbia began working shortly after obtaining the 2014 Permit, during the ongoing judicial review litigation. Columbia completed Phase 1 and Phase 2A impacts under the 2014 Permit, as well as the construction of the mitigation project at First Mine Run. Phase 1 extends approximately five miles from the Manor Road Metering and Regulating Station at MP 16.1 to the Rutledge Compressor Station at MP 21.1, and included the crossing of Little Gunpowder Falls using HDD. Phase 2A extends approximately 0.6 miles from MP 8.2 to MP 8.8.

MDE had provided Columbia with authority to proceed with the Phase 2B work in regulated areas, from MP 8.0 to MP 8.2, MP 8.8 to MP 10.6, and MP 12.4 to MP 16.0. (See MDE letter dated March 24, 2015). On April 30, 2015, the day before this Phase 2B work was to begin, the Circuit Court issued its Opinion and Order. Columbia continued to perform project work in

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<sup>3</sup> The Department issued Water Quality Certification (WQC) Number 12-NT-0433/201261660 to the certification holder, NiSource/Columbia Gas Transmission LLC, on April 14, 2014. The WQC remains in effect for this project until December 31, 2019.

uplands (i.e., non-State-regulated resources) after the Remand Order, but stopped performing work in State-regulated wetlands or waterways.

#### **D. Remaining Work To-Be-Completed by Columbia Under the 2015 Permit**

As indicated in the scope of authorized activities under the reissued Nontidal Wetlands and Waterways Permit No. 12-NT-0433/201261660 (issued to Columbia Gas Transmission on August 8, 2015) (“the 2015 Permit”), the remaining work to be completed includes continuing restoration activities for Phase 1 and Phase 2A, as well as pipeline installation for Phase 2B (approximately 5.7 miles), Phase 2C (approximately 1.7 miles), and Phase 3 (approximately 8 miles). Columbia will also install a mainline valve during Phase 2B, and a bi-directional pig launcher/receiver during Phase 3.

### **III. THE DEPARTMENT’S COMPLIANCE WITH THE REQUIREMENTS IN THE REMAND ORDER**

Although the Department and Columbia filed an appeal of the April 30, 2015 Remand Order, the Department also proceeded to follow through with the three requirements set forth in the Remand Order. To be clear, the Department did not re-review every aspect of its initial decision to issue the 2014 Permit. The Department concentrated on the three discrete issues in the Remand Order, and how best to conform a reissued permit to the law as interpreted by that Order.

For the sake of completeness, this Summary Basis of Decision duplicates much of the evaluation and discussions in the 2014 Summary Basis of Decision. However, this Summary Basis of Decision has been updated to also include the additional discussion and evaluations relevant to the Remand Order. As described in the applicable sections below, the Department has complied with all three components of the Remand Order:

- The Department has conducted a more extensive public notice process to ensure that the June 1, 2015 public notice specified that two of the remaining stream crossings may be crossed either by open-cut trenching or HDD to ensure a meaningful opportunity for public participation;
- The Department has confirmed with the Maryland Historical Trust that the project will not adversely affect the Bosleys’ historic property and, therefore, has substantial evidence in the record on this point; and
- The Department has clarified its rationale for its determination that the project will not cause or contribute to a degradation of surface or groundwater under § 5-907(a)(3) of the Environment Article, as required by the Nontidal Wetlands Protection Act.

The Department has also ensured that all of the plans and materials listed in the general and special conditions are expressly part of the 2015 Permit. These materials are available online at the following website:

[http://www.mde.state.md.us/programs/Water/WetlandsandWaterways/Pages/Columbia\\_Nontidal\\_Permit12-NT-0433.aspx](http://www.mde.state.md.us/programs/Water/WetlandsandWaterways/Pages/Columbia_Nontidal_Permit12-NT-0433.aspx).

The materials are also available for inspection at MDE's office in Baltimore and four public libraries on or after August 11, 2015:

Maryland Department of the Environment  
1800 Washington Boulevard  
Baltimore, MD 21230

\* MDE Receptionist, during regular business hours\*

Baltimore County Public Library  
Cockeysville Branch  
9833 Greenside Drive  
Cockeysville, MD 21030

Baltimore County Public Library  
Hereford Branch  
16490 York Road  
Hereford, MD 21111

Baltimore County Public Library  
Reisterstown Branch  
21 Cockeys Mill Road  
Reisterstown, MD 21136

Harford County Public Library  
Fallston Branch  
1461 Fallston Road  
Fallston, MD 21047

Finally, the Department has ensured that the Special Conditions of the 2015 Permit do not contain any open-ended unknown future actions by the Department or Columbia. In other words, all of the actions to be taken by Columbia under this 2015 Permit are known and identified in the 2015 Permit, Department-approved plans, and conditions. Any change to what the Department has reviewed and approved under the 2015 Permit will require Columbia to apply for a modification to the permit. (See, for example, 2015 Permit, Special Condition B on Erosion and Sediment Control Plans and Maintenance of Stream Flow Plans.)

While the Court's one-page Remand Order did not specifically require the Department to comply with these latter two issues (i.e., accessibility of the permit and referenced documents, and eliminating future decisions), the Opinion relies on *MDE v. Anacostia*, 222 Md. App. 153 (April 2, 2015) (currently pending before the Court of Appeals), and applies the reasoning in *Anacostia* to this nontidal wetlands and waterways permit. In *Anacostia*, the court found that the Department's draft NPDES stormwater permit to Montgomery County, was vague and referred to "decisions that have yet to be made" and materials such as implementation plans that had not yet been developed. *Id.* at 178-85. Accordingly, in light of the discussion in the Court's Opinion, the Department felt it necessary to address and resolve these two issues in addition to the three issues specifically stated in the Remand Order.

#### **IV. PROJECT PURPOSE AND NEED**

Project purpose means the principal reason for conducting all regulated activities and other activities on a project site. The Department has determined that the purpose of Columbia's Line MB Extension Project is to provide for enhanced reliability and operational flexibility of Columbia's pipeline facilities, thereby greatly reducing the risk of interruptions to markets in the greater Baltimore area. The extension of existing Line MB from the Owings Mills M&R Station to the Rutledge Compressor Station will reduce the ongoing risk of scheduled or unscheduled interruptions to service while enhancing Columbia's ability to conduct routine facility maintenance and inspections without interruptions to customer supply. (See Permit Application.) Accordingly, there is a need for the project.

Line MA has been in service since the first half of the twentieth century. With the increased demand on this line due to growth and development within the greater Baltimore region over time, Columbia needs to maintain and upgrade that line while also providing uninterrupted gas supply to its customers. The installation of a parallel second line will provide Columbia with the ability to maintain and upgrade Line MA and provide safe and reliable service to the Greater Baltimore region.

#### **V. PUBLIC PARTICIPATION PROCESS**

##### **A. The Department's Public Participation Process on the Initial Application**

Once an application is complete, the Department issues a public notice providing an opportunity to submit written comments or to request a public informational hearing. When the Columbia Application was substantially complete and placed on public notice, the project proposed open-cut trenching of all stream crossings. The Public Notice was issued jointly with the U.S. Army Corps of Engineers (the Corps) on April 15, 2013 (PN13-21). In addition, the Department arranged for the public notice to be published in *The Baltimore Sun* on April 18, 2013, *The Aegis* on April 20, 2013, *The Jeffersonian* on April 23, 2013, and *The Avenue* on May 2, 2013. The public notice was placed on the Department's website from April 15, 2013 to May 14, 2013, and was mailed to the interested persons list for this Application, and mailed to the general subscription mailing list maintained by the Department.

The notice announced the public comment period which ran from April 15, 2013 to June 7, 2013. The notice also announced two public informational hearings – one held on May 21, 2013 at Fallston High school in Harford County, and the second held on May 23, 2013 at Stevenson University in Baltimore County. The public informational hearings were conducted jointly by the Department and the Corps. Approximately 100 people attended the hearings. The Department received more than 30 written public comments during and after the public comment period. Although the public comment period closed on June 7, 2013, the Department continued to accept and consider public comments received through March 2014. During the application review process, the Department pressed Columbia to avoid and minimize impacts. As discussed later in this Summary Basis, in order to avoid and minimize impacts to regulated resources, the

Department required Columbia to evaluate the use of HDD at certain crossings, including Gunpowder Falls.

### **B. The Department's Public Participation Process Following the Remand Order**

The Bosley Petitioners asserted in the judicial review action that they would have had different comments had they known that HDD was being contemplated for the Gunpowder Falls crossing. The Department responded that the project description in the public notice complied with the requirements of § 5-204(b) (i.e., noticing open-cut trenching for stream crossings upon the substantial completion of the application), and that the Bosleys did actually participate in the process by attending a public hearing and providing comments. The Circuit Court determined that the Department's public notice on the initial application was insufficient because the Bosley Petitioners were not afforded a meaningful opportunity to comment on the project.

