

**Office of  
Energy Projects**

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Columbia Gulf Transmission, LLC

Docket No. CP20-490-000

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# **Mainline 300 Replacement Project**

## **Environmental Assessment**

Washington, DC 20426

**MAINLINE 300 REPLACEMENT PROJECT  
ENVIRONMENTAL ASSESSMENT**

**TABLE OF CONTENTS**

<b>SECTION</b>	<b>PAGE NUMBER</b>
<b>SECTION A – PROPOSED ACTION .....</b>	<b>1</b>
1.0 Introduction.....	1
2.0 Purpose and Need .....	1
3.0 Public Review and Comment.....	2
4.0 Proposed Facilities.....	2
5.0 Land Requirements .....	4
6.0 Abandonment, Construction, and Restoration Procedures .....	6
7.0 Operation and Maintenance Procedures .....	8
8.0 Environmental Compliance Inspection and Monitoring.....	8
9.0 Permits, Approvals, and Regulatory Consultations .....	8
<b>SECTION B – ENVIRONMENTAL ANALYSIS .....</b>	<b>10</b>
1.0 Geology and Mineral Resources .....	10
2.0 Soils .....	10
3.0 Water Resources .....	11
3.1 Surface Water .....	11
3.2 Groundwater Resources.....	12
3.3 Wetlands .....	12
4.0 Vegetation, Wildlife and Special Status Species .....	13
4.1 Vegetation.....	13
4.2 Wildlife Resources.....	14
4.3 Special Status Species.....	15
5.0 Land Use, Aesthetics .....	17
6.0 Cultural Resources .....	20
7.0 Air Quality and Noise .....	21
7.1 Air Quality .....	21
7.2 Noise .....	23
8.0 Reliability and Safety.....	24
8.1 Reliability .....	24
8.2 Safety Standards .....	25
9.0 Cumulative Impacts .....	26
<b>SECTION C – ALTERNATIVES .....</b>	<b>32</b>
1.0 No-Action Alternative .....	32
2.0 System Alternatives .....	32
3.0 Pipeline Route Alternatives .....	33
<b>SECTION D – STAFF’S CONCLUSIONS AND RECOMMENDATIONS.....</b>	<b>34</b>
<b>SECTION E – REFERENCES .....</b>	<b>39</b>
<b>SECTION F – LIST OF PREPARERS.....</b>	<b>41</b>

**LIST OF TABLES**

<b>TABLE</b>		<b>PAGE NUMBER</b>
Table 1	Summary of Land Requirements .....	4
Table 2	Environmental Permits, Approvals, and Consultations .....	9
Table 3	Wetlands Crossed by the Project .....	12
Table 4	Vegetation Impacts During Construction and Operation of the Project .....	13
Table 5	Federally Listed Species Potentially Occurring in the Project Area.....	16
Table 6	Land Requirement – Construction and Operation of the Project (acres) .....	18
Table 7	Summary of Potential Construction Emissions .....	22
Table 8	Noise Sensitive Areas within 0.25 Mile of the Project .....	24
Table 9	Cumulative Geographic Scope Areas .....	27

**LIST OF FIGURES**

<b>FIGURE</b>		<b>PAGE NUMBER</b>
Figure 1	General Location of the Project Facilities .....	3
Figure 2	Cumulative Project Map.....	31

**LIST OF APPENDICES**

- Appendix 1 Recently Completed, Contemporary, or Ongoing, and Reasonably Foreseeable Future Projects in the Geographic Scope Impact Assessment Area
- Appendix 2 Interagency ESA Consultation Checklist for the MSHCP

## TECHNICAL ABBREVIATIONS AND ACRONYMS

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CAA	Clean Air Act
Columbia Gulf	Columbia Gulf Transmission, LLC
CEQ	Council on Environmental Quality
Certificate	Certificate of Public Convenience and Necessity
CFR	Code of Federal Regulations
CH <sub>4</sub>	methane
CO	carbon monoxide
CO <sub>2</sub>	carbon dioxide
CO <sub>2e</sub>	carbon dioxide equivalents
Commission	Federal Energy Regulatory Commission
CWA	construction work area
DOT	U.S. Department of Transportation
EA	environmental assessment
ECS	environmental construction standards
EI	environmental inspector
EO	Executive Order
EPA	United States Environmental Protection Agency
FERC	Federal Energy Regulatory Commission
GHG	greenhouse gases
HAPs	hazardous air pollutants
MAOP	maximum allowable operating pressure
ML	Mainline
MLV	mainline valve
MP	milepost
NAAAs	nonattainment areas
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act of 1969 (as amended)
NGA	Natural Gas Act
NOI	<i>Notice of Intent to Prepare an Environmental Assessment for the Proposed Mainline 300 Replacement Project and Request for Comments on Environmental Issues</i>
NO <sub>x</sub>	nitrogen oxides
NRHP	National Register of Historic Places
NSA	noise sensitive area
NWI	National Wetlands Inventory
O <sub>3</sub>	ozone
OEP	Office of Energy Projects
PHMSA	Pipeline and Hazardous Materials Safety Administration
PM <sub>10</sub>	particulate matter less than 10 microns in diameter
PM <sub>2.5</sub>	particulate matter less than 2.5 microns in diameter
Project	Mainline 300 Replacement Project
psig	pounds per square inch gauge
SHPO	State Historic Preservation Office
SO <sub>2</sub>	sulfur dioxide
SPCC	Spill Prevention, Containment, and Countermeasures
TAR	Temporary Access Road
TWS	temporary workspace
USACE	United States Army Corps. of Engineers
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
VOC	volatile organic compound

## **SECTION A – PROPOSED ACTION**

### **1.0 Introduction**

The staff of the Federal Energy Regulatory Commission (Commission or FERC) prepared this environmental assessment (EA) to assess the environmental impacts of the proposed Mainline 300 Replacement Project (Project). On June 30, 2020, Columbia Gulf Transmission, LLC (Columbia Gulf); pursuant to sections 7(b) and 7(c) of the Natural Gas Act, in FERC Docket No. CP20-490-000, filed an application for Abandonment Authority and a Certificate of Public Convenience and Necessity (Certificate) to abandon, replace, and operate interstate natural gas transmission facilities.

We<sup>1</sup> prepared this EA in compliance with the requirements of the National Environmental Policy Act (NEPA); the Council on Environmental Quality’s (CEQ) regulations for implementing NEPA (Title 40 Code of Federal Regulations (CFR), Parts 1500-1508 [40 CFR 1500-1508])<sup>2</sup>; and the Commission’s regulations at 18 CFR 380.

The FERC is the lead federal agency for authorizing interstate natural gas transmission facilities under the National Gas Act (NGA), and the lead federal agency for preparation of this EA, in accordance with NEPA (40 CFR 1501) and the Energy Policy Act of 2005.

The assessment of environmental impacts is an integral part of the Commission’s decision-making process to determine whether to authorize Columbia Gulf’s proposal. Our principal purposes in preparing this EA are to identify and assess potential impacts on the natural and human environment that could result from implementation of the proposed action; and identify and recommend reasonable alternatives and specific mitigation measures, as necessary, to avoid or minimize project-related environmental impacts.

### **2.0 Purpose and Need**

Due to increased population densities along certain discrete sections of Mainline 300, Columbia Gulf is required, pursuant to Part 192 of the U.S. Department of Transportation (DOT) regulations to meet Class 3 pipeline design requirements. To address these population changes and satisfy DOT requirements, Columbia Gulf proposes to replace discrete sections of Mainline 300 to allow continued operation at the

<sup>1</sup> “We,” “us,” and “our” refer to the environmental staff of the FERC’s Office of Energy Projects.

<sup>2</sup> On July 16, 2020, CEQ issued a final rule, *Update to the Regulations Implementing the Procedural Provisions of the National Environmental Policy Act* (Final Rule, 85 Fed. Reg. 43,304), which was effective as of September 14, 2020; however, the NEPA review of this project was in process at that time and was prepared pursuant to the 1978 regulations.

current maximum allowable operating pressure (MAOP) of 1,050 pounds per square inch gauge (psig).

Section 7(b) of the National Gas Act (NGA) specifies that no natural gas company shall abandon any portion of its facilities subject to the Commission's jurisdiction without the Commission first finding that the abandonment would not negatively affect the present or future public convenience and necessity.

Under section 7(c) of the NGA, the Commission determines whether interstate natural gas transportation facilities are in the public convenience and necessity and, if so, grants a Certificate of Public Convenience and Necessity (Certificate) to construct and operate them. The Commission bases its decisions on both economic issues, including need, and environmental impacts.

### **3.0 Public Review and Comment**

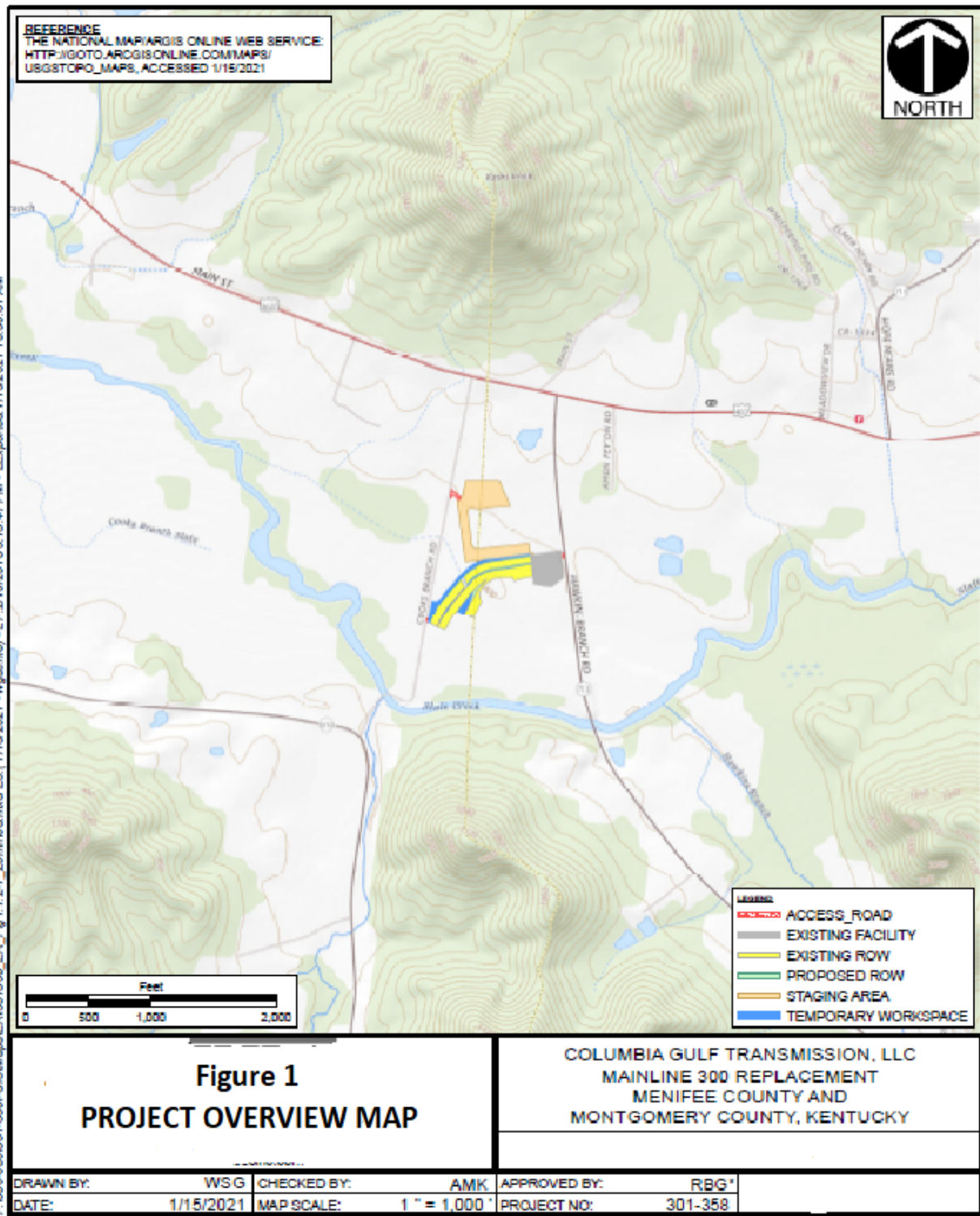
On July 31, 2020, the Commission issued a *Notice of Intent to Prepare an Environmental Assessment for the Mainline 300 Replacement Project and Request for Comments on Environmental Issues* (NOI). The NOI was sent to affected landowners; federal, state, and local government agencies; elected officials; environmental and public interest groups; Native American tribes; other interested parties; and local libraries and newspapers. The NOI established a 30-day scoping period and requested comments on specific concerns about the Project or issues that should be considered during the preparation of the EA. The scoping period ended on August 31, 2020. In response to the NOI, the Commission did not receive any comments.