Following the Remand Order, the Department placed the project on public notice on June 1, 2015. The public notice explained that all but two of the remaining stream crossings would be crossed using open-cut trenching, and that two specific stream crossings – Gunpowder Falls and the Unnamed Tributaries to North Branch Jones Falls – might be crossed by either open-cut trenching or HDD. The public notice then provided the extent of the impacts (i.e., the square feet of impacts to nontidal wetlands, streams, waterways, and the 100-year floodplain) for the four scenarios that might be authorized by the Department: (1) open-cut trenching for all of the remaining stream crossings, including Gunpowder Falls and the Unnamed Tributaries to North Branch Jones Falls; (2) open cut trenching for all of the remaining stream crossings, except Gunpowder Falls; (3) open cut trenching for all of the remaining stream crossings except for the Unnamed Tributaries to North Branch Jones Falls; and (4) open cut trenching for all of the remaining stream crossings except for Gunpowder Falls and the Unnamed Tributaries to North Branch Jones Falls.

The June 1, 2015 public notice was mailed to the interested persons list for the project, which includes all contiguous property owners and appropriate local officials, as well as the Department's general subscription list (approximately 1,200 mailings in total). The public notice was published in *The Baltimore Sun* on June 2, 2015. The public notice was also placed on the Department's website. The notice announced the public comment period, which ran from June 1, 2015 to July 8, 2015. The notice also announced a public informational hearing, which was held on June 15, 2015 at the Stevenson University, Owings Mills Campus in Baltimore County. At the public informational hearing, 58 people signed the attendance sheets. The Department received approximately 100 written public comments during the public comment period. The Department reviewed and considered all of the comments received during and after the public comment period.

In conclusion, the Department has determined that its June 1, 2015 public notice complied with § 5-204 of the Environment Article, the applicable nontidal wetlands and waterways regulations, and Court's Remand Order.

### C. Public Comments

The relevant issues raised by commenters during both public comment periods are provided here.

- General: need for project not demonstrated; residents already have two pipelines in neighborhood; no benefit to residents in the area; general opposition to the project; general support for the project; easement agreement required by Columbia; sufficiency of the mitigation; construction techniques; extension of public comment period; sufficiency of the public notice; withdrawal of Department's appeal of remand decision.
- Water Use and Water Quality: impacts on drinking water; impacts on wells; impacts on septic systems; impacts on downstream drinking water sources (e.g., Loch Raven Reservoir); sedimentation/contamination of local streams; violation of federal and state water quality regulations; potential for pipeline to transport material other than natural gas; protection of aquifers; monitoring of drinking water wells; and, compliance with the Safe Drinking Water Act Assessment.
- Soils: soil compaction; impacts from erosion and sedimentation.
- Wetlands and Waterways: impacts to wetlands, waterways, and Tier II waters; potential change to floodplain due to forest clearing; vernal pool at Oregon Ridge Park; improved Best Management Practices; Hydraulic and Hydrologic Analysis for streams.
- Trout Fisheries: impacts to headwaters of Use III, natural trout streams; sedimentation; potential thermal impacts; streambed disturbance; Tier II streams; long-term physical and chemical stream monitoring; pre- and post-water quality monitoring.
- Other Environmental / Land Use: impacts from tree clearing; forest fragmentation; impacts to aquatic species, wildlife, and vegetation; impact to visual landscape; noise impacts; interruption of a property subdivision process currently underway; potential for introduction of invasive species; Phase 1 stabilization problems; construction monitoring; reforestation of temporary forest impacts; loss of tree canopy; increased protection of Baisman Run; potential impacts to wildlife; effect of the U.S Fish and Wildlife Service public notice for Northern Long-Eared Bat; potential archeological/historical resources in project area.
- Safety: proximity to residences; proximity to commercial properties; public safety during construction; impacts from blasting; potential leaks; pipeline failure; Columbia's safety record; property damage; maintenance and inspection of pipeline.
- Economic: impact on property values; impacts to use of residential and commercial properties; Columbia's landowner negotiations.
- Alternatives: use alternatives such as the Transcontinental (Transco) Gas Pipeline or Baltimore Gas and Electric (BGE) pipeline routes; replace existing pipeline; use route to avoid neighborhoods; share capacity with Transco or BGE; use northern routes.

It is important to note that the Department's decision is confined to the issues relevant to the nontidal wetlands and waterways statutes and regulations and discussed in detail in the

appropriate sections below. Certain issues raised during the public participation process are not directly within the scope of the Department's review. For example, safety issues fall under the purview of the Federal Energy Regulatory Commission (FERC), and were considered and addressed by FERC in the Certificate of Public Convenience and Necessity (issued by FERC on November 21, 2013) (the Certificate).

## **VI. APPLICABLE STATUTES AND REGULATIONS**

An applicant submits one application to the Department encompassing its request for all proposed impacts to nontidal wetlands, nontidal wetland buffers, the 100-year nontidal floodplain, and streams. The Department considers the project under the Nontidal Wetlands Protection Act and the Waterway Construction Act. If the Department determines that the applicant has met the requirements of the relevant statutes and implementing regulations for the proposed project impacts, the Department issues one permit for all of those impacts.

### **A. Nontidal Wetlands Protection Act and Regulations**

Under criteria provided in Title 5, Subtitle 9 of the Environment Article, Annotated Code of Maryland and COMAR 26.23, the Department evaluates permit applications for projects proposing to conduct a regulated activity within a nontidal wetland or nontidal wetland buffer. The Department may not issue a nontidal wetlands permit for a regulated activity unless the Department finds that the applicant has demonstrated that:

- The proposed project, which is not water-dependent, has no practicable alternative;
- The regulated activity will first avoid and then minimize adverse impacts to nontidal wetlands and buffers;
- The regulated activity does not cause or contribute to a degradation of surface or ground waters; and
- The proposed project is consistent with any Department-approved comprehensive watershed management plan. (Note: This criteria is not applicable here because there are no Department-approved comprehensive watershed management plans for the watersheds where the Project is taking place.)

### **B. Waterway Construction Act and Regulations**

Under criteria provided in Title 5, Subtitle 5 of the Environment Article, Annotated Code of Maryland and COMAR 26.17.04, the Department evaluates permit applications for projects that propose to change the course, current, or cross-section of a stream or body of water within the State including any changes to the 100-year nontidal floodplain of free-flowing waters. (Free-flowing waters do not include State or private wetlands or areas subject to tidal flooding.) As the basis for approval, denial, or modification of a waterway construction permit, the Department shall weigh all public advantages and disadvantages. The Department shall grant the permit, if project approval is in the best public interest and the plans for the project provide for the greatest feasible utilization of the waters of the State, adequately preserve the public safety, and promote the general welfare. The Department may deny a waterway construction permit if the

Department determines that the proposed construction is inadequate, wasteful, dangerous, impracticable, or detrimental to the public interest.

## **VII. APPLICATION CRITERIA EVALUATED**

### **A. The Project Has No Practicable Alternative.**

For projects such as this one, that are not water-dependent, the Department may not issue a permit for a regulated activity unless the Department first finds that the applicant has demonstrated that the proposed project has no practicable alternative. Practicable means available and capable of being done after taking into consideration costs, existing technology, and logistics in light of the overall project purpose. Under the practicable alternatives analysis, the Department shall consider:

- Whether the basic project purpose cannot be accomplished using one or more sites in the same general area as the proposed project that would avoid or result in less adverse impacts to nontidal wetlands;
- Whether the applicant has made a good faith effort to accommodate site constraints that caused an alternative to be rejected; and
- Whether the regulated activity is necessary for the project to meet a demonstrated public need.

Columbia first performed an alternative site analysis to support its application to FERC for a Certificate under the Natural Gas Act. Based on Columbia's evaluation, FERC concluded that Columbia's Proposed Route constituted the most feasible alternative for accomplishing the demonstrated purpose and need for the project. FERC also concluded that the preferred method of crossing all waterways was using the open-cut trenching method.

Columbia submitted the same alternative site analysis to the Department when it applied for this wetlands and waterways permit. (See Permit Application, Resource Report 10.) In that initial analysis, Columbia evaluated:

- The no-action alternative;
- System alternatives, such as replacing the existing Line MA or using other existing natural gas transmission lines in the vicinity of the Project; and
- Numerous major and minor route alternatives, such as:
  - Baltimore Gas and Electric (BGE) (MP 17.8 to MP 20.8)
  - Old Manor Court (MP 5.0 to MP 5.9);
  - Owings Mills Alternatives (MP 1.4 to MP 8.2);
  - North Alternatives (MP. 16.5 to MP 17.7).

Columbia's Resource Report concluded that the Proposed Route "most feasibly meets the Project's purpose and need and, to the greatest extent, minimizes the overall impacts to the environment."

During the application review process for this Permit, the Department received oral and written comments concerning additional alternate alignments for the pipeline. The Department received a report, initially submitted by a commenter to FERC, that evaluated an alternate alignment for the Harford County portion of the Project. The Department and the Corps also met onsite with the Woodsbrook Community Association and the Hess Road Coalition to discuss their specific concerns with the Proposed Route and the merits of alternate routes. As a result, the Department asked Columbia to further consider four alternate alignments to determine whether any of these alternate alignments would result in fewer wetland and waterway impacts while still achieving the project purpose. (See MDE letter dated August 2, 2013.) Columbia evaluated the following four alignments:

- Hess Road Coalition Alternative #1 (HRC-1);
- Hess Road Coalition Alternative #2 (HRC-2);
- Modified Landis Alternative (MLA or COE-1); and
- MDE/Corps Alternate.

Columbia provided an analysis of these alternate alignments on September 18, 2013, October 28, 2013 and November 1, 2013. The Department discussed these submissions with Columbia at a Joint Agency Meeting on December 3, 2013 and requested additional detailed information in order to directly compare the impacts of each alternative to the Proposed Route. In response to this request, Columbia provided MDE with a revised analysis on December 13, 2013.

None of the four alternatives resulted in significantly less impacts to wetlands or waterways, and, in fact, the wetland and waterway impacts from the four alternatives were similar to or greater than the Proposed Route. In other words, the alternatives only shifted impacts from one area to another; they did not reduce the environmental impacts. Each of the four alternatives also presented other considerable problems. For example, HRC-1 would impact three more septic reserve areas than the Proposed Route, HRC-2 and MLA had numerous constructability issues that are not present with the Proposed Route, and the MDE/Corps Alternative would result in greater impacts to residential properties than the Proposed Route. (See Columbia's Revised Analysis, dated December 13, 2013.)

The Department was satisfied with the analysis provided by Columbia and determined that Columbia made a good faith effort to accommodate site constraints that caused an alternative to be rejected. Given that the purpose of this Project is to increase system reliability and operational flexibility, that upgrading an aging segment of the existing natural gas supply pipeline will ultimately provide benefits to public safety and welfare, and that the alternative site analysis demonstrated that an alternative alignment would not result in less adverse impacts to wetlands and waterways, the Department determined that the proposed regulated activity has no practicable alternative.

## **B. The Regulated Activity Will Avoid and Minimize Adverse Impacts to Wetlands and Waterways.**

After the Department is satisfied that there is no practicable alternative to the proposed regulated activity, an applicant must demonstrate that adverse impacts to nontidal wetlands, their regulated buffers, waterways, and the 100-year floodplain are necessary and unavoidable.

### *i. Pre-Application Avoidance & Minimization*

Even before applying to the Department for this Permit, Columbia had undertaken certain avoidance and minimization measures. First, Columbia re-routed the alignment at MP 16.55 to avoid Gunpowder Falls State Park, which avoided impacts to key brook trout habitats and several headwater tributary feeders. (See Maryland Department of Natural Resources (DNR) letters dated September 7, 2012 and November 19, 2012.) Second, the majority of the Line MB expansion is on existing rights-of-way and areas adjacent to existing rights-of-way. With the exception of the alignment re-route around Gunpowder State Park, the Project is not creating new rights-of-way. Third, as a result of pre-application site visits conducted with Columbia, MDE, and the Corps, Columbia reduced the width of the construction right-of-way from 100-feet wide to 75-feet wide for all proposed wetland and waterway crossings.

### *ii. Avoidance and Minimization During Application Review*

In its Application, Columbia proposed to cross 53 streams using the open-cut crossing method and impact 44 nontidal wetland areas. Throughout the application review process, the Department pressed Columbia to reduce its impacts even further. As a result, Columbia was able to eliminate some impacts altogether. The Project will cross fewer streams and impact fewer wetland areas than initially proposed in the Application. Using the HDD crossing method avoids even more impacts to regulated resources. (A detailed discussion of HDD is below.)

In addition to eliminating impacts, Columbia will implement a number of measures to minimize its impacts during and after construction of the pipeline. For example, Columbia will use temporary construction road access bridges to span streams and nontidal wetland areas for construction access. Columbia will use timber mats in regulated areas and not drive directly on or through nontidal wetlands or streams. Columbia will place its construction material and equipment staging locations outside of nontidal wetlands and streams.

The Department has ensured that the Erosion and Sediment Control (ESC) plans and the Maintenance of Stream Flow (MOSF) plans have incorporated the Department's best management practices (BMPs) for work in regulated areas. (See 2015 Permit, Special Conditions B and I). The Department also required Columbia to implement enhanced BMPs for crossing streams in the Tier II watershed (Little Gunpowder Falls Watershed). Columbia went above and beyond this requirement by applying the enhanced BMPs to all of the open-cut crossings for the entire length of the Project. The Department has ensured that these enhanced BMPs are reflected in the ESC and MOSF plans reviewed and approved by the Department. (See 2015 Permit, Special Conditions B and J.) In addition to the above, Columbia worked with

the Department to develop advanced BMPs for work at Baisman Run and the Unnamed Tributaries to Baisman Run. These advanced BMPs have also been incorporated into the ESC and MOSF plans. (See 2015 Permit, Special Condition B and K.)

Through these measures, Columbia reduced the extent of temporary and permanent impacts in every category of regulated resources. Temporary and permanent nontidal wetland impacts were reduced by about 7,000 square feet (sf) – from approximately 238,000 sf (Application) to approximately 231,000 sf (2015 Permit). Similarly, temporary and permanent nontidal buffer impacts were reduced by about 6,000 sf – from about 177,000 sf (Application) to about 171,000 sf (2015 Permit). The extent of temporary stream impacts was reduced by about 1,200 linear feet (lf) – from about 5,600 lf (Application) to about 4,400 lf (2015 Permit). Finally, the temporary 100-year nontidal floodplain impacts were reduced by about 27,000 sf – from about 212,000 sf (2013 Public Notice) to about 185,000 sf (2015 Permit).

### *iii. Horizontal Directional Drilling*

In addition to all of the avoidance and minimization efforts detailed above, the Department thoroughly considered whether streams should be crossed by open-cut trenching or HDD. During the FERC Certificate process, Columbia proposed to cross all waterways using open-cut trenching. FERC's Certificate concurred with the Environmental Analysis and authorized open-cut trenching at all stream crossings. During the FERC process, at the request of the Department and the Corps, Columbia evaluated the impacts from HDD at six crossings. That analysis concluded that there was no measurable benefit for HDD over the proposed open-cut method. (See EA; Resource Report 2.) Trenchless pipeline construction methods (e.g., HDD) are generally considered in areas where conventional construction is not feasible or to minimize impacts to sensitive resources (e.g., locations with identified rare, threatened, or endangered species, cultural resources, and major waterway crossings).

During the Application review process for this Permit (prior to the Remand Order), the Department pressed Columbia to further evaluate the use of HDD at certain stream crossings. At the outset, the Department asked Columbia to evaluate HDD at six crossings: Gunpowder Falls, Little Gunpowder Falls, Beaverdam Run, Gwynn's Falls (two), and Western Run. After DNR provided input on the Project to MDE, this list was increased. In MDE's letter dated May 10, 2013, the Department relayed DNR's concerns about the crossing methods: "the major concern[] is that proposed trenching of sensitive and important headwater streams, potentially resulting in inadvertent and direct sediment discharges, poses the greatest threat to these critically important waters." (See MDE letter dated May 10, 2013; see also DNR's letter dated April 17, 2013.) DNR's request consisted of the six crossings previously evaluated by Columbia as well the following additional crossings: North Branch Jones Falls mainstem and tributaries; Baisman Run; Unnamed Tributaries to Baisman Run; Oregon Branch; Carroll Branch; Parker Branch; and Yellow Branch.

During a joint agency meeting on June 5, 2013, MDE, DNR, the Corps, and Columbia discussed stream crossing methods. Columbia presented preliminary HDD analysis and discussed additional impacts that would result from the use of HDD. Even though some adverse environmental impacts are avoided with HDD, other HDD impacts include: significant impacts

to business and residences; additional forest clearing for pipe-stringing and pull-back activities; length of time for construction; potential inadvertent loss of drilling returns (frac-out); significantly more noise and truck traffic; potential impacts to drinking wells, septic fields, and residential structures; and increased cost. After this meeting, DNR conducted site visits with Columbia and inspected the streams for which DNR had requested an evaluation of HDD. Subsequently, MDE requested that Columbia further evaluate the following nine stream crossings for HDD:

- #1 – Unnamed Tributaries to North Branch Jones Falls (MP 2.1)
- #2 – North Branch Jones Falls and Unnamed Tributary to North Branch Jones Falls (MP 2.9)
- #3 – Unnamed Tributaries to North Branch Jones Falls (MP 3.7)
- #4 – Beaverdam Run (MP 5.3)
- #5 – Unnamed Tributaries to Baisman Run (MP 6.4)
- #6 – Baisman Run (MP 6.7)
- #7 – Western Run (MP 9.7)
- #8 – Gunpowder Falls and Tributaries to Gunpowder Falls (MP 11.6); and
- #9 – Little Gunpowder Falls (MP 17.7).