### **4.0 Proposed Facilities**

The Project would involve the abandonment, replacement, and operation of the following facilities in Montgomery and Menifee Counties, Kentucky (see figure 1):

- replacement of approximately 760 feet of existing 36-inch-diameter pipeline, with approximately 760 feet of new, 36-inch-diameter natural gas transmission pipeline between Milepost (MP) 6.8 to MP 6.9 (replacement sections would be abandoned by removal and the new pipeline would be installed in the same trench);
- replacement of approximately 15 feet of existing 36-inch-diameter pipeline, with approximately 15 feet of new, 36-inch-diameter natural gas transmission pipeline at MP 6.9 (replacement sections would be abandoned by removal and the new pipeline would be installed in the same trench); and
- abandonment in place of approximately 422 feet of 36-inch-diameter natural gas transmission pipeline. This is necessary to minimize potential impacts to an archaeological site near the Project area (Site 15Mf490) that is considered eligible for listing on the National Register of Historic Places (NRHP).

Figure 1 General Location of the Project Facilities



## 5.0 Land Requirements

Table 1 summarizes Project land requirements including existing permanent right-of-way, temporary construction right-of-way, temporary workspace (TWS) areas, and temporary access roads which are collectively referred to as the construction work area (CWA). Approximately 0.10 acre of new permanent right-of-way would be acquired for the Project. This area of new right-of-way is located between the existing maintained right-of-way for Columbia Gulf Lines ML200 and ML300. Columbia Gulf would maintain the existing right-of-way and proposed new right-of-way during operation. Approximately 0.09 mile of replacement pipeline would be offset 25 feet north of the section that would be abandoned in place.

Construction of the Project would result in both temporary and permanent land disturbance. Following construction, land affected during construction would be restored and the permanent right-of-way would be maintained in an herbaceous state during operation of the pipelines.

<b>Table 1 Summary of Land Requirements</b>		
<b>Facility</b>	<b>Land Affected During Construction (acres) <sup>a</sup></b>	<b>Land Affected During Operation (acres)</b>
New Permanent right-of-way	0.1	0.1
Existing right-of-way	3.6	3.4
Workspace in Existing Facility – Gravel or Paved	0.9	0.0
Staging Area <sup>b</sup> in Existing Facility – Gravel or Paved	0.7	0.0
Staging Area <sup>b</sup> in Existing Facility – Maintained Grass	3.0	0.0
TWS	1.6	0.0
Access Road	0.07	0.0
<b>TOTAL</b>	<b>9.9</b>	<b>3.5</b>
<sup>a</sup> Land affected during construction includes both temporary and permanent work areas. <sup>b</sup> Staging areas would be used for such things as equipment staging and storage, parking, contractor trailers, and storage of construction consumables such as mats and pipe.		

Pipeline replacement activities would be conducted within Columbia Gulf's maintained right-of-way containing Mainline (ML) 100, 200 and ML 300, and partially within new right-of-way. The construction right-of-way consists of temporary and permanent workspace needed for construction and operation of the pipeline. The CWA configuration would vary based on the location within the overall construction workspace due to the variable right-of-way dimensions and spacing between the three high pressure transmission pipelines within the existing right-of-way. To minimize potential impacts to an archaeological site near the Project area, construction of the new pipeline segment would utilize a CWA that varies from approximately 190 feet wide in the eastern portion



of the Project to approximately 290 feet wide in the western portion of the Project. The majority of the CWA is within Columbia Gulf's existing, cleared, and maintained right-of-way.

One contractor staging area has been identified for the Project, which would be used to store pipe, materials, and equipment; employee vehicle parking; vehicle maintenance and storage; and for temporary field offices. No improvements are anticipated. The contractor staging area is located within the existing Means Compressor Station and was selected to minimize the effects on vegetation and land use.

Columbia Gulf would use existing public roads or the existing right-of-way for construction access to Project work areas. In addition, Columbia Gulf has identified three proposed temporary access roads that would be used for the Project.

Columbia Gulf has prepared Environmental Construction Standards (ECS) for this Project which adopts and incorporates the requirements of the FERC's *Upland Erosion Control, Revegetation, and Maintenance Plan* (FERC Plan) and the FERC's *Wetland and Waterbody Construction and Mitigation Procedures* (FERC Procedures), with one modification (see Section B.3.3). The ECS provides details and narratives to aid in implementation of those requirements and to meet and/or exceed state-specific environmental requirements.

After the completion of the construction, all temporary right-of-way would be restored per the ECS requirements and allowed to revert to previous land uses. All permanent rights-of-way would be restored as per ECS, appropriate landowner agreements, and retained as open land for the maintenance and operation of the pipeline. Impacts to existing land use would be mitigated per the ECS. Measures would include the removal of all excess material and equipment, the proper management of materials and equipment, and the restoration of temporarily impacted lands.

In active croplands, pastures, rangeland, or hayfields, Columbia Gulf would strip and segregate topsoil from the full right-of-way in accordance with its ECS. Following pipeline installation, the subsoil would be returned to the ditch and the topsoil replaced in the area from which it was stripped. Columbia Gulf would negotiate agreements with the individual landowners which would include compensation for damages to crops.

After construction, the CWA would be restored in accordance with the ECS as soon as practicable. Most developed land uses would be able to continue in accordance with individual right-of-way agreements for approved and/or restricted use of permanent right-of-way.

Lastly, the Project involves work within existing cleared right-of-way and limited TWS to complete the construction activities. No aboveground facilities are proposed for

the Project. Since the Project does not include the installation of aboveground facilities, we do not anticipate the Project would result in any permanent impacts on existing visual resources or visually sensitive areas.

Pending the receipt of all necessary permits and approvals, Columbia Gulf anticipates mobilization and construction no later than May 1, 2021 with an in-service date of August 1, 2021.

## **6.0 Abandonment, Construction, and Restoration Procedures**

### **Abandonment Procedures**

Pipeline abandonment activities would be conducted in accordance with existing landowner agreements. Typically, the flow of gas through the existing pipeline would be shut off. Columbia Gulf would then blow down the pipe to evacuate the remaining gas. For the segments to be abandoned by removal, once abandonment is complete, the ditch would remain open in order to install the new pipe using lift & lay construction. Once the pipe section is removed, the exposed ditch would immediately be prepared for the installation of new replacement pipe, and pipe replacement would commence within one to two weeks after initial pipe removal. The trench would then be backfilled as soon as practicable after installation of the new pipe, and the workspace would be rough graded. It is anticipated that the exposed trench would remain open for a maximum of three to four weeks.

For the segment proposed to be abandoned in place, the ends of the segment would be exposed, cut, cleaned with a pig tool, filled with grout, then capped at each end with weld caps or steel plate.

The proposed replacement facilities would be designed, constructed, tested, operated, and maintained to conform with or exceed federal, state, and local requirements, including the DOT Minimum Safety Standards in 49 CFR 192, “Transportation of Natural and Other Gas by Pipeline: Minimum Federal Safety Standards,” and FERC’s siting and maintenance regulations at 18 CFR 380.15.

### **Standard Pipeline Construction and Restoration Procedures**

Construction would involve a series of discrete activities typically conducted in a linear sequence. These include survey and staking; clearing and grading; installation of erosion control measures; pipe stringing, bending and welding; trenching; lower-in and backfilling; hydrostatic testing; final tie-in; commission; and right-of-way cleanup and restoration. The new pipeline would be installed within the existing ML 300 pipeline right-of-way and approximately 0.10 acres of new permanent right-of-way located between the existing maintained right-of-way for Columbia Gulf Lines ML 200 and ML 300. The alignment of the new pipeline with respect to other pipelines within the

Columbia Gulf right-of-way would be generally 25 feet or more from each existing line. No pipeline crossovers are proposed.

### **Specialized Pipeline Construction Procedures**

Areas that typically require specialized pipeline construction procedures include agricultural areas, utility crossings; waterbodies and wetlands; residential areas; and areas requiring rock removal.

### **Wetland Crossing**

Construction within wetlands would be conducted in accordance with the ECS, and requirements specified in federal, state, and county water crossing permits. Columbia Gulf would require a 25- to 120-foot construction right-of-way through wetlands to allow for equipment crossing and to safely perform construction. The expansion of the right-of-way through wetlands is a modification of the Procedures. We have reviewed and approved this modification (see discussion in Section B.3.3). Where soils are unstable, temporary work surfaces would be installed with the use of timber mats.

### **Agricultural Areas**

In the portion of the CWA used for hayfields, Columbia Gulf would strip and segregate topsoil from the full right-of-way in accordance with its ECS. Following pipeline installation, the subsoil would be returned to the ditch and the topsoil replaced in the area from which it was stripped. The working side of the right-of-way would be de-compacted prior to final grading and restoration. After construction completion, Columbia Gulf would coordinate with landowners to allow continued agricultural use of property while minimizing impacts on pipeline operations. Additionally, and prior to construction, Columbia Gulf would consult with landowners to locate existing drainage tiles. If drainage tiles are exposed or damaged during construction activities, appropriate measures to repair/replace them would be implemented in coordination with the landowner and in accordance with the ECS.

### **Utility Crossings**

Prior to construction, Columbia Gulf would contact Kentucky's "One Call" system as well as the national "811" call system to identify and mark buried utility lines in the vicinity of the Project. Based on the location of the Project CWA, crossings of underground and overhead utilities along the construction right-of-way are not expected.

## **7.0 Operation and Maintenance Procedures**

Columbia Gulf would operate and maintain the new pipeline segments in accordance with all applicable federal and state requirements, including the minimum federal safety standards identified in Transportation of Natural and Other Gas by Pipeline, Title 49 CFR Part 192. Operation and maintenance of the facilities would be performed by or at the direction of Columbia Gulf. Additionally, maintenance of the proposed pipeline facilities and associated right-of-way would be performed in accordance with Columbia Gulf's ECS.

## **8.0 Environmental Compliance Inspection and Monitoring**

Columbia Gulf personnel and its contractors would be required to comply with any conditions of a FERC Certificate/Authorization it may receive, all mitigation measures identified in its Application, and any other applicable federal and state permits and authorizations.

Columbia Gulf would employ at least one Environmental Inspector (EI) to monitor compliance during construction. The EI performing environmental oversight would serve to monitor the implementation of all environmental requirements during construction. The EI's responsibility is to ensure that the Projects' ground disturbing activities follow all environmental conditions contained with the FERC Order and all other applicable authorizations and permits. FERC staff and/or its representatives would also maintain oversight during construction to determine environmental compliance with the Commission's orders.