On June 18, 2013, Columbia provided its initial evaluation of HDD for the nine stream crossings. Over the course of the next several months, Columbia provided a more refined analysis to compare the impacts that would result from HDD and open-cut trenching. After another joint agency meeting with MDE, DNR, the Corps, and Columbia on December 3, 2013, Columbia provided its revised HDD alternatives analysis to the Department. (See Columbia letter dated December 19, 2013.) After the Department's consideration of that analysis, the Department notified Columbia on February 20, 2014 that it would require HDD at the following three crossings, subject to geotechnical investigations:

- #3 – Unnamed Tributaries to North Branch Jones Falls (MP 3.7)
- #8 – Gunpowder Falls (MP 11.6); and
- #9 – Little Gunpowder Falls (MP 17.7).

For the remaining six crossings, DNR conducted an additional independent analysis to re-assess the conclusions in Columbia's December 19, 2013 report. DNR provided its reassessment to MDE in February and March 2014. After analyzing all of the information provided, the Department determined that open-cut trenching was the most appropriate method to cross the remaining six crossings. The Department did not require HDD at those six crossings because the negative impacts associated with HDD, including the need for larger workspaces, longer construction schedules, and increased noise, traffic, and costs, outweigh the environmental benefits of HDD. HDD activities would have resulted in greater environmental impacts (i.e. additional forest clearing or wetland or waterway impacts due to entry and exit pits or pipe stringing and pull-back areas) than open-cut trenching. HDD activities at these locations would cause significant adverse impacts to residential properties. Open-cut trenching will result in minimal stream impacts, and significantly less residential impacts.

Accordingly, the 2014 Permit authorized open-cut trenching for all stream crossings, except for the three identified above (Unnamed Tributaries to North Branch Jones Falls, Gunpowder Falls, and Little Gunpowder Falls). The 2014 Permit required the use of HDD at the three crossings, subject to further geotechnical investigations at each crossing. (2014 Permit, Spec. Cond. F).

*iv. Geotechnical Investigations*

The Department initially required the use of the HDD stream crossing method for the Unnamed Tributaries to North Branch Jones Falls, Gunpowder Falls, and Little Gunpowder Falls because, overall, the environmental benefits of HDD outweigh the negative impacts associated with HDD, including the need for larger workspaces, longer construction schedules, and increased noise, traffic, and costs. Specifically, HDD activities avoided multiple regulated resources (i.e., more than one stream and/or wetlands), and did not increase environmental impacts (i.e., additional forest clearing or wetland or waterway impacts due to entry and exit pits or pipe stringing and pull back areas).

As required by Special Condition F in the 2014 Permit, Columbia provided the Department with the following three reports:

- *Geotechnical Investigation, NiSource Gas Transmission and Storage: Caves Valley Crossing MP 3.7;*
- *Geotechnical Investigation NiSource Gas Transmission and Storage: Gunpowder Falls at MP 11.6; and*
- *Geotechnical Investigation for NiSource Gas Transmission and Storage: Little Gunpowder Falls at MP 17.7.*

The Department also received technical feasibility reports from Columbia for these three HDD crossings:

- *Horizontal Directional Drilling (HDD) Crossing MP-3.7, Un-Named Tributaries to North Branch Jones Falls Summary* (June 17, 2015);
- *Horizontal Directional Drilling (HDD) Crossing MP-11.6, Gunpowder Falls* (June 17, 2015); *and Horizontal Directional Drilling (HDD) Crossing MP-17.7, Little Gunpowder Falls* (July 21, 2015).

The geotechnical report data and technical feasibility analysis confirmed that the Little Gunpowder Falls crossing was considered feasible based upon rock quality (RQD), elevation differential issue, HDD construction site layout and product pipe pullback/installation. The Department confirmed this assessment with the Maryland Geologic Survey.

In contrast to the data and analysis for Little Gunpowder Falls, the RQD and site layout for the crossings of Gunpowder Falls and the Unnamed Tributaries to North Branch Jones Falls demonstrate a high risk for failure. This high risk of failure may result in: inadvertent drilling fluid returns, poor cuttings removal, stuck drilling tool and hole collapse. The test boring data results demonstrate that the crossings are marginally feasible and, as such, the Department determined that the HDD method should not be used for these two crossings, but that open-cut trenching would better protect environmental resources.

In order to facilitate the Department's decision and to further minimize impacts to regulated areas, a site visit was conducted on June 16, 2015 to Gunpowder Falls and on July 9, 2015 to the Unnamed Tributaries to North Branch Jones Falls. As a result of the June 16, 2015 site visit, Columbia determined it could relocate the proposed alignment of Line MB closer to the existing Line MA at Gunpowder Falls and reduce the limits of disturbance to avoid stream bank impacts. During the site visit to the Unnamed Tributaries to the North Branch Jones Falls, Columbia similarly made adjustments to the alignment for Line MB, reduced impacts within the limits of disturbance by placing mats over all of the streams and wetlands, and will limit tree trimming to keep the streams shaded.

*v. Summary and Conclusion*

In conclusion, the Department was satisfied with Columbia's submissions regarding avoidance and minimization of regulated resources. Given that Columbia avoided regulated resources by reducing the number of stream crossings and the number of wetland areas that would be impacted by the Project, given that the use of HDD, where appropriate, avoids additional impacts to regulated resources, and given that Columbia minimized its impacts by incorporating all of the guidelines, standards, and BMPs requested by the Department, the Department is satisfied that the Columbia has avoided and minimized impacts to regulated resources.

**C. The Regulated Activity Does Not Cause or Contribute to a Degradation of Surface or Ground Waters.**

Under § 5-907(a)(3), the Department may not issue a nontidal wetland permit for a regulated activity unless the Department finds that the applicant has demonstrated that the regulated activity will not cause or contribute to a degradation of groundwaters or surface waters. §5-907(a)(3); COMAR 26.23.02.04A(3). To meet this "no-degradation" standard, the regulations provide that a regulated activity may not:

- (1) As determined by the Department, cause an individual or cumulative effect that degrades:
  - (a) Aquatic ecosystem diversity, productivity, and stability;
  - (b) Plankton, fish, shellfish, and wildlife;
  - (c) Recreational and economic values; and
  - (d) Public welfare; or
  
- (2) As determined by the Department, cause an individual or cumulative effect that:
  - (a) Violates any applicable State water quality standard, the Environment Article of the Annotated Code of Maryland, or the Clean Water Act;
  - (b) Degrades surface and ground water quality.

COMAR 26.23.02.06A.

For the majority of projects, the Department is satisfied that a project will not cause or contribute to a degradation of groundwaters or surface waters under COMAR 26.23.02.06A(1) or (A)(2) if the applicant (1) implements the Department's best management practices for working in

regulated areas; (2) obtains and complies with County-approved ESC plans; (3) obtains and complies with County-approved stormwater management plans; and (4) if applicable, incorporates any requirements of the Department's Science Services Administration concerning work in Tier II watersheds. This combination of practices, if properly implemented, will ensure that conditions before regulated activities take place are the same as or comparable to conditions after the regulated activities have been completed and the areas are fully restored.

The Department's best management practices, *Best Management Practices for Working in Nontidal Wetlands, Wetland Buffers, Waterways, and 100-Year Floodplains*, are specifically designed to control soil loss and reduce water quality degradation caused by nutrients, animal waste, toxics, and sediment. In addition, the best management practices are also specifically designed to minimize adverse impacts to the surface water and groundwater flow and circulation patterns, and to the chemical, physical, and biological characteristics of a nontidal wetland. Similarly, erosion and sediment measures and stormwater management practices are designed to prevent the degradation of ground and surface water quality. The 2011 Standards and Specifications for Soil Erosion and Sediment Control are incorporated by reference into State regulations and serve as the official guide for erosion and sediment control principles, methods, and practices.

Finally, Maryland is required by the Clean Water Act to develop policies, guidance, and implementation procedures to protect and maintain existing high quality waters such as Tier II waters and prevent degradations of existing water quality conditions. Tier II waters have chemical or biological characteristics that are significantly better than the minimum water quality requirements. All Tier II designations in Maryland are based on having healthy biological communities of fish and aquatic insects. Enhanced best management practices are required for all open-cut stream crossings upstream of a Tier II stream segment in order to meet the State's antidegradation policy and to protect and maintain existing high quality waters.

By implementing the Department's BMPs, obtaining County-approved ESC plans, and incorporating the Tier II requirements identified by the Department, Columbia's project complies with COMAR 26.23.02.06 and will not, as determined by the Department, cause or contribute to a degradation of groundwaters or surface waters or violate any applicable State water quality standard. Here, Columbia went significantly further than the minimum measures required by the Department.

*i. Best Management Practices Implemented by Columbia*

The Department has verified that all of the measures described here have been incorporated into the ESC plans and MOSF plans approved by the Department.

Not only is Columbia implementing the Department's *Best Management Practices for Working in Nontidal Wetlands, Wetland Buffers, Waterways, and 100-Year Floodplains*, but Columbia is also implementing Enhanced Best Management Practices for work in regulated areas (See Special Conditions I, and J.) The Department requires enhanced best management practices for stream crossings upstream of a Tier II steam segment because these BMPs are specifically designed to protect and maintain existing high quality waters. For example, limited disturbed

areas in order to maximize preservation of existing vegetation; expanding stream buffers to at least 100 feet; using super silt fencing near stream and wetland resources; limiting the extent and duration of disturbance through project phasing; accelerated scheduling; and, streamside buffer planting to accelerate vegetative stabilization along streambanks and provide shading to minimize fluctuations of water temperature. By implementing the enhanced BMPs across the entire project, for all open-cut crossings, the Department is assured that existing water quality for all streams crossed during pipeline installation will be protected and maintained.

Although Baisman Run is not a designated by the Department as a Tier II water, it is designated as a sentinel stream and its protection is essential. A watershed analysis looks for reference streams, known as sentinel streams, that can be used in the development of Maryland Biological Stream Survey (MBSS) data. These streams should be located in areas that have the least amount of anthropogenic disturbance and must remain in this stable situation into the future. These streams are used to refine the indices of biotic integrity (IBI scores). They are sampled every year and the data is used to determine if events have occurred during the sampling year that may have negatively or positively influenced IBI scores. Based on this annual sentinel score analysis, DNR can quantify the amount of impact a significantly wet or dry year can have on the IBI scores. The survey results are a means to normalize IBI scores statewide.

The Baisman Run watershed (headwaters, streams, and tributaries) is situated within Oregon Ridge Park. It has minimal and predictable human impacts. Because the Baisman Run stream reflects the quality of a stream with minimal watershed impacts, it is considered a reference or sentinel stream. The Department developed a set of advanced BMPs for Columbia to incorporate into its construction and operation plans for the crossings of Baisman Run and the Unnamed Tributaries to Baisman Run. These advanced BMPs are site-specific and even more protective of the waterway than the enhanced best management practices used for Tier II waters. (2015 Permit, Special Condition K.)

For example, the Department is requiring redundant controls: two lines of super-silt fence (SSF) or a line of SSF and a line of silt fence on both sides of Baisman Run. To protect fish species, exclusion netting will be installed upstream in a natural pool with riffle. Columbia will sweep and scare fish downstream of the work area. Stream channels shall be restored with native cobble as soon as possible so that the stream will be restored to pre-construction condition. Additionally, the Sequence of Construction for Baisman Run Watershed has been developed to further minimize construction impacts above and beyond those required by the *2011 Maryland Standards and Specifications for Soil Erosion and Sediment Control*.

Finally, in addition to all of the best management practices, the method that Columbia is using to open-cut trench will ensure that there is no degradation to surface or groundwaters. (2015 Permit, Special Condition F.) The dry open-cut, dam-and-pump crossing method is designed to control and prevent impacts to water quality and aquatic resources. It minimizes the duration of the construction process associated with stream crossings and allows excavation, pipe installation, and restoration to occur quickly and under dry conditions. (Assessment of Water Quality Impacts of the Line MB Extension Project, August 5, 2015.)

*ii. Tier II Antidegradation Review*

In this case, the Project crosses the Little Gunpowder Falls Watershed that drains to a Tier II stream segment. As a result, the Department required Columbia to implement enhanced best management practices at all of the crossings upstream of the Tier II stream segment. During the pre-application process for this Permit, the Department provided a preliminary list of enhanced best management practices for Columbia to incorporate into the Project plans in order to protect high quality waters. (See MDE email dated March 20, 2012.) These practices include, for example, limiting disturbed areas in order to maximize preservation of existing vegetation, accelerating stabilization in order to disturb no more area than can be stabilized by the end of the workday, expanding stream buffers to at least 100 feet, and using super silt fencing near stream and wetland resources.

During its review of the Project, the Department asked Columbia to evaluate a trenchless stream crossing method for Little Gunpowder Falls. Little Gunpowder Falls is considered a major crossing because it is a perennial stream that is more than 10-feet wide, is a Use III water, and is in close proximity to the designated Tier II stream segment. Accordingly, the Department asked Columbia to document whether technical or engineering issues existed which would prevent Columbia from being able to cross by HDD in order to avoid any impacts to the downstream Tier II stream segment. Columbia provided this analysis in its Little Gunpowder Falls-Comprehensive Analysis on Stream Crossing Methodology (dated June 18, 2013). The Department determined that this analysis was insufficient to justify open-cut trench for Little Gunpowder Falls. After evaluating Columbia's geotechnical data (on November 1, 2013), the Department's decision to require HDD at this crossing remained unchanged. This crossing was completed without incident the Fall of 2014.

In addition to enhanced best management practices for the Tier II watershed, Columbia is required to perform pre- post-construction biological monitoring in Little Gunpowder Falls and provide the data and a narrative report to the Department. See 2015 Permit, Special Condition O.

The Department raised concerns about the potential of the Project to cause permanent soil compaction along the work corridor and near-stream work areas, as well as concerns regarding average pipe depth. (See MDE letter dated August 2, 2013.) The Baltimore County Soil Conservation District (SCD) also notified the Department that, based on its review of the Phase 1 ESC plans, the SCD specifically requested that Columbia address compaction for the haul and access roads and identify other measures to ensure vegetative stabilization within the work areas. (See SCD email dated September 12, 2013.) Permanent soil compaction limits vegetation growth, causes loss of existing vegetation, thus increasing the potential for erosion and sedimentation of adjacent waterways. Columbia identified measures to address these concerns (see Columbia letters dated August 2, 2013 and December 9, 2013), and the Department is satisfied that these measures will minimize the negative effects of soil compaction to the greatest extent feasible and that no long term adverse impacts should occur.

*iii. Frac-Out Contingency Plan*

Because there is the potential for frac-outs to occur during HDD activities, which could cause the release of drilling mud, containing bentonite (fine clay) and additives, into the waterways, the Department required Columbia to develop a Frac-Out Contingency Plan. Columbia's plan, which MDE approved, includes on-site routine visual monitoring each day during HDD activities and, in the event of a frac-out, control and cleanup protocols. Columbia will notify MDE and the Corps in the event of any inadvertent release of drilling materials or frac-out. (2015 Permit, Special Condition E.)

*iv. Hydrostatic Testing Discharges*

The Department requested information about the appropriation of water required for the hydrostatic testing of the pipe, location and method of discharge of the hydrostatic test water, and the need for a National Pollutant Discharge Elimination System (NPDES) General Permit (GP) for discharges from Tanks, Pipes, and Other Liquid Containment Structures at Facilities other Than Oil Terminals (GP No. 11HT). (See MDE letter dated December 22, 2012.) Columbia's response provided a detailed plan for appropriation of the hydrostatic testing water. Columbia will discharge the hydrostatic test water to an approved dewatering structure located in well-vegetated upland areas. The discharge points are shown on the ESC plans. On August 2, 2013 the Department issued a coverage to Columbia under the 11HT for hydrostatic testing associated with this project.

When the Nontidal Wetlands Division reviewed the discharge permit, it determined that the discharge permit's pH limit exceeded water quality standard. Excessive pH levels could cause adverse impacts to trout waters. Therefore, the Nontidal Wetlands Division requested that the pH limit be revised to meet water quality standards. On December 16, 2013 and September 23, 2014, Columbia obtained modifications to their coverage under 11HT. General Condition N "Protection of Water Quality" of the discharge permit requires water quality criteria to be based on limits for pH of 6.5 to 8.5, thus meeting water quality standards.

To further protect water quality during hydrostatic testing discharges, DNR provided Columbia with additional BMPs on December 6, 2013. Columbia incorporated these BMPs into the ESC plans to the maximum extent possible. (See MDE's letter dated December 9, 2013.)

*v. Comments Related to Water Quality*

Several commenters stated that MDE should require monitoring of physical or chemical characteristics of the streams before and after construction. The nontidal wetlands statute and regulations do not require that the Department impose monitoring as a condition of a wetlands and waterways permit. Although monitoring may provide information on the effectiveness of the implementation of the BMPs, monitoring in and of itself does not prevent a degradation to regulated resources or minimize adverse effects on regulated resources. The Department believes that the extensive special conditions required by this 2015 Permit (for example, the enhanced BMPs, the advanced BMPs, requiring an Independent Environmental Monitor) are the

most effective way to ensure that pre-existing conditions are maintained after the completion of the regulated activities.