## **9.0 Permits, Approvals, and Regulatory Consultations**

Table 2 summarizes the permits, approvals, and regulatory consultations applicable to the Project. Columbia Gulf would be required to obtain all necessary permits regardless if they appear in the table or not.

**Table 2 – Environmental Permits, Approvals, and Consultations**

<b>Permit/Approval/Consultation</b>	<b>Administering Agency</b>	<b>Filing Date or (Anticipated) Date</b>	<b>Receipt Date or (Anticipated) Date</b>
<b>Federal</b>			
Section 7 Threatened and Endangered Species Consultation <sup>a</sup>	United States Fish and Wildlife Service (USFWS)	April 8, 2020	April 28, 2020
Migratory Bird Treaty Act and Bald and Golden eagle Protection Act Compliance	USFWS Kentucky Field Office	April 8, 2020	April 28, 2020
<b>State</b>			
Kentucky Pollutant Discharge Elimination System Construction Stormwater Water Permit	KDEP Division of Water	(January 2021)	(January 2021)
Permit to Construct Across or Along a Stream (i.e. Floodplain construction permit)		(January 2021)	(March 2021)
Section 106 of the National Historic Preservation Act Clearance	Kentucky State Historic Preservation Office	May 7, 2020	June 4, 2020
State Threatened and Endangered Species Consultation and Clearance	Kentucky State Nature Preserves Commission	April 10, 2020	April 10, 2020
<b>Local</b>			
Floodplain Construction Permit	Montgomery County	(January 2021)	(March 2021)

<sup>a</sup> To comply with the provisions of the Endangered Species Act, Columbia Gulf has evaluated and certified that the Project activities are consistent with the U.S. Fish and Wildlife Service approved NiSouce/Columbia Gulf Multi-Species Habitat Conservation Plan and the resulting programmatic Section 7 consultation.

## **SECTION B – ENVIRONMENTAL ANALYSIS**

Abandoning, replacing, and operating the proposed facilities would have temporary, short-term, long-term, and permanent impacts on the environment. As discussed throughout this EA, temporary impacts are defined as occurring only during the construction phase. Short-term impacts are defined as lasting between two to five years following construction. Long-term impacts would eventually recover but require more than five years. Permanent impacts are defined as lasting throughout the life of the Project. Our analysis also addresses direct and indirect effects collectively by resource.

The analysis contained in this EA is based upon Columbia Gulf's application and supplemental filings and our experience with the construction and operation of natural gas infrastructure. However, if the Project is approved and proceeds to the construction phase, it is not uncommon for a project proponent to require minor modifications (e.g., minor changes in workspace configurations). These changes are often identified by a company once on-the-ground implementation of work is initiated. Any Project modifications would be subject to review and approval from FERC's Director of the Office of Energy Projects (Director of OEP), or the Director's designee, and any other applicable permitting/authorizing agencies.

### **1.0 Geology and Mineral Resources**

The Project area is located on the border of the Appalachian Plateau and the Interior Low Plateau physiographic provinces (Fenneman and Johnson, 1946), as well as on the eastern edge of the Outer Bluegrass and western edge of the Eastern Kentucky Coal Field physiographic regions (Kentucky Geological Survey [KGS], 2016; 2018). Topography in the immediate Project area is characterized by gently sloping (0 to 5 percent) valley bottoms with elevations ranging from 815 to 830 feet above mean sea level. No oil and gas exploration/extraction or active or inactive surface or subsurface mines were identified within 0.25 mile of the Project area (USGS, 2011; KGS, 2020).

Geologic hazards are natural, physical conditions that can result in damage to land and structures or injury to people. Such hazards typically are seismic-related, including earthquakes, surface faulting, and soil liquefaction; landslides; or ground subsidence hazards such as karst. However, we have determined that the Project would not significantly impact or be significantly impacted by geologic hazards.

### **2.0 Soils**

Construction activities such as clearing, grading, trench excavation, backfilling, and the movement of construction equipment along the right-of-way would affect soil resources. Clearing removes the protective cover and exposes soils to the effects of wind and rain, which increases the potential for soil erosion and sedimentation of sensitive areas. Grading, spoil storage, and equipment traffic can compact soil, reducing porosity and increasing runoff potential. Excess rock or fill material brought to the surface during trenching operations could hinder restoration and revegetation of the right-of-way. Soil characteristics in the Project area were assessed using the Natural Resources Conservation Service (NRCS) Soil Survey geographic database (2020). All Project area soils are considered to not be highly compaction prone, highly erodible by wind, highly erodible by water, or to have low revegetation potential. With the exception of approximately 0.3 acre underlying the staging area, Project area soils are classified as having a depth to bedrock of greater than 60 inches. All Project area soils are classified as prime farmland.

To minimize or avoid potential impacts due to soil erosion, Columbia Gulf would implement measures in accordance with the FERC Plan and its ECS.

The United States Department of Agriculture defines prime farmland as land that has the best combination of physical and chemical characteristics for growing food, feed, forage, fiber, and oilseed crops. Prime farmland soils would not be permanently impacted as the Project would not preclude any area from future agricultural land use. Columbia Gulf would minimize impacts on agricultural areas during construction in accordance with measures in its ECS. These include measures to conserve and segregate the upper 12 inches of topsoil, alleviate soil compaction, protect and maintain existing drainage tile and irrigation systems, prevent the introduction of weeds, and retain existing soil productivity, thereby minimizing the potential for long-term impacts on agricultural lands.

The Means Compressor Station is listed on the State Hazardous Waste Site database, regulated by the Kentucky State Superfund Program. This site is a former Columbia Gulf office that was converted to a compressor station in 1989. The eastern portion of the Project area overlaps with the mapped location of the site. Based on the results of site characterization, completed per a U.S. Environmental Protection Agency (EPA)-approved General Sampling and Analysis Plan finalized in February 2002, no further action was recommended, and the site was listed as “Closed” on February 26, 2013.

Columbia Gulf does not anticipate encountering contaminated soils or groundwater during construction. If encountered, Columbia Gulf would adhere to its Unexpected Contamination Discovery Plan. Additionally, contamination from spills or leaks of fuels, lubricants, and coolant from construction equipment could adversely affect soils. Columbia Gulf’s Spill Prevention, Control, and Countermeasure (SPCC) Plan specifies measures to prevent contamination from accidental spills or leaks of fuels, and lubricants, as well as cleanup procedures in the event of inadvertent spills during Project construction. Therefore, given the minimization and mitigation measures described above, we conclude that soils would not be significantly affected by Project construction and operation.

### **3.0 Water Resources**

#### **3.1 Surface Water**

With the exception of a roadside ditch, field surveys conducted by Columbia Gulf, found no waterbodies within the Project area. The ditch is believed to only have perceptible flow immediately following precipitation events and does not support aquatic life. Where temporary access road (TAR)-01 crosses the ditch, a temporary culvert would be installed to maintain flow during precipitation events.

No surface water intakes are located within five miles of the Project area (KIA, 2020). According to information from the Kentucky Department of Environmental Protection (KDEP) Division of Water, the Project is located within Zone 3 of the Mount Sterling Water Works Source Water Protection Area. Zone 3 is known as a Zone of Potential Impact and extends 25 miles above an intake along the source stream and any third order tributaries or above. It also includes the area of any 14-digit hydrologic unit code (HUC) that is adjacent to these streams. In an email dated August 25, 2020 to Columbia Gulf<sup>3</sup> the Mt. Sterling Water and Sewer Authority stated that based on the erosion control measures proposed and the distance to the intake, there are no immediate concerns or reservations associated with the Project.

In accordance with DOT regulations, Columbia Gulf would conduct hydrostatic testing of the pipeline segments prior to placing them into service. Columbia Gulf would utilize municipal water resources for fugitive dust control and to hydrostatically test the

<sup>3</sup> See accession number 20200901-5216

pipeline. Columbia Gulf would use a maximum of 2,000 gallons of water per day for approximately 25 days for dust suppression. In total, Columbia Gulf would use approximately 42,000 gallons of municipal water for hydrostatic testing. Following initial testing, Columbia Gulf would containerize water for re-use (if needed) in subsequent tests. After the testing is complete, the water would be hauled off-site and discharged at an approved receiving facility.

As mentioned above, no waterbody crossings would occur. Columbia Gulf would use erosion and sediment control devices to prevent soil from entering any nearby waterbodies and trench breakers would be installed following the pipe installation to prevent water from flowing along the trench after backfilling. Inadvertent spills of fuel, lubricants, or solvents could result in surface water contamination. In the event of a spill, Columbia Gulf would employ measures outlined in the ECS and SPCC Plan. Additionally, Columbia Gulf would use proper storage, containment, and handling procedures in accordance with the ECS and SPCC Plan. Therefore, based on the implementation of Columbia Gulf’s ECS and SPCC Plan and the absence of any surface waterbody crossings, we conclude that the Project would not have a significant impact on surface waters.

### 3.2 Groundwater Resources

The Project is underlain by the Mississippian and Pennsylvanian aquifers. The water quality in these aquifers in the Project vicinity is generally adequate, or it can be treated and made adequate for most uses (USGS, 1995). The Project does not overlie EPA-designated sole source aquifers or state-designated wellhead protection areas (EPA, 2020; KDEP, 2020). Additionally, no public or private water supply wells, springs, or seeps were identified within 150 feet of the Project area (KGS, 2020). The Project would also not cross areas of known groundwater contamination. Therefore, and based on Columbia Gulf’s implementation of its ECS, SPCC Plan, and Unexpected Contamination Discovery Plan, we conclude that the Project would not have a significant impact on groundwater resources.

### 3.3 Wetlands

Wetlands are defined as “those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions” (USACE 1987).

Table 3 below lists the wetlands identified to be affected by the Project construction.

<b>Table 3 Wetlands Crossed by the Project</b>				
<b>Wetland ID</b>	<b>NWI Classification<sup>1</sup></b>	<b>Crossing Method/ Workspace Type</b>	<b>Crossing Length (ft)</b>	<b>Area Affected During Construction (areas)</b>
Wetland B	PEM	Pipeline and Temporary Timber Mat Workspace/ Equipment Crossing	52	0.19
Wetland C	PEM	Temporary Timber Mat Workspace/ Equipment Crossing	66	0.02
Wetland D	PEM	Temporary Timber Mat Workspace/ Equipment Crossing	45	0.05
<b>Total</b>				0.26
<sup>1</sup> PEM=Palustrine Emergent Wetland				



As noted in the table above, palustrine emergent (PEM) wetlands were documented in the Project area. PEM wetlands are characterized by erect, rooted, herbaceous hydrophytes, excluding mosses and lichens. Dominant vegetation within the Project area documented during wetland surveys include softstem bulrush (*Schoenoplectus tabernaemontani*), blunt spike rush (*Eleocharis obusta*), yellow nutsedge (*Cyperus esculentus*), spotted lady's thumb (*Persicaria maculosa*), and soft rush (*Juncus effusus*).

The pipeline would be installed in wetlands using open-cut methods and timber mats would be installed over wetland areas that cannot support the weight of equipment to provide access along the right-of-way. Columbia Gulf stated it has configured the construction work area to avoid wetland impacts to the maximum extent practicable. As depicted in table 3 above, only one wetland, Wetland B, would be affected by pipeline installation. The remaining wetland areas within the Project construction area would be matted to be protected from equipment crossings along the right-of-way. Columbia Gulf stated that an expanded right-of-way width was needed for the Project due to adjacent existing pipelines and the need to stockpile excavated soils and for equipment to access the right-of-way. Based on the justification provided by Columbia Gulf, we find the use of an expanded right-of-way in the vicinity of Wetland B to be acceptable.