A commenter asserted that unanticipated releases from Prettyboy Reservoir may increase sedimentation in downstream waters during the construction of the Project. One special condition in the Permit requires Columbia to contact Baltimore City prior to construction. (See 2015 Permit, Special Condition C.) Another special condition requires Columbia to conduct weather forecasting for several days in advance of starting any stream crossing work so that in-stream work is scheduled around any forecasted storm events. (See 2015 Permit, Special Condition F.) With these special conditions, the Department does not anticipate that any adverse effects will occur as a result of unanticipated releases from Prettyboy Reservoir.

Commenters were concerned about environmental impacts that could result from a pipeline rupture. In an unlikely event of a rupture, natural gas would dissipate into the air, because it is lighter than air. Natural gas would not sink into the ground and, therefore, would not affect wetlands, waterways, groundwater or drinking water wells.

In addition, commenters asserted that wells and water supply could be adversely impacted during the construction of the Project. Columbia has identified only a single well within the construction workspace/limits of disturbance. Under FERC's Certificate, Columbia is required to test any at-risk wells before and after construction and Columbia is responsible for replacing or repairing any damaged wells. Furthermore, Columbia altered the alignment of the pipe to increase the distance of the pipe from the well to 18 feet and increased the distance of the work space from the house from 9 feet to 15 feet. Columbia will use a specialized construction method (i.e., stove pipe method) which is typically used in dense residential areas, and will use a narrower construction right-of-way at this location. Finally, to protect this well, Columbia will clearly mark it and install plastic Jersey barriers around the drinking water well prior to construction. Construction at this property was completed in 2014 with no adverse to the drinking water well. Furthermore, the Department does not anticipate any impacts to groundwater as a result of this Project.

Commenters asserted that the construction of the Project could impact residential septic systems and septic reserve areas, and negatively affect groundwater. Columbia has identified only a few properties where the septic reserve areas would be impacted by the construction of the pipeline and workspace. Under FERC's Certificate, Columbia is required to replace or repair any damaged septic systems.

A commenter asserted that the trench, in which the pipe is placed, could serve as a pathway for the flow of contaminated liquids into nearby drinking wells. There is only one set of septic system drainage lines within the construction work area along the portion of the project where Line MB will not be co-located with Line MA. The septic system is 36 feet north of the pipeline centerline and the drainage lines will not be bisected by the pipeline. For this property owner, Columbia will perform testing pre- and post-construction of the septic system to ensure it is not damaged. Columbia will also implement protection measures such as the installation of trench breakers during construction to ensure the drainage lines are not damaged, thereby effectively eliminating the potential for septic effluent to travel along the trench.

The Department does not anticipate any impacts to septic systems, or septic reserve areas, or groundwater.

The Department received comments asserting that the Project could further degrade downstream waters during construction and operation, including Loch Raven Reservoir which provides drinking water to Baltimore City residents. The Department does not anticipate this Project having any impacts on downstream water supplies. Regardless, a Special Condition in the Permit will require Columbia to invite Baltimore City to participate in all pre-construction meetings. (See 2015 Permit, Special Condition C.) Additionally, a special condition requires weather forecasting prior to all stream crossing activities to prevent flooding of an active stream crossing. (See 2015 Permit, Special Condition F.)

A public comment was received concerning adequacy of construction over-sight. The Department has selected an independent environmental monitor to ensure compliance with the scope and conditions of the permit. The independent environmental monitor shall report directly to the Water Management Administration's Compliance Program. (See 2015 Permit, Special Condition A.)

During the public comment period, comments were received regarding inadequate vegetative stabilization by Columbia during Phase 1 pipeline construction. The Administration's Compliance Program is addressing any stabilization concerns that affect the activities authorized by the permit. For vegetative stabilization issues in upland areas, Columbia is addressing those concerns with each individual property owner.

#### *vi. Summary and Conclusion*

Given all of the measures incorporated into the plans and specifications for this Project (e.g., enhanced and advanced BMPs that have been incorporated into the erosion and sediment controls for all open-cut stream crossings, Tier II measures to avoid soil compaction, advanced BMPs for Baisman Run) as well as the additional requirements and special conditions to which this Project is subject (e.g., frac-out contingency plan, NDPES permit for hydrostatic testing discharges), the Department is satisfied that the Project will not cause or contribute to a degradation of surface or groundwater and that COMAR 26.23.02.06 will be met. In addition, as required by Special Condition A of the 2015 permit, an Independent Environmental Monitor will be on-site during all construction activities in regulated areas to ensure implementation of the permit and all of its special conditions.

To develop an adequate monitoring plan, 4 – 6 months would be required. Additionally, contracts would need to be secured for monitoring work, lab work and the data analysis work before the Department could approve the plan. Furthermore, if the Department required the minimum expected baseline data collected, the last samples would not be collected until the end of 2016. If the monitoring plan is not adequately developed the data collected may not be useful.

#### **D. The Project Complies With All Relevant Waterway Construction Regulatory Criteria.**

Although the standards are articulated differently in the Nontidal Wetlands Protection Act and the Waterway Construction Act, the objective of both statutes is the same – to protect the regulated resources from unnecessary adverse impacts. The purpose and need for the Project, the practicable alternatives analysis, and the avoidance and minimization analysis described above are applicable to both wetlands and waterways impacts and, therefore, will not be duplicated in this section. This section discusses only the waterway-specific criteria the Department considered and evaluated for this Project.

##### *i. Hydrologic and Hydraulic Analysis*

For many projects, an applicant is required to submit hydrologic and hydraulic computations to establish the hydraulic effects of a proposed project, including the effect to 100-year frequency flood elevations. For this Project, however, the Department did not require Columbia to submit a detailed hydrologic and hydraulic analysis because all of the waterway and floodplain impacts from the project are temporary and do not permanently change the course, current or cross section of waters of the State.

##### *ii. Erosion and Sediment Control Plans*

As specified in Special Condition B of the 2015 Permit, the Department has ensured that the ESC plans and the MOSF plans submitted by Columbia are in accordance with the Waterway Construction regulatory requirements (COMAR 26.17.04). The plans reviewed and approved by the Department detail the methods of erosion and sediment control during construction and the methods of stream diversion to be used during construction. The Department verified that appropriate BMPs and the Department's Guidelines for Waterway Construction were incorporated into the plans, and that all temporary access crossings and temporary sediment-trapping devices satisfy the waterway regulations. Columbia also submitted the sequence of construction details and has delineated all temporary staging and stockpiling areas in accordance with the Department's requirements.

The ESC plans for Phase 2C and Phase 3 are subject to further review and final approval by the Baltimore County Soil Conservation District under its authority under the Maryland Erosion and Sediment Control Act and applicable Baltimore County regulations. Columbia is required to apply for a modification to this Permit if the County-approved ESC plans for Phase 2C or Phase 3 conflict with the plans that have been reviewed and approved by the Department, where the County-approved plans have removed any best management practices required under this Permit or modified any impact to nontidal wetlands, nontidal wetland buffers, streams, or the 100-year floodplain authorized under this Permit. (See 2015 Permit, Special Condition B.)

*iii. Time of Year Restrictions*

In order to protect fisheries, aquatic and terrestrial habitat, and their related flora and fauna, time of year restrictions will be in place for all open-cut trenching and HDD activities. (See 2015 Permit, Special Condition D.)

*iv. Summary and Conclusion*

In conclusion, the Department evaluated the Application in light of the applicable waterway construction regulations and criteria. The Department weighed the public advantages and disadvantages and determined that the Permit is in the best public interest and the project plans provide for the greatest feasible utilization of the waters of the State, adequately preserve the public safety and promote the general public welfare.

**VIII. ADDITIONAL CONSIDERATIONS RELEVANT TO THE DEPARTMENT'S DECISION**

**A. Rare, Threatened, or Endangered Species**

All applications are screened to determine whether there are designated resources in the area such as rare, threatened or endangered species. If rare, threatened, or endangered species are indicated, the Department sends the application to DNR for review and comment.

When the screening process for Columbia's Application detected potential impacts to rare, threatened, or endangered species, the Department forwarded it to DNR's Wildlife and Heritage Service for comments. DNR's comment letter stated that there are no State or federal records for rare, threatened or endangered species within the boundaries of the Project. (See DNR letter dated May 2, 2012.) DNR did, however, provide guidance to Columbia related to a state-listed threatened orchid, the purple fringeless orchid (*platanthera perameona*), which is located within a half-mile of the project site.

In addition, DNR required additional investigation from Columbia related to the bog turtle (*Glyptemys muhlenbergii*), a federal- and State-listed threatened species, which does occur in some of the watersheds in which the Project is located. Columbia performed a Phase I Bog Turtle survey within the 21-mile project corridor and a Phase II Bog Turtle Survey for 10 identified nontidal wetland areas. The Phase II survey concluded that the bog turtle was not present along the project corridor and there was no potential to impact the species from the construction of the Project. (See Rocco letters dated October 18, 2012 and May 15, 2013.) Columbia also performed Phase I surveys of the proposed mitigation site and several potential site reroutes. No wetlands were found containing suitable Bog Turtle habitat. (See letters dated June 3, 2013, June 26, 2013, December 26, 2013, and March 19, 2014.)

## **B. Historical and Archeological Resources**

### *i. During the Department's Initial Review of the Application*

The Department coordinates with the Maryland Historic Trust (MHT) by giving MHT notice of any application for a permit and, where appropriate, the Department may require an applicant to consult with MHT before the Department issues a permit. Every permit application is screened to determine whether there are historical or archeological resources in the area, and, if so, the Department forwards the application to the Maryland Historical Trust (MHT) for review and comment.

When the screening process for Columbia's Application detected potential impacts to historical or archeological resources, the Department forwarded the Application to MHT. On December 21, 2012, MHT determined that no historic properties will be affected by the Project, but requested that Columbia perform additional cultural and archeological surveys. The additional surveys were completed and MHT determined that the Project would have no adverse effects on cultural resources. (See Columbia's April 1, 2014 report and MHT correspondence dated April 8, 2014.)

### *ii. After the 2014 Permit was Remanded to the Department*

The Remand Order required that the Department comply with the Maryland Historical Trust Act. During the initial application review process, the Department forwarded Columbia's application to MHT, as described above. After the Remand Order, MHT provided a clarifying letter to the Corps with a copy to the Department stating that after an exhaustive review of supplemental cultural resources investigations, MHT maintains that their initial recommendation of "no adverse effect" remains appropriate and valid for this project. (See MHT July 1, 2015 Letter.)

MHT's letter states:

MHT received detailed information regarding proposed horizontal directional drill workspaces, pathways and access roads that were to extend outside of the previously surveyed areas. MHT staff completed their review of the submittal on March 5, 2014 and recommended that the proposed activities would have no adverse effect on historic properties. While some of the proposed workspaces are located in the general vicinity of the Bosley Farm (Maryland Inventory of Historic Properties #BA-266), the engineering plans that were submitted to MHT clearly indicate that the majority of the impact area is located in an area having moderate to steep slopes with little potential for containing significant archeological deposits associated with the 18<sup>th</sup> century farm. We returned a hardcopy of the submittal to Goodwin & Associates with our "no adverse effect" stamp, including the review date (March 5, 2014) and the reviewer's signature (Dixie Henry). . . . [I]t remains our opinion that the proposed undertaking, as currently designed, will have no adverse effect on significant historic properties, including archeological resources, historic structures and landscapes, and historic districts.

Accordingly, in compliance with the Remand Order, the Department has confirmed with MHT that the project will not adversely affect the Bosleys' historic property.

### **C. Trout Fisheries**

The Project runs through the heart of a trout fishery that represents Maryland's best concentration of high-quality brook and brown trout. Given the sensitivity of these aquatic species, it is essential that measures be taken to minimize thermal effects and sedimentation impacts. The enhanced best management practices and additional protections for Baisman Run (discussed under Section VII.B.ii), and other appropriate BMPs will minimize the potential for these adverse impacts to trout resources.

### **D. Forest Interior Dwelling Species (FIDS)**

Forest interior dwelling species (FIDS) require large forest areas to breed successfully and maintain viable populations. FIDS are an integral part of Maryland's landscape and have depended on large forested tracts, including streamside and Bayside forests, for thousands of years. Forest fragmentation results in both direct and indirect impacts to FIDS by reducing both the quantity and quality of forest habitat available to FIDS. According to DNR's Wildlife and Heritage Service information, the forested areas on the Project site contain FIDS. DNR provided specific site design guidelines that Columbia incorporated into its project plans to minimize impacts to FIDS and other native forest plants and wildlife. (See Permit Application, Attachment 8.)

### **E. Forest Conservation**

Columbia must meet the requirements of the Maryland Forest Conservation Act (FCA). The objectives of the FCA are to minimize the loss of forest land from development and ensure that priority areas for forest retention and forest planting are identified and protected prior to development. For impacts to State-owned land, DNR is responsible for implementing the requirements of the FCA. Baltimore County and Harford County have been delegated by the State to oversee and implement the requirements of the FCA for non-State-owned land. This Project must, therefore, have Forest Conservation Plans approved by DNR, Baltimore County, and Harford County. (See 2015 Permit, Special Condition L.)

### **F. Invasive Species**

Didymo (*Didymosphenia geminata*) is an invasive freshwater alga that is increasingly becoming a concern within certain Maryland waters. On January 13, 2013, DNR provided guidance to Columbia to develop a control program for Didymo. Columbia's Didymo prevention plan was approved by DNR on January 31, 2014. (See 2015 Permit, Special Condition M.)

## **IX. MITIGATION**

Mitigation is only a consideration in a permit decision after steps have been taken to avoid and minimize impacts to nontidal wetlands and their regulated buffers, and nontidal waterways, including the 100-year nontidal floodplain. The permanent nontidal wetland impacts result from the permanent conversion of 31,678 sf (0.73 ac) of nontidal forested wetlands to emergent wetlands and 761 sf (0.02 ac) of nontidal scrub-shrub wetland to emergent wetlands. Mitigation will be required at a 1:1 mitigation to impact ratio for the permanent wetland conversion loss, resulting in a wetland mitigation requirement of 32,439 sf (0.74 ac) of nontidal forested and scrub-shrub wetland mitigation.

The Department approved Columbia's Phase II Wetland Mitigation Plan and Columbia has completed construction of its mitigation project. The Permittee continues to be subject to the project standards and other requirements specified in the Approval Letter. The project included forested wetland restoration and forested nontidal wetland enhancement on the First Mine Run Property in Baltimore County. The project also included the installation of grade control structures to prevent an existing stream headcut from negatively impacting two adjacent wetlands. As stated in the April 30, 2013 letter from Ecotone, Inc., onsite mitigation was not feasible and there are no approved Mitigation Banks in the impact area. The selected mitigation site is within the Loch Raven Reservoir watershed (02-13-08-05), which is one of the impacted watersheds. The proposed mitigation and impacts are both within the Piedmont physiographic region, resulting in a higher likelihood that the restoration will result in a similar type of wetland community as will be impacted by the Project. The mitigation will provide water quality improvement, flood storage, and wildlife habitat, replacing the wetland functions lost due to the proposed impacts. The mitigation site will be permanently protected through an approved Declaration of Restrictive Covenants. The Department, accordingly, determined that the mitigation plan will adequately offset the wetland losses.

## **X. RESPONSE TO ADDITIONAL PUBLIC COMMENTS**

The following section discusses additional comments received by the Department that are not directly within the scope of the Department's evaluation of the nontidal wetland and waterway impacts associated with the Line MB Extension Project.

### **A. Sufficiency of the Public Notice, Request for an Extension of the Public Comment Period, and Request for Withdrawal of the Department's Appeal of the Remand Decision**

The Department received several comments questioning the adequacy of the public notice. As discussed above, the Department believes that the June 1, 2015 public notice complies with the applicable wetland and waterway public notice statute and regulations. In addition, the public notice complied with the Remand Order because it provided notice of the remaining open-cut and HDD options under consideration by the Department.

The Department received numerous comments requesting that the public comment period be extended beyond July 8, 2015. Because the length of the public comment period satisfied the statute and regulations, and because of the limited scope of the issues raised in the Remand Order, the Department declined to grant an extension of the public comment period.

The Department also received several comments requesting that the Department withdraw its appeal of the Remand Order. While the Department complied with the Remand Order, at the same time the Department hopes that the appeal will clarify the law applicable to the Department's review of nontidal wetlands and waterways permit applications.

### **B. BGE Pipeline**

During one of the public informational hearings, a person asked why the existing BGE natural gas pipeline could not be used by Columbia, thus eliminating the need for Line MB. The purpose of the project (enhanced reliability and operational flexibility) cannot be achieved by using BGE-owned facilities. BGE facilities are local distribution facilities regulated by the State of Maryland. BGE is not an interstate pipeline, regulated by FERC under the Natural Gas Act, like Columbia. Columbia has no authority to use the facilities of a state-regulated distribution company, nor could Columbia compel BGE to allow it to use BGE's facilities.

### **C. Safety Issues**

Commenters expressed safety concerns over siting pipelines close to residences. That issue is not directly within MDE's review; MDE's review is limited to the Project's impacts to nontidal wetlands and waterways. However, the Department notes FERC's discussion on public safety in its November 21, 2012 Order issuing the Certificate to Columbia. FERC states that pipelines are constructed and operated in accordance with the U.S. Department of Transportation (DOT) regulations. Columbia will construct and operate the project in compliance with DOT regulations which will ensure pipeline safety near homes. Columbia will also maintain operating policies and procedures that DOT periodically reviews, including periodic training sessions and review of operating and emergency procedures for affected operations employees. (145 FERC ¶ 61,153 (2013) at p. 34.)