The primary impact of Project construction on wetlands would be the clearing and alteration of wetland vegetation. Construction could also affect soils, and water quality within wetlands due to sediment loading or inadvertent spills of fuel or chemicals. Impacts on wetlands would be greatest during and immediately following construction. Most of these effects would be short-term in nature and would cease when, or shortly after, the wetlands are restored and revegetate naturally. The herbaceous vegetation would regenerate quickly (typically within 1 to 3 years).

Columbia Gulf would minimize wetland impacts by implementing the construction and mitigation measures outlined in its ECS, and by adhering to applicable permit requirements. Therefore, we conclude that wetland impacts would not be significant.

In a letter dated July 20, 2020 (LRL-2020-419-JMG), the U.S. Army Corps of Engineers determined that based on the Navigable Waters Protection Rule (33 Code of Federal Regulations 328.3), the wetlands within the Project area are not jurisdictional waters of the U.S. Therefore, Clean Water Act Section 404 or 401 authorization is not required for discharge of dredge or fill material into the wetland areas in the Project area.

#### 4.0 Vegetation, Wildlife and Special Status Species

##### 4.1 Vegetation

As describe in table 4 below, the Project would be located across herbaceous and wetland vegetation communities. No tree clearing is proposed for the Project.

Workspace	Upland Herbaceous		Wetland		Total	
	Constr.	Oper.	Constr.	Oper.	Constr.	Oper.
Right-of-way	3.5	3.5	0.21	0.02	3.7	3.5
TWS	0.93	0	0.05	0	0.98	0
Access Roads	0.01	0	0	0	0.01	0
Staging Area	3.5	0	0	0	3.5	0
<b>Total Project</b>	<b>8.0</b>	<b>3.5</b>	<b>0.26</b>	<b>0.02</b>	<b>8.2</b>	<b>3.5</b>

ROW= right of way  
TWS= temporary workspace

Wetland vegetation is discussed in section B.3.3. Upland herbaceous land includes non-forested upland areas used for open space, grass and shrubs on previously disturbed areas (i.e. existing right-of-way), and uncultivated pasture and hayfields. No vegetation communities of special concern were identified in the Project area during either agency consultations or field surveys. The Project is not located within any National Park Service land or Wildlife Management Areas, state parks, state forests, state monitored rare plant communities, or county owned parkland.

Noxious and invasive plant species can out-compete and displace native plant species, thereby adversely altering the composition and function of affected vegetation. Plant species identified as noxious and invasive were identified during Project surveys. These species include reed canary grass (*phalaris arundinacea*) and multiflora rose (*rosa multiflora*). Reed canary grass was observed within Wetland A at less than two percent of the relative cover of the wetland. A small area of multiflora rose was observed along a fence line on the eastern portion of the Project area. To avoid and minimize the potential for the introduction and/or spread of invasive and noxious weed species, Columbia Gulf would implement measures in the ECS. These include conducting training for Columbia Gulf and contractor personnel; use of approved herbicides; and cleaning of equipment, timber mats, and vehicles prior to initially arriving at contractor yards and staging areas.

Abandoning and installing the proposed pipeline facilities would require the temporary and permanent clearing of vegetation. Impacts on vegetation would generally be temporary and short-term. To facilitate revegetation, Columbia Gulf would seed construction workspaces in accordance with its ECS. Prior to implementation of restoration activities, Columbia Gulf would coordinate with local conservation authorities and landowners to determine if there are any modifications or recommendations to the seed mixes proposed in the ECS. Therefore, based on the types and amounts of vegetation affected by the Project and Columbia Gulf's proposed avoidance, minimization, and mitigation measures to limit Project impacts, we conclude that impacts on vegetation from the Project would not be significant.

## **4.2 Wildlife Resources**

Wildlife habitat types are based on the vegetation communities within the Project area and, as stated above, include wetlands and upland herbaceous lands. These vegetation communities/habitat types provide foraging, cover, and nesting habitat for a variety of commonly occurring wildlife species. As no waterbodies would be affected by the Project construction activities, there would be no impacts on aquatic resources. In addition, the Project is not located within any nature preserves, wildlife refuges, or wildlife management areas.

Construction and operation of the Project would result in temporary and short-term impacts on wildlife. Impacts would vary depending on the specific habitat requirements of the species in the area and the vegetative land cover affected. Potential short-term impacts on wildlife include the displacement of individuals from construction areas and adjacent habitats and the direct mortality of small, less mobile mammals, reptiles, and amphibians that are unable to vacate the construction area. Although individual mortality of some wildlife species could occur as a result of the Project, the effects of these individual losses on wildlife populations would be minor. Based on the presence of similar habitats adjacent to and in the vicinity of construction activities, and the implementation of impact avoidance and minimization measures, we conclude that construction and operation of the Project would not significantly impact wildlife.

## **Migratory Birds**

Migratory birds are species that nest in the United States and Canada during the summer and then migrate to and from tropical regions of Mexico, Central and South America, and the Caribbean for the non-breeding season. Migratory birds are protected under the Migratory Bird Treaty Act (16 U.S Code [U.S.C.] 703-711). Executive Order (EO) 13186 (66 FR 3853) directs federal agencies to identify where unintentional take is likely to have a measurable negative effect on migratory bird populations and to avoid or minimize adverse impacts on migratory birds through enhanced collaboration with the U.S. Fish and Wildlife Service (FWS). EO 13186 was issued, in part, to ensure that environmental analyses of federal actions assess the impacts of these actions/plans on migratory birds. It also states that emphasis should be placed on species of concern, priority habitats, and key risk factors, and it prohibits the take of any migratory bird without authorization from the FWS.

The Project would be located within Region 24-Central Hardwoods Region of the North American Bird Conservation Initiative (U.S. North American Conservation Initiative Committee, 2016). The primary concern for impacts on migratory birds, including bald eagles, is mortality of eggs and/or young, since immature birds could not avoid active construction. Ground disturbing activities could cause disturbance during critical breeding and nesting periods, potentially resulting in the loss of nests, eggs, or young. Much of the Project is collocated within existing rights-of-way and no tree clearing is proposed. This would reduce temporary and permanent impacts on migratory birds. Columbia Gulf consulted with the United States Fish and Wildlife Service (FWS) and the Kentucky Department of Fish and Wildlife Resources (KDFWR) and would implement measures in their ECS to reduce impacts on migratory birds. In addition, Columbia Gulf stated that no bald eagle nests were observed in the Project area during field surveys.

Based on the characteristics and habitat requirements of migratory birds known to occur in the proposed Project area, the amount of similar habitat adjacent to and in the vicinity of the Project, the absence of tree clearing, and Columbia Gulf's adherence to its ECS, we have determined that the Project would not result in population-level impacts or significant measurable negative impacts on migratory birds.

### **4.3 Special Status Species**

Section 7 of the ESA requires the Commission to ensure that any action it authorizes does not jeopardize the continued existence of a federally listed endangered or threatened species or results in the destruction or adverse modification of the designated critical habitat of a federally listed species. Furthermore, the ESA requires us to consult with the FWS to determine whether any federally listed endangered or threatened species of their designated critical habitats are located in the vicinity of the project, and to determine the proposed action's potential effects on those species or critical habitat.

To address impacts resulting from the operation and upkeep of its pipeline systems, Columbia Gulf has developed a Multi-Species Habitat Conservation Plan (MSHCP) in coordination with the FWS. The MSHCP identifies common pipeline activities that may take place within potential federally listed species habitat. The MSHCP outlines detailed monitoring, reporting, and management protocols for multiple ESA listed species known to occur in the project area.

The MSHCP applies to the Project because Columbia Gulf's facilities were reviewed in the MSHCP Biological Opinion, and associated concurrence letters. Through the MSHCP, Columbia Gulf and the FWS have developed standard mitigation measures that would reduce impacts on listed species to less than significant levels. Columbia Gulf provided the Interagency ESA Consultation Checklist for the MSHCP for

FERC review. This checklist is included in Appendix 2 of this EA. Columbia Gulf, acting as the project non-federal representative for the FERC, initiated informal consultation with the FWS in April 2020. Table 5 below identifies the federally listed species that have the potential to occur in the Project area due to the presence of suitable habitat. We determined that four additional listed species including the grey bat, Virginia big-eared bat, snuffbox mussel, and wire-haired goldenrod would not be affected by the Project as their habitats are not present in the Project area. The Project is within the range and may contain suitable summer habitat for the federally endangered Indiana bat and northern long-eared bat. A discussion on these two species is provided below.

<b>Table 5 Federally Listed Species Potentially Occurring in the Project Area</b>					
<b>Common Name</b>	<b>Scientific Name</b>	<b>Federal Status <sup>a</sup></b>	<b>State Status <sup>b</sup></b>	<b>MSHCP Status <sup>c</sup></b>	<b>Habitat Assessment and Anticipated Project Impact</b>
Indiana bat	<i>Myotis sodalis</i>	E	S1S2	MSHCP LAA	Potentially suitable summer habitat; tree clearing timing restrictions to minimize impact; no additional consultation is necessary
Northern long-ear bat (NLEB)	<i>Myotis septentrionalis</i>	T	S4	MSHCP LAA	Potentially suitable summer habitat; tree clearing timing restrictions to minimize impact; no additional consultation is necessary

<sup>a</sup> E = Endangered; T = Threatened.  
<sup>b</sup> S1 = Critically Imperiled; S2 = Imperiled; S3 = Vulnerable; S4 = Apparently Secure  
<sup>c</sup> NE = No Effect; NLAA = Not likely to adversely affect; LAA = Likely to adversely affect

In a letter dated April 28, 2020 the FWS stated that if Columbia Gulf adheres to the measures in the MSHCP for the bat species that may be present in the Project area, no additional consultation is required.

It should be noted that the snuffbox mussel is not included in Columbia’s MSHCP and may occur in Slate Creek which is located approximately 600 feet south of the Project area. As the Project would not affect this or any waterbodies during construction, Columbia Gulf determined the Project would have no effect on the snuffbox mussel. We agree. In a letter dated April 28, 2020 the FWS acknowledged this determination and stated they had no additional comments on this species.

### *Indiana Bat*

Columbia Gulf would implement all mandatory and voluntary avoidance and minimization measures required in the MSHCP for the Indiana bat. Some examples of these minimization methods include:

- Operators, employees, and contractors (working in areas of known or presumed Indiana Bat Habitat as described in the MHSCP) would be educated on the biology of the Indiana bat, activities that may affect bat behavior, and ways to avoid and minimize these effects.
- Equipment servicing and maintenance areas would be sited at least 300 feet away from streambeds, sinkholes, fissures, or areas draining into sinkholes, fissures, or other karst features.
- Implement and strict adherence to sediment and erosion control measures, ensure restoration of pre-existing topographic contours after any ground disturbance, and restore native vegetation (where possible) as specified in the ECS upon completion of work within suitable summer habitat and known or presumed occupied spring staging and fall swarming habitat.

It should be noted that neither the MSHCP nor the FWS include any vegetation clearing windows for non-forested habitat. As there is no tree clearing associated with the Project construction activities, the Project is in compliance with several of the avoidance and mitigation measures associated with clearing windows.

With Columbia's commitment to abide by the MSHCP, including the measures listed above, we conclude that the Project activities comply with the programmatic biological opinion and concurrence letters for the species. We find that the Project is consistent with the MSHCP; therefore, additional Section 7 consultation is not required.

#### *Northern Long-eared Bat*

Implementation of the mitigation measures listed in the MSHCP, would minimize impacts on the northern long-eared bat. These measures are similar to those that would be implemented for the Indian bat and also includes:

- Operators, employees, and contractors (working in areas of known or presumed northern long-eared bat habitat as described in this section) would be educated on the biology of the northern long-eared bat, activities that may affect bat behavior, and ways to avoid and minimize these effects.

It should be noted that neither the MSHCP nor the FWS include any vegetation clearing windows for non-forested habitat. As there is no tree clearing associated with the Project construction activities, the Project is in compliance with several of the avoidance and mitigation measures required associated with clearing windows.

With Columbia's commitment to abide by the MSHCP, including the measures listed above, we conclude that the Project activities comply with the programmatic biological opinion and concurrence letters for the species. We find that the Project is consistent with the MSHCP; therefore, additional Section 7 consultation is not required.

### **State Listed Species**

Columbia Gulf consulted KDFWR data and identified seven state-listed endangered, threatened, or special concern plant and animal species that have been documented within the Project area (KDFWR, 2020). These species include the Indiana bat, northern long eared bat, cutleaf meadow parsnip (*Thaspium pinnatifidum*), wild lily of the valley (*Maianthemum canadense*), American ginseng (*Panax quinquefolius*), and the federally listed white-haired goldenrod (*Solidago albopilosa*) discussed above.

Columbia Gulf stated that based on coordinates provided by the Kentucky State Nature Preserve Commission, the closest known occurrence of cutleaf meadow parsnip or wild lily of the valley is approximately nine miles from the Project site. As such, impacts to these species are not anticipated. Columbia Gulf also states the Project does not contain suitable habitat for American ginseng (rich deciduous forest) and as such no impacts are anticipated.

### **5.0 Land Use, Aesthetics**

Columbia Gulf would affect a total of about 9.9 acres of land for construction and operation which includes 3.5 acres of permanent impacts for new permanent easement and existing permanent right-of-way. The total 9.9 acres consists of 3.6 acres of existing permanent right-of-way, 1.6 acres of temporary workspace; and 3.7 acres of staging area. Table 6 identifies land uses within the CWA.

## Pipeline Facilities

Both the abandonment and construction of new pipelines would utilize the same CWA, including the same TWS, and access roads during construction. Areas disturbed during construction would be restored in accordance with ECS and project-specific plans. No substantial aboveground facilities (e.g., new compressor stations or new meter stations) are proposed for this Project and no new permanent access roads would be created.

Workspace	Agriculture		Developed		Surface Waters		Total	
	Constr.	Oper.	Constr.	Oper.	Constr.	Oper.	Constr.	Oper.
Right-of-way	3.5	3.5	0	0	0.2	0	3.7	3.5
Existing Facility	0	0	0.9	0	0	0	0.9	0
Temporary Workspace	0.9	0	0.6	0	<0.1	0	1.6	0
Access Roads	<0.1	0	<0.1	0	0	0	<0.1	0
Staging Area	0	0	3.7	0	0	0	3.7	0
<b>Total Project</b>	<b>4.4</b>	<b>3.5</b>	<b>5.2</b>	<b>0</b>	<b>0.2</b>	<b>0</b>	<b>9.9</b>	<b>3.5</b>

## Contractor Staging Area

One contractor staging area has been identified for the Project, which may be used to store pipe, materials, and equipment; employee vehicle parking; vehicle maintenance and storage; and for temporary field offices. No improvement is required. The contractor staging area is located within the existing Means Compressor Station and was selected to minimize the effects on vegetation and land use. After construction has been completed, the contractor staging area would be restored to pre-construction conditions including topsoil replacement (where applicable) in accordance with ECS.

## Access Roads

Columbia Gulf has identified three proposed temporary access roads (TAR-01, TAR-02 and TAR-03) that would be used for the Project.

TAR-01 is a proposed gravel construction entrance (approximately 20 feet long by 25 feet wide) to allow access from Cook Branch Road to the proposed CWA. TAR-02 is an existing gravel driveway to the Means Compressor Station (approximately 20 feet long by 25 feet wide) to allow access from KY-713 to the proposed CWA. TAR-03 is an existing gravel entrance (approximately 82 feet long by 25 feet wide) to allow access from Cook Branch Road to the proposed CWA within the Means Compressor Station.

Columbia Gulf would use existing roads TAR-02 and TAR-03 for construction activities associated with the Project. In addition, Columbia Gulf would use one temporary access road TAR-01 which was not previously used by Columbia Gulf. Portions of these roads would require improvements to areas such as gravel and/or grading, replacing or installing culverts and minor widening, to safely accommodate construction equipment and vehicles. After construction has been completed, TAR-01, TAR-02 and TAR-03 would be returned to pre-existing conditions, to the extent practicable, or left in place, at the request of the landowners.

## Impacts and Mitigation

After the completion of the construction, all workspaces would be restored per the ECS and appropriate landowner agreements. All permanent right-of-way would be retained as open land for the maintenance and operation of the pipeline. All temporary and permanent impacts on existing land use would be mitigated per the ECS. Measures would include the removal of all excess material and equipment, the proper management of materials and equipment, and the restoration of temporarily impacted lands to pre-construction use.

In active croplands, pastures, rangeland, or hayfields, Columbia Gulf would strip and segregate topsoil from the full right-of-way in accordance with its ECS. Following pipeline installation, the subsoil would be returned to the ditch and the topsoil replaced in the area from which it was stripped to restore the approximate pre-construction grade and contour. In cultivated croplands, reseedling of the right-of-way is not required by the FERC Plan, unless requested by the landowner. Columbia Gulf is required to leave the soil in proper condition for planting and incorporate soil additives in accordance with written recommendations from the local soil conservation authority, land management agency, or landowner. These measures are designed to minimize potential mixing or loss of topsoil and subsoil and provide conditions that would allow successful restoration, provided that impacted land is returned to agricultural land use practices. Implementation of proper topsoil segregation would minimize loss of crop productivity and the potential for long-term problems with erosion.

Agricultural land in the construction area may be taken out of production for one growing season while Project facilities are constructed. However, it is possible that saturated soil conditions could delay topsoil replacement and final grading until conditions allow for proper soil handling and restoration. In addition, some restoration issues within agricultural areas may develop over time after initial restoration (e.g., trench subsidence, revegetation concerns) that may require additional disturbance of the right-of-way by Columbia Gulf to correct. Problems with topsoil replacement, compaction, subsidence, rocks, and drainage and irrigation systems resulting from construction in active agricultural areas would continue to be monitored and corrected until restoration is successful. Columbia Gulf states that it would negotiate agreements with the individual landowners which would include compensation for damages to crops.

Revegetation of agricultural areas would be considered successful when crop growth and vigor are similar to adjacent undisturbed portions of the same field, unless the easement agreement specifies otherwise. Resumption of agricultural operations following Project construction and/or planting of a cover crop would aid in the restoration of soil structure and productivity that could take several years to achieve success, depending on site-specific conditions and land use practices.

No residences are located within 50 feet of the CWA and impacts to residential land are not anticipated.

Developed land within the CWA consists of areas within the existing fence line of the Means Compressor Station and the portion of TAR-2 and TAR-3 that are currently gravel covered. Temporary impacts on developed lands may include disturbance of landscaped areas, removal of fences, and other accessory structures. This may include the removal of landscaping items, the disturbance of streets and driveways; altered traffic patterns; and temporary noise impacts from construction activities. Columbia Gulf would work with landowners to negotiate agreements for replacing items that are removed along the construction right-of-way. The items must be maintained in accordance with Columbia Gulf's right-of-way agreements and must not jeopardize the future integrity of

the right-of-way or impede access by pipeline personnel for operation and maintenance activities.

After construction, the CWA would be restored as soon as practicable. Most developed land uses would be able to continue in accordance with individual right-of-way agreements for approved and/or restricted use of permanent right-of-way.

There are no proposed residential or commercial developments within 0.25 miles of the Project. The Project would not cross or pass within 0.25 miles of areas of publicly owned or managed tracts of land. There are no Federal managed lands within 0.25 miles of the Project area. The Project does not cross any wild or scenic rivers per the National Wild and Scenic Rivers System. The Project is also not located within any coastal zone management areas. The closest public/conservation land within the vicinity of the Project area is the approximately 711,193-acre Daniel Boone National Forest, located approximately 10 miles to the northeast and southeast of the Project.

Based on the land use characteristics identified in the Project area and the implementation of Columbia Gulf's mitigation plans, we conclude that impacts resulting from construction and operation of the Project on land use would not be significant.

## **Visual Resources**

The Project involves work within existing cleared right-of-way and limited TWS to complete the construction activities. No aboveground facilities are proposed for the Project. Since the Project does not include the installation of aboveground facilities, we do not anticipate the Project would result in any permanent impacts on existing visual resources or visually sensitive areas.

## **6.0 Cultural Resources**

To minimize potential impacts to an archaeological site near the Project area (Site 15Mf490) that is considered eligible for listing on the NRHP, approximately 0.08 mile of ML 300 would be cut, cleaned, grouted, capped and abandoned in place. Approximately 0.09 mile of replacement pipeline would be offset approximately 25 feet north of the section that would be abandoned in place.

Section 106 of the National Historic Preservation Act, as amended, requires the FERC to take into account the effects of its undertakings on properties listed in or eligible for listing in the National Register of Historic Places (NRHP) and afford the Advisory Council on Historic Preservation an opportunity to comment on the undertaking. Columbia Gulf, as a non-federal party, is assisting the Commission in meeting these obligations under Section 106 and the implementing regulations at 36 CFR 800 by preparing the necessary information, analyses, and recommendations, as authorized by 36 CFR Part 800.2(a)(3).

All of the areas of the proposed Project were previously surveyed for other replacement projects or for the existing compressor station. Therefore, in consultation with the Kentucky State Historic Preservation Office (SHPO), Columbia Gulf conducted background research and prepared an analysis and summary of the previous surveys for this Project. No historic structures were identified within the area of potential effect. Three archaeological sites were identified within or adjacent to the construction right-of-way. All three were recommended eligible for listing in the NRHP or for additional testing. Columbia Gulf designed the Project to avoid the areas of the three sites with significant deposits. In a June 4, 2020 letter the SHPO recommended to Columbia Gulf that, with the installation of protective fencing at the edges of the construction right-of-way adjacent to the sites, the project would have no adverse effect to historic properties. We concur.



On April 15, 2020 Columbia Gulf wrote to the Absentee Shawnee Tribe, the Delaware Nation, the Cherokee Nation, the Eastern Band of Cherokee Indians, the Eastern Shawnee Tribe of Oklahoma, the Peoria Tribe of Indians of Oklahoma, and the United Keetoowah Band of Cherokee Indians to request their comments on the project. The FERC sent its NOI (issued July 31, 2020) to the same tribes to provide them an opportunity to comment on the project. No responses have been received to date.

Columbia Gulf prepared a plan in the event any unanticipated cultural resources or human remains were encountered during construction. We find this plan to be acceptable. Therefore, we have determined in consultation with the SHPO, that with the installation of protective fencing, the Project as proposed would have no adverse effect on any properties listed in or eligible for listing in the NRHP.

## **7.0 Air Quality and Noise**

### **7.1 Air Quality**

The Project would result in temporary emissions of regulated air pollutants and other air contaminants during ground disturbing activities. There would be no operational emissions from the Project.

Combustion of fossil fuels (natural gas, gasoline, diesel, etc.) would produce criteria air pollutants such as carbon monoxide, sulfur dioxide, and inhalable particulate matter. Combustion of fossil fuels also produces the ozone precursors volatile organic compounds (VOC), a large group of organic chemicals that have a high vapor pressure at room temperature, and oxides of nitrogen (NO<sub>x</sub>). VOCs react with NO<sub>x</sub>, typically on sunny days to form O<sub>3</sub>. Another byproduct of combustion is Greenhouse Gases (GHG), and hazardous air pollutants (HAPs). HAPs are chemicals known to cause cancer and other serious health impacts.

GHG produced by fossil fuel combustion include carbon dioxide, methane, and nitrous oxides. GHGs are generally non-toxic and non-hazardous at normal ambient concentrations however, they are the primary cause of warming of the global climate system since the industrial age. Other pollutants, not produced by combustion, are fugitive dust and fugitive emissions. Fugitive dust is a mix of PM<sub>2.5</sub>, PM<sub>10</sub>, and larger particles that become airborne due to vehicle travel, earth movement, or wind erosion.

The Clean Air Act (CAA) of 1970, as amended in 1977 and 1990, is the basic federal statute governing air quality. The provisions of the CAA that are potentially relevant to the Project include National Ambient Air Quality Standards (NAAQS) and General Conformity. No county or local air quality regulations were identified as being potentially applicable to the Project.

The United States Environmental Protection Agency (EPA) designates the attainment status of an area for each criteria pollutant based on whether an area meets the NAAQS. Areas that meet the NAAQS are termed “attainment areas.” Menifee and Montgomery Counties, Kentucky are currently designated as attainment or unclassifiable (considered attainment) for all criteria pollutants (EPA, 2018c). Therefore, a Clean Air Act General Conformity Determination is not required.

Project equipment used for abandonment and construction activities would cause localized minor increases of air pollutants. Residents in the area may notice fugitive dust emissions due to vehicle travel and earth movement. The abandonment and construction activities would involve limited locations spread across multiple sites. These sites where pipeline replacement would take place would not require a large amount of equipment, or a significant period. The activities at each location would not generate a large daily magnitude of emission and would be short-term. Therefore, we conclude that air quality would not be significantly affected by the Project.

## Federal Air Quality Regulations and Programs

Federal air quality regulations applicable to pipeline projects may include:

- New Source Performance Standards, 40 CFR 60 (NSPS);
- National Emission Standards for Hazardous Air Pollutants, 40 CFR 61 (NESHAP);
- National Emission Standards for Hazardous Air Pollutants for Source Categories, 40 CFR 63 (maximum achievable control technology (MACT) standards);
- General Conformity Rule, 40 CFR 93;
- Prevention of Significant Deterioration (PSD), 40 CFR 51.166; and
- Mandatory Greenhouse Gas (GHG) Reporting Rule, 40 CFR 98.

Because the Project does not include the addition or modification of stationary emissions sources and is in an attainment area, the NSPS, NESHAP, MACT, General Conformity, PSD, and the GHG Reporting Rule do not apply.

## State, County, and Local Air Quality Regulations

Kentucky air quality rules are codified in chapters 50 – 53, 55, 57 – 61, 63, 65, and 68 of Kentucky Administrative Regulations Title 401. There are no new permanent air emissions sources associated with the Project, and no state air quality permits would be required. There are no county or local air quality regulations in the areas of Kentucky where the Project is proposed. The Project would not include open burning.

## Air Quality Impacts and Mitigation

### Construction Emissions and Mitigation

Temporary air quality impacts associated with construction activities would result primarily from soil disturbance and the operation of fuel-burning equipment and vehicles. Construction activities are anticipated to take place between May and August 2021.

Potential emissions from construction equipment would result from fuel combustion during Project construction. Combustion-related pollutants include NO<sub>x</sub>, CO, volatile organic compound (VOC), SO<sub>2</sub>, PM, PM<sub>10</sub>, PM<sub>2.5</sub>, GHGs, and Hazardous Air Pollutants (HAPs). Table 7 provides details of air emissions calculations for each element of the Project. These emissions would be localized, temporary, and of limited duration, and are not anticipated to significantly increase ambient air pollutant concentrations. Potential impacts would be mitigated and minimized.

Emissions Source	Pollutant (in tons)								
	NO <sub>x</sub>	CO	VOC	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>	CH <sub>4</sub>	CO <sub>2e</sub>	HAPs
Access Roadways	-	-	-	-	0.02	0.00	-	-	-
Fugitive Dust	-	-	-	-	1.96	0.29	-	-	-
Non-Road Engine	1.94	0.89	0.17	0.01	0.16	0.15	0.01	1,068	0.08
On-Road Engine	0.07	0.14	0.01	0.00	0.00	0.00	0.00	102	0.00
<b>Total Emissions</b>	<b>2.01</b>	<b>1.03</b>	<b>0.18</b>	<b>0.01</b>	<b>2.14</b>	<b>0.44</b>	<b>0.01</b>	<b>1,170</b>	<b>0.08</b>

Exhaust emissions from diesel- and gasoline-fueled construction equipment and vehicle engines would be minimized by federal design standards imposed at the time of manufacture of the vehicles and would comply with EPA mobile and non-road emission regulations (40 CFR Parts 85, 86, and 89). Columbia Gulf would minimize exhaust emissions from construction equipment by maintaining the equipment in accordance with the manufacturer's recommendations and minimizing the idling time of engines, to the extent practicable.

Air quality impacts from fugitive dust generation will be temporary, occurring only during the period of construction activities. Fugitive emissions, generally low-level releases, will be intermittent and will consist of larger dust particles that will be expected to settle out of the atmosphere proximal to their release point. We do not expect this Project's vehicle, equipment, and fugitive dust emissions to result in air quality that exceeds applicable ambient air quality standards. Open burning is not planned for the Project.

Where necessary, the Applicant would follow their Fugitive Dust Control Plan to control fugitive dust emissions. If necessary, Columbia Gulf would minimize construction worker traffic by using offsite parking and shuttle buses. As a result, no adverse or long-term air impacts from construction are anticipated. During construction, Columbia Gulf would implement measures to prevent and control fugitive dust emissions, as outlined in its Fugitive Dust Control Plan.

## **Operation Emissions and Mitigation**

There would be no change in emissions during operation of the Project. Once completed, there would be no aboveground equipment or components new or existing associated with the Project. The Project would have no impact on pipeline use and the replacement-in-kind of pipeline facilities is not expected to change or increase air emissions. There would be operational emissions from fugitive releases and when the pipelines are blown down; however, due to the infrequent occurrence of these activities, emission for blowdowns have not been calculated. Therefore, no significant impact on air quality due to Project operation is expected.

In conclusion, with Columbia Gulf's commitment to controlling fugitive dust, minimizing construction worker traffic, the Project's construction and operation would not have a significant impact on regional air quality.

## **7.2 Noise**

### **Construction Noise**

Noise would be generated during construction of the Project. During construction heavy equipment would be used, such as, excavators, bulldozers, dump trucks, and side-boom tractors; however, not all the equipment would be used during each phase of construction.

### **Impacts and Mitigation**

The construction work activities would cause a temporary increase in the ambient noise in the immediate vicinity of the construction site. Construction equipment would be properly muffled and maintained to avoid producing excessive noise near noise sensitive areas (NSAs). Table 8 identifies the 12 NSAs within 0.25 miles of the Project area.

Noise would be produced along temporary access roads. The component of construction noise would come mainly from vehicles traveling to the staging areas and from a wide range of truck trips for delivery and recovery of materials at the work sites

and in the pipeline right-of-way. The procedures for bringing personnel, materials, and equipment to each work site would vary along the alignment. Truck trips would also be required to deliver heavy construction equipment, pipe, aggregate, and other materials. Typical construction of pipelines would be scheduled during daylight hours, thereby making impacts negligible. The peak noise levels associated with material transportation and commuting worker vehicles would be short-term, but they would have a temporary impact as vehicles pass by, depending on the proximity of noise receptors to the travel routes. Therefore, no significant effect is anticipated resulting from construction noise.

**Table 8 Noise Sensitive Areas within 0.25 Mile of the Project**

<b>NSA</b>	<b>NSA Type</b>	<b>Distance from CWA (LF)</b>	<b>Direction from CWA</b>
1	Residence	500	East
2	Residence	560	East
3	Commercial	620	East
4	Residence	640	Northeast
5	Residence	780	North
6	Residence	785	Northeast
7	Residence	900	Northeast
8	Residence	950	North-Northeast
9	Residence	1,160	North-Northeast
10	Residence	1,160	Northeast
11	Residence	1,220	North-Northeast
12	Residence	1,250	Northeast

## **Operational Noise**

The Project is limited to the replacement and maintenance of existing below grade facilities; therefore, operation of the Project would have no significant effect on existing noise levels.

## **8.0 Reliability and Safety**

### **8.1 Reliability**

Columbia Gas is required to maintain compliance with Part 192 of the DOT regulations. Columbia Gulf has determined that it would pursue replacement of the pipeline with pipe in the affected sections to allow continued operation of the current MAOP. Therefore, Columbia Gulf proposes to replace segments of its existing Mainline 300 pipeline to meet the Class 3 pipeline design requirements. The replacement of this existing pipeline segment would enable Columbia Gulf to continue providing safe and reliable transportation service to its customers.

The transportation of natural gas by pipeline involves some risk to the public in the event of an accident and subsequent release of gas. The greatest hazard is a fire or explosion following a major pipeline rupture. Methane, the primary component of natural gas, is colorless, odorless, and tasteless. It is not toxic, but it is classified as a simple asphyxiate, possessing a slight inhalation hazard. If breathed in high concentration, oxygen deficiency can result in serious injury or death.

The pipeline and aboveground facilities associated with the Project must be designed, constructed, operated, and maintained in accordance with the DOT Minimum Federal Safety Standards in 49 CFR Part 192. The regulations are intended to ensure

adequate protection for the public and to prevent natural gas facility accidents and failures.

The DOT pipeline standards are published in Parts 190-199 of Title 49 of the CFR. For example, Part 192 of 49 CFR specifically addresses natural gas pipeline safety issues, prescribes the minimum standards for operating and maintaining pipeline facilities, and incorporates compressor station design, including emergency shutdowns and safety equipment. Part 192 also requires a pipeline operator to establish a written emergency plan that includes procedures to minimize the hazards in a natural gas pipeline emergency.

## **8.2 Safety Standards**

The Project would be designed, constructed, operated, and maintained in accordance with the DOT Pipeline and Hazardous Materials Safety Administration's (PHMSA) Minimum Federal Safety Standards stated in Title 49 of CFR Part 192. The regulations are intended to ensure adequate protection of the public from natural gas pipeline failures. Part 192 specifies material selection and qualification, minimum design requirements, and protection from internal, external, and atmospheric corrosion. Sections 163 through 173 of Part 192 relate specifically to compressor stations, addressing design and construction, liquid removal, emergency shutdown, pressure limiting devices, additional safety equipment, and ventilation. Elements of the DOT PHMSA's Standards provide the foundations for facility planning, construction, and operation.

### **Pipeline Class Location**

DOT defines area classifications based on population density in the vicinity of a pipeline and requires more rigorous safety requirements for pipelines located in populated areas. The class location unit is an area that extends 220 yards on either side of the centerline of any continuous 1-mile length of pipeline. The regulations define four area classifications as follows:

- Class 1 – locations with 10 or fewer buildings intended for human occupancy.
- Class 2 – locations with more than 10 but fewer than 46 buildings intended for human occupancy.
- Class 3 – locations with 46 or more buildings intended for human occupancy or where the pipeline lies within 100 yards of either a building or a small, well-defined outside area occupied by 20 or more people on at least 5 days a week for 10 weeks in any 12-month period.
- Class 4 – locations where buildings with four or more stories aboveground are prevalent.

Class locations representing more populated areas require higher safety factors in pipeline design, testing, and operation. Pipelines constructed in Class 1 locations must be installed with a minimum depth of cover of 30 inches in normal soil and 18 inches in consolidated rock. Pipelines constructed in Class 2, 3, and 4 locations, as well as in drainage ditches of public roads and railroad crossings, require 36 inches of cover in normal soil and 24 inches in consolidated rock. Class locations also specify the maximum distance to a sectionalizing block valve: 10 miles in Class 1; 7.5 miles in Class 2; 4 miles in Class 3; and 2.5 miles in Class 4. Pipeline design pressures, hydrostatic test pressures, MAOP, inspection and testing of welds, and frequency of pipeline patrols and leak surveys must also conform to higher standards in more populated areas. Pipeline design pressures, hydrostatic test pressures, maximum allowable operating pressure, inspection and testing of welds, and frequency of pipeline patrols and leak surveys also must conform to higher standards in more populated areas.

Columbia Gulf would design, test and construct the pipeline to meet the Class 3 minimum standards. Columbia Gulf would monitor population changes in the vicinity of the pipeline over the entire life of the pipeline. If population density increases adjacent to the right-of-way, Columbia Gulf would evaluate whether a change in class location is necessary and respond according to the requirements set forth in Part 192.

### **High Consequence Areas**

High Consequence Areas (HCAs) for natural gas transmission pipelines focus solely on populated areas, as environmental and ecological consequences are usually minimal for releases involving natural gas. No HCAs have been identified for the proposed Project facilities. The Project would be incorporated into Columbia Gulf's existing integrity Management Plan program to ensure any changes in HCA status along the Project's route that are identified and assessed appropriately.

### **Integrity Management Plan**

Columbia Gulf would comply with the DOT Gas Transmission Pipeline Integrity Management rule (49 CFR Part 192 – Subpart O) which requires a pipeline operator to develop and follow a written integrity management program.

### **Emergency Response Planning**

Minimum standards for operating and maintaining pipeline facilities, including the requirement to establish a written plan governing these activities, are described in 49 CFR Part 192. Under Section 192.615, each pipeline operator also must establish an emergency plan that provides written procedures to respond to and minimize the hazards from a gas pipeline emergency. Columbia Gulf has established emergency plans throughout its operating areas and follows its internal procedures for updating its Emergency Plan Manual for each company location.

## **9.0 Cumulative Impacts**

In accordance with NEPA, we identified other actions in the vicinity of the Project facilities and evaluated the potential for a cumulative impact on the environment. A cumulative effect is the impact on the environment that results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency or person undertakes such other actions. An adequate cumulative effects analysis may be conducted by focusing on the current aggregate effects of past actions without delving into the historical details of individual past actions. In this analysis, we consider the impacts of past projects to have become part of the affected environment (environmental baseline), which is described and evaluated in the preceding environmental analyses; however, ongoing effects of past actions that are relevant to the analysis are also considered.

Review of potential cumulative impacts associated with the Project included recently completed, contemporary or ongoing, and reasonably foreseeable future projects. Specifically, we attempted to identify major projects that have the potential to contribute to cumulative impacts on the resources analyzed that occur within the geographic scope for the specific resource. Major projects that were analyzed included infrastructure and transportation projects, FERC-jurisdictional pipelines and other linear utility projects, and major residential, commercial, and industrial development projects.

A total of 5 projects were identified within the geographic scope. These include one FERC-jurisdictional natural gas transmission project, the Columbia Gulf ML 100 and 200 Replacement Project (FERC Docket CP19-193-000), and four other which have the potential to contribute to cumulative impacts. The other projects involve one

transportation related activity and three municipal projects (water and sewer line installation).

We used a Geographic Scope Impact Assessment Area that is tailored to each resource type to establish a spatial extent for the analysis of additional projects contributing to cumulative impacts as shown in table 9. The developments and projects that occur in the geographic scope of the Project would or could contribute to cumulative impacts on geology, soils, surface water, wetlands, vegetation, wildlife, land uses, air quality, and noise resources. Cumulative impacts on groundwater and cultural resources would not occur as a result of the identified developments and projects; and therefore, these resources are not addressed further in this analysis.

Our review of the Project impacts concludes that nearly all construction impacts would be contained within the right-of-way and its associated additional temporary workspace. Erosion control measures included in the ECS, for example, would keep disturbed soils within work areas. Consequently, the geographic scope for cumulative impacts analysis for soils and geology is limited to Project construction areas and adjacent areas.

Appendix 1 identifies the recently, completed, contemporary, or ongoing, and reasonably foreseeable future projects in the Geographic Scope Impact Assessment Area. This table lists the resources specific to the Geographic Scope impacts areas that are appropriate to assess cumulative as described in the EA and consistent with CEQ guidance. The locations of these projects are shown on figure 2.

<b>Resource</b>	<b>Geographic Scope</b>
Water and Aquatic Resources	Hydrologic Unit Code 12-digit (HUC-12) watersheds
Vegetation	HUC – 12
Wildlife	HUC – 12
Geology and Soil	Project workspace and adjacent lands
Land Use	1-mile radius
Air (Construction)	0.25-mile radius
Noise (construction)	0.25-mile radius

## **Geology and Soils**

Construction associated with the proposed Project would result in temporary and minor impacts on near-surface geology and soils, as discussed in section B.1. Cumulative impacts could occur if projects are constructed concurrently or if one project re-disturbs an area that was previously stabilized and restored by another project.

Project areas overlap with or are immediately adjacent to Columbia Gulf’s Mainline 100 and 200 Replacement Project. Columbia Gulf’s Mainline 100 and 200 Replacement Project is FERC-certificated, with an estimated completion date of November 2021. As the proposed Project would be constructed from May 2021 to August 2021, disturbance from both projects could occur simultaneously or consecutively. As described in section B.1, effects from the construction and operation of the proposed Project would be relatively minor and would be minimized by implementation of Columbia Gulf’s construction plans (for example, its SPCC Plan) and its ECS, which incorporates the FERC Plan. In addition, the Columbia Gulf’s Mainline 100 and 200 Replacement Project would need to comply with similar measures, including

the FERC Plan. Implementation of these measures would avoid or minimize cumulative impacts on geology and soils.

## **Land Use**

As indicated in appendix 1, only two projects were identified (i.e. Mainline 100 and 200 Replacement Project and the Systems Improvements Project) that were within the geographic scope for land use cumulative impacts. These projects would have short-term impacts to land uses in the Project area during construction. The long-term impacts on land use associated with these projects as a result of the permanent structures or easements would generally be localized and result in only a minor cumulative impact. Therefore, we conclude that the cumulative impact on land use would not be significant.

## **Surface Water and Wetland Resources**

As identified in appendix 1, the following other projects occur within the HUC 12 watershed in which the Project is located:

- Mainline 100 and 200 Replacement
- US-460 at Lucky Stop Hill
- Pump Station No. 5 Project
- Welch Road Project-Phase II
- System Improvement Project

Concurrent construction of projects involving clearing, grading, or other earthwork may increase the potential for cumulative impacts on water quality from increased storm water runoff. If revegetation associated with these other projects is not complete, and the work areas stabilized, at the start of construction of the proposed Project, there could be increased soil exposure within the watershed. This may increase the potential for sedimentation in surface waterbodies as a result of soil erosion, which could adversely impact water quality in the Project watershed. However, each these projects are also expected to implement best management practices to ensure avoidance, minimization, and/or mitigation of potential impacts on surface water resources. In addition, the System Improvements Project has a construction schedule of 2019-2020 and is expected to be completed prior to the proposed May 2021 start date for the Project.

Workspace associated with Mainline 100 and 200 Replacement would overlap with the Project workspace and based on the proposed Project schedule both projects may have construction that occur simultaneously or consecutively. As described above, effects on surface waters from the construction and operation of the proposed Project would be relatively minor and would be minimized by the implementation of Columbia's ESC. Columbia Gulf's Mainline 100 and 200 Replacement Project would need to comply with similar measures, including the FERC Plan and Procedures. Implementation of these measures would avoid or minimize cumulative impacts on surface waters.

While surface water impacts associated with the Project could contribute to a cumulative effect when combined with other projects located within the geographic scope considered, based on the incremental impacts on surface water, this cumulative effect is not anticipated to be significant. Overall, cumulative impacts on surface water resources are anticipated to be minor and short-term.

Construction and operation of the proposed Project would result in 0.26 acres of temporary wetland impacts, as outlined in table 3. Temporary impacts are associated with wetland crossing, stormwater runoff, and potential spills of hazardous materials during construction. No permanent impacts on wetlands is expected. Based on information obtained from the USFWS National Wetlands Inventory there are over 900 acres of wetlands in the two HUCs affected by the Project.



Two of the five projects located within the HUC 12 watersheds shared by the Project are anticipated to have wetland impacts. This includes 0.09 acres of impacts associated with the Mainline 100 and 200 Replacement project and 3.9 acres of impacts associated with the US-460 at Lucky Stop Hill Project. The impacts associated with the remaining projects are unknown.

The potential for cumulative impacts as a result of stormwater runoff and spills of hazardous materials is considered to be minimal.

Based on the absence of permanent wetland impact from the proposed Project and the abundance of similar habitat in the Project vicinity, we conclude that construction and operation of the Project and other projects in the same watershed would not result in significant cumulative impacts on wetlands.

### **Wildlife and Vegetation**

As noted above, we identified five other projects within the HUC 12 watershed in which the Project is located.

The majority of impacts on wildlife and vegetation would be associated with the temporary and permanent conversion of vegetation/wildlife habitat association with the construction and operation of the Project. Increased development and loss of habitat within the geographic scope could cause wildlife to adapt to new conditions or to relocate to undisturbed habitat. This may lead to increased competition. In addition, direct mortality of less mobile species may occur as a result of development activities. However, the majority of the Project's impacts are expected to be short term and minor.

The Project consists primarily of temporary impacts to open, herbaceous land that would be allowed to return to pre-construction conditions with the rights-of-way maintained in an agricultural or herbaceous state. No tree clearing would occur as part of the Project construction. In addition, no new aboveground facilities would be constructed.

The US-460 at Lucky Stop Hill, the Pump Station No. 5 Project, and the Welch Road Project-Phase II are located over 2.0 miles from the Project area and are not anticipated to impact the same vegetation habitats as the Project. In addition, the System Improvements Project has a construction schedule of 2019-2020 and is expected to be completed prior to the proposed May 2021 start date for the Project.

The Mainline 100 and 200 Replacement Project has overlapping workspace and may have an overlapping construction schedule with the Project which would result in a greater area and duration of vegetation disturbance in the geographic scope. Increased noise, lighting, and human activity may disturb wildlife in the area. However, wildlife is anticipated to return to those areas temporarily affected following the completion of construction activities. The Mainline 100 and 200 Replacement is only anticipated to have a permanent impact on 0.14 acre of forested land.

Based on the primarily temporary impacts of the Project on vegetation and wildlife resources and the abundance of similar habitat in the Project vicinity, we conclude that construction and operation of the Project and other projects in the same watershed would not result in significant cumulative impacts on vegetation and wildlife.

### **Air Quality and Noise**

There would be no change in emissions during operation of the Project. Since there would be no aboveground facilities associated with the Project, cumulative impacts on noise and air associated with operation of the Project were not considered.

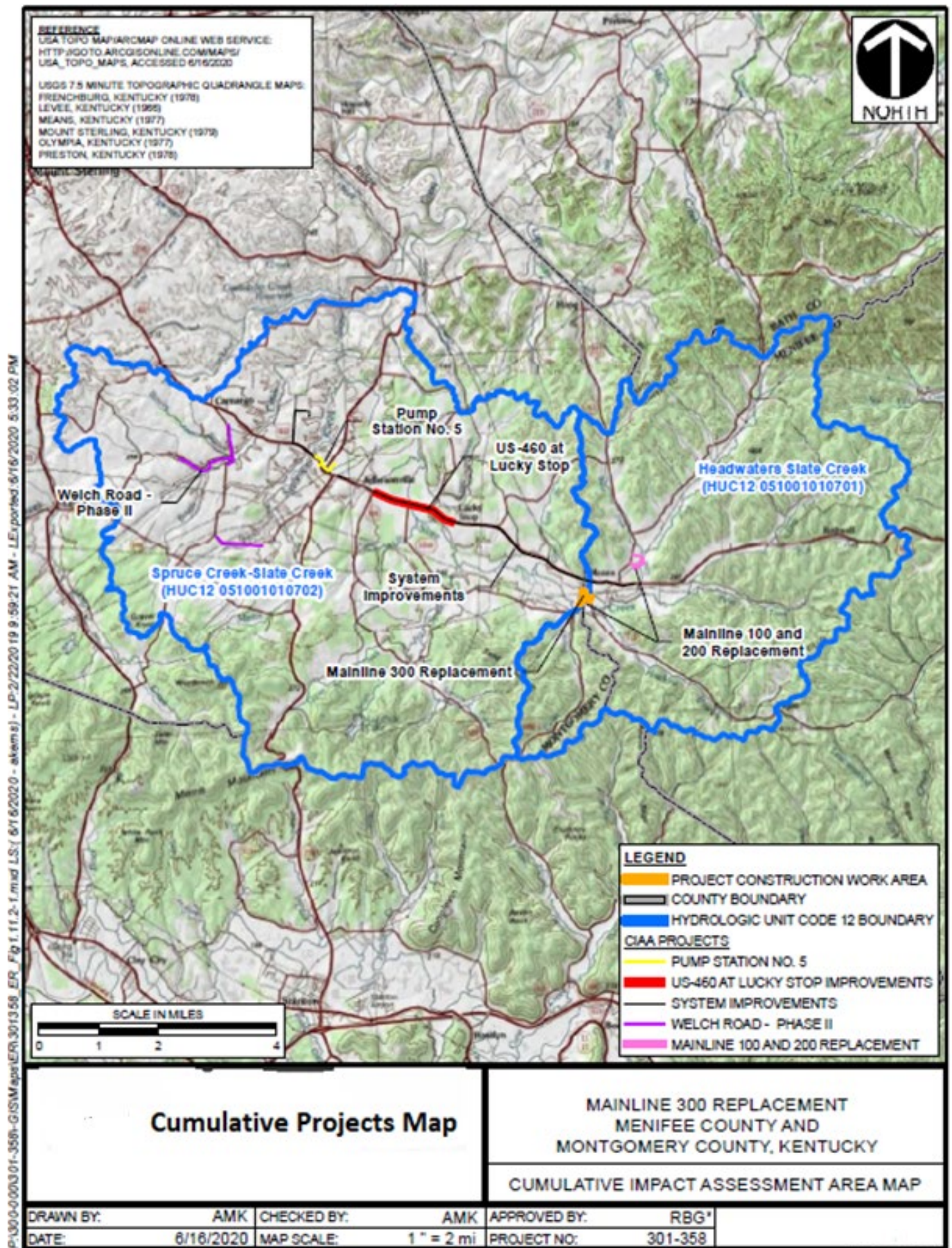
The Project would contribute to cumulative impacts on construction noise and construction air quality, but these activities are minor, temporary, of short duration, and would vary considerably from day-to-day as construction progresses. Construction noise may be periodically audible at nearby NSAs. However, long term impacts are not anticipated, and typical construction of pipelines would be scheduled during daylight hours, thereby making impacts negligible.

As indicated in appendix 2, only two projects were identified within the geographic scope for air and noise impacts. The System Improvements Project has a construction schedule of 2019-2020 and is expected to be completed prior to the proposed May 2021 start date for the Project. Consequently, air and noise impacts from construction would not be concurrent with the Project. Cumulative impacts from overlapping construction of the Mainline 100 and 200 Replacement Project are relatively small. As such, concurrent construction of the proposed Project and the other projects is not anticipated to result in adverse cumulative impacts on local air quality and noise.

### **Conclusion on Cumulative Impacts**

The Project would have a minimal impact on the resources discussed. As previously concluded in this EA, impacts with the Project would be minor and mostly temporary and therefore, when considered with past, present, and reasonably foreseeable projects with the geographic scope, we conclude that cumulative impacts on resources would not be significant.

Figure 2 Cumulative Project Map



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## **SECTION C – ALTERNATIVES**

In accordance with NEPA and Commission policy, we consider and evaluate alternatives to the proposed action, including the no-action alternative, system alternatives, and pipeline route alternatives. These alternatives are evaluated using a specific set of criteria. The evaluation criteria applied to each alternative include a determination whether the alternative:

- meets the objective of the proposed Project;
- is technically and economically feasible and practical; and
- offers a significant environmental advantage over the proposed Project.

Through environmental comparison and application of our professional judgment, each alternative is considered (in the sequence identified above) to a point where it becomes clear if the alternative could or could not meet the three evaluation criteria. An alternative that cannot achieve the objective for the Project cannot be considered as an acceptable replacement for the Project.

### **1.0 No-Action Alternative**

Under the “No-Action” alternative, the Project would not occur and the purpose and need described in this EA would not be realized. Though it would result in no impacts to landowners and the environment, the No-Action alternative would not allow Columbia Gulf to meet Class 3 pipeline design requirements. Therefore, we conclude that the no-action alternative would not meet the objectives of the Project.

### **2.0 System Alternatives**

System alternatives are those that would make use of other existing, modified, or proposed pipeline systems to meet the Project objectives. To be considered viable, such alternatives must provide an equivalent amount of transportation capacity to the customers in the area. Use of a system alternative would make it unnecessary to construct all or part of the proposed Project, though some modifications or additions to the existing or planned systems may be required. Such modifications or additions would likely result in environmental impacts; however, these impacts could be less than, similar to or even greater than those associated with the proposed Project. We are not aware of any pipeline systems in the region that could meet the supply objectives of the Project. Furthermore, the Project pipeline is the existing primary natural gas supply to multiple points of delivery, a system alternative is not a feasible alternative to maintain service to existing customers. Therefore, system alternatives would not meet the objectives of the Project.

### **3.0 Pipeline Route Alternatives**

The Project consists of replacement of segments of existing interstate natural gas pipeline in existing right-of-way with the purpose of addressing pipeline safety requirements. Our review concludes that the route with the least impact consists of the existing pipeline route with the existing ML 300 right-of-way and we did not identify any pipeline route alternatives that could satisfy the evaluation criteria. The proposed action would require approximately 0.09 mile of the replacement pipeline to be offset by about 25 feet north of the section of ML 300 to minimize potential impacts on an archaeological site near the Project area. We did not identify an alternative to the proposed alignment of this segment.

#### **Conclusion**

After reviewing the alternatives to the proposed Project, we concluded that none of the alternatives would satisfy the evaluation criteria. In summary, we have determined that the proposed action is the preferred alternative that can meet the Project's objectives.

## SECTION D – STAFF’S CONCLUSIONS AND RECOMMENDATIONS

Based on the analysis in this EA, we have determined that if Columbia Gulf abandons, constructs, and operates the proposed facilities in accordance with its application and supplements, and the staff’s recommended mitigation measures below, approval of the Project would not constitute a major federal action significantly affecting the quality of the human environment. We recommend that the Commission Order contain a finding of no significant impact and include the measures listed below as conditions in any authorization the Commission may issue to Columbia Gulf.

1. Columbia Gulf shall follow the construction procedures and mitigation measures described in its application and supplements (including responses to staff data requests) and as identified in the EA, unless modified by the Order, Columbia Gulf must:
  - a. request any modification to these procedures, measures, or conditions in a filing with the Secretary of the Commission (Secretary);
  - b. justify each modification relative to site-specific conditions;
  - c. explain how that modification provides an equal or greater level of environmental protection than the original measure; and
  - d. receive approval in writing from the Director of OEP, or the Director’s designee, **before using that modification.**
  
2. The Director of OEP, or the Director’s designee, has delegated authority to address any requests for approvals or authorizations necessary to carry out the conditions of the Order, and take whatever steps are necessary to ensure the protection of environmental resources during construction and operation of the Project, and abandonment activities. This authority shall allow:
  - a. the modification of conditions of the Order;
  - b. stop-work authority; and
  - c. the imposition of any additional measures deemed necessary to ensure continued compliance with the intent of the conditions of the Order as well as the avoidance or mitigation of unforeseen adverse environmental impact resulting from Project construction, operation, and abandonment activities.
  
3. **Prior to any construction**, Columbia Gulf shall file an affirmative statement with the Secretary, certified by a senior company official, that all company personnel, environmental inspectors (EIs), and contractor personnel would be informed of the EI’s authority and have been or would be trained on the implementation of the environmental mitigation measures appropriate to their jobs **before** becoming involved with construction and restoration activities.

4. The authorized abandonment and construction activities and facility locations shall be as shown in the EA, as supplemented by filed alignment sheets. **As soon as they are available, and before the start of construction,** Columbia Gulf shall file with the Secretary any revised detailed survey maps/sheets at a scale not smaller than 1:6,000 with station positions for the facilities approved by the Order. All requests for modifications of environmental conditions of the Order or site-specific clearances must be written and must reference locations designated on these alignment maps/sheets.

Columbia Gulf's exercise of eminent domain authority granted under Natural Gas Act (NGA) section 7 (h) in any condemnation proceedings related to the Order must be consistent with these authorized facilities and locations. Columbia Gulf's right of eminent domain granted under NGA section 7(h) does not authorize it to increase the size of its natural gas pipeline facilities to accommodate future needs or to acquire a right-of-way for a pipeline to transport a commodity other than natural gas.

5. Columbia Gulf shall file with the Secretary detailed alignment maps/sheets and aerial photographs at a scale not smaller than 1:6,000 identifying all route realignments or facility relocations, and staging areas, pipe storage yards, new access roads, and other areas that would be used or disturbed and have not been previously identified in filings with the Secretary. Approval for each of these areas must be explicitly requested in writing. For each area, the request must include a description of the existing land use/cover type, and documentation of landowner approval, whether any cultural resources or federally listed threatened or endangered species would be affected, and whether any other environmentally sensitive areas are within or abutting the area. All areas shall be clearly identified on the maps/sheets/aerial photographs. Each area must be approved in writing by the Director of the OEP, or the Director's designed, **before construction in or near that area.**

This requirement does not apply to extra workspaces allowed by the Commission's *Upland Erosion Control, Revegetation, and Maintenance Plan* and/or minor field realignments per landowner needs and requirements which do not affect other landowners or sensitive environmental areas such as wetlands.

Examples of alterations requiring approval include all route realignments and facility location changes resulting from:

- a. implementation of cultural resource mitigation measures;
- b. implementation of endangered, threatened, or special concern species mitigation measures;
- c. recommendations by state regulatory authorities; and

- d. agreements with individual's landowners that affect other landowners or could affect sensitive environmental areas.

6. **Within 60 days of the Order and before construction or abandonment by removal begins**, Columbia Gulf shall file an Implementation Plan with the Secretary for review and written approval by the Director of the OEP, or the Director's designee. Columbia Gulf must file revisions to the plan as schedules change. The plan shall identify:

- a. how Columbia Gulf would implement the construction procedures and measures described in its application and supplements (including responses to staff data requests), identified in the EA, and required by the Order;
- b. how Columbia Gulf would incorporate these requirements into the contract bid documents, construction contracts (especially penalty clauses and specifications), and construction drawings so that the mitigation required at each site is clear to onsite construction and inspection personnel;
- c. the number of EIs assigned per spread, and how the company would ensure that sufficient personnel are available to implement the environmental mitigation;
- d. company personnel, including EIs and contractors, who would receive copies of the appropriate material;
- e. the location and dates of the environmental compliance training and instructions Columbia Gulf would give to all personnel involved with construction and restoration (initial and refresher training as the project progresses and personnel change);
- f. the company personnel (if known) and specific portion of Columbia Gulf's organizations having responsibility for compliance;
- g. the procedures (including use of contract penalties) Columbia Gulf would follow if noncompliance occurs; and
- h. for each discrete facility, a Gantt or PERT chart