One commenter stated that it is possible to convert a natural gas pipeline to one able to transport hazardous materials in a liquid form. This commenter cited CFR Parts 192 and 195, which provides a process for requesting authorization from FERC for such a conversion. Additionally, the Columbia easement agreements appear to allow for this possibility for conversion. The Department is not a party to the easement agreements between Columbia and property owners, nor is this concern directly within the scope of MDE's review of the Project's nontidal wetlands and waterways impacts. However, information Columbia provided in the FERC process appears to address this concern. Columbia is an interstate natural gas transmission pipeline company whose sole activity is the transportation and storage of natural gas owned by others in interstate commerce via a federally regulated system of pipeline and related facilities. Columbia does not explore for, produce, develop, buy or sell natural gas as a commodity. Columbia does not transport or store anything other than natural gas through the pipeline facilities proposed in the Line MB Extension Project. The easement language referred to by the commenter is among

many easement language variations within the natural gas industry. It is a well-established practice to obtain easement rights that are sufficiently detailed to ensure that the landowner and Columbia are both fully advised on their respective rights and obligations. Most importantly, there is no proposal before the Department, FERC, or any party related to the transportation of liquids through the proposed pipeline facilities. The pipeline will operate under the terms of the certificate issued by the FERC, the Natural Gas Act (and regulations promulgated thereunder) and the Pipeline Safety Act, none of which include an authorization for Columbia to transport commodities other than natural gas.

Commenters raised concerns with a statement in FERC's Environmental Assessment that pipeline construction may require blasting in areas if shallow bedrock is encountered. They stated that blasting in close proximity to wells could rupture the casing increasing the likelihood of contamination. If blasting is required, it will be performed under the supervision of a Maryland-certified blaster who would be familiar with local ordinances and guidelines for blasting. The handling and use of explosives in Maryland is regulated by MDE Bureau of Mines and the federal Bureau of Alcohol, Tobacco, Firearms, and Explosives. Blasting activities would strictly adhere to all local, state, and federal regulations applying to controlled blasting and blast vibration limits concerning structures and underground or aboveground utilities. (See information on Columbia's blast plan in the Permit Application and September 16, 2013 letter.) Columbia does not plan to conduct any in-stream blasting. and Any instream blasting would require approval by the Department. (See 2015 Permit, General Condition 17.)

#### **D. Property Values**

Commenters stated that property values will be negatively affected as a result of the pipeline crossing their properties, and specifically, crossing septic reserve areas. The Project's potential effect on property values is not an issue within the Department's scope of review for this Project's impacts to wetlands and waterways.

#### **E. Septic Reserve Area**

Commenters stated that the construction of the pipeline would reduce the size of the septic reserve areas. None of the identified septic reserve areas will be reduced below the minimum square footage required by the County, which are sufficient to accommodate an existing septic system and two replacement systems. In Harford County, when an affected septic reserve area will be reduced below existing levels, landowners are required to re-file a plat for county approval showing the reduced septic reserve area, even if the reduced septic reserve area meets the minimum standards. Under the conditions of FERC's Certificate, Columbia is required to file documents showing that the plats with adjusted septic reserve areas have been provided to Harford County.

#### **F. Oregon Ridge Park**

Commenters raised concerns about potential environmental impacts to Oregon Ridge from construction of the project. The comments were focused on potential impacts to a vernal pool and various wildlife and forest harvest. On July 23, 2015, the Department received confirmation

from Columbia that the vernal pool (P003B), habitat for the spotted salamander, was delineated to be “largely outside” of the survey corridor and has been confirmed to be completely outside the limits of disturbance for the project. The bluebird and Monarch butterfly habitat will be temporarily impacted by construction staging within Oregon Ridge Park, however, the staging area is located in upland areas outside of the Department’s jurisdiction.

Additional comments were received regarding timber harvest and loss of canopy. Columbia is negotiating directly with Baltimore County for easement expansion. Recovery of revenue for timber harvest may be negotiated with Columbia and is outside of the Department’s jurisdiction. Concern of the impact to streams from the loss of tree canopy by easement widening has been addressed by the requirement of a streamside planting plan to be implemented at all perennial and intermittent stream crossings. (2015 Permit, Special Condition N). This plan provides the planting of shrubs and herbaceous vegetation to provide shade and cover, as well as wildlife value.

### **G. Northern Long-Eared Bat**

Numerous commenters questioned how the recent listing of the Northern Long-Eared Bat would affect the Line MB Extension Project. On May 4, 2015, the U.S. Fish and Wildlife Service (USFWS) listed the Northern Long-Eared Bat as a threatened species under the Endangered Species Act. At the same time the USFWS issued an interim special rule (Interim Rule 4(d)) that eliminates unnecessary regulatory requirements for landowners, land managers, government agencies and others in the range of the Northern Long-Eared Bat. On June 25, 2015, the Corps published a Special Public Notice to ensure compliance with Section 7 of the Endangered Species Act. This notice requires all previous authorizations and verifications issued by the Corps in Maryland and the District of Columbia to conduct new on-line project screening for the Northern Long-Eared Bat in all Maryland counties and the District of Columbia.

The Northern Long-Eared Bat is a federally-listed threatened species; it is not a state-listed rare, threatened, or endangered species. The federal rule, therefore, has no applicability to the Department’s decision to issue the 2015 Permit. Nevertheless, the Department has received correspondence from the Corps regarding Columbia’s compliance with the Corps’ special public notice and Columbia’s consultation with USFWS. Columbia initiated screening on June 25, 2015 with the USFWS. On July 10, 2015, the USFWS determined that “the project is not likely to have an adverse effect on this species” for work completed in Phase 1 and 2A. On July 28, 2015, the USFWS determined that “the project is not likely to have an adverse effect on this species” for tree clearing activities proposed for Phase 2B. On August 4, 2015, the Corps notified Columbia that, based on the July 10<sup>th</sup> and July 28<sup>th</sup> USFWS letters, “consultation under Section 7 of the Endangered Species Act has been completed for 2015 construction activities including Phase 2B.” The Corps requested that Columbia notify the Corps immediately if there are any 2015 project changes, and that Columbia notify the Corps of the USFWS findings after consultation with Columbia concerning the 2016 construction activities. To summarize, the USFWS has determined there is no adverse effect for completed Phase 1 and 2A, and to-be-completed Phase 2B. Columbia continues to consult with USFWS regarding the proposed 2016 work (Phase 2C and Phase 3) and USFWS may make recommendations upon completion of that review.

## **H. Safe Drinking Water Risk Assessment**

The 1996 Safe Drinking Water Act Amendments required states to develop and implement source water assessment programs to evaluate the potential for contaminants to affect the source of all public drinking water systems. A Source Water Assessment follows a process for evaluating the susceptibility of a public drinking water supply. The main steps in the assessment process are: delineating the watershed drainage area that is likely to contribute to the drinking water supply; identifying potential contaminants with the area; and assessing the vulnerability of the system to those contaminants. Maryland's Source Water Assessment Plan was submitted to the EPA in February 1999, and received final acceptance from EPA in November 1999. The Department completed a Source Water Assessment Report for the Loch Raven Reservoir in December 2004. The report is available on the Department's website at [http://www.mde.state.md.us/programs/Water/Water\\_Supply/Source\\_Water\\_Assessment\\_Program/Pages/Programs/WaterPrograms/water\\_supply/sourcewaterassessment/by\\_county.aspx](http://www.mde.state.md.us/programs/Water/Water_Supply/Source_Water_Assessment_Program/Pages/Programs/WaterPrograms/water_supply/sourcewaterassessment/by_county.aspx). The Nontidal Wetlands Protection Act and the Waterway Construction Act do not require a Safe Drinking Water Act Risk Assessment in connection with the issuance of a permit. For further discussion on protection of the public drinking water supply, please refer to that section above.

## **I. Columbia/Landowner Negotiations**

Both during the June 15, 2015 public informational hearing and the public comment period (June 1, 2015 through July 8, 2015), comments were received regarding dissatisfaction with Columbia's negotiations with affected landowners. These comments are outside the scope of the Department's review under the Nontidal Wetlands Protection Act and the Waterway Construction Act and have been forwarded to Columbia for response.

## **XI. CONCLUSION**

Based on the Department's review of the Application and all additional submissions from Columbia, the Department has determined that the Project satisfies all of the relevant requirements of the Nontidal Wetlands Protection Act and its implementing regulations as well as the Waterway Construction Act and its implementing regulations. The Department has also determined that its decision to issue this Permit complies with the Circuit Courts Opinion and Remand Order. Therefore, it is the Department's decision to reissue Nontidal Wetlands and Waterways Permit Number 12-NT-0433/201261660 to Columbia for the regulated activities associated with this Project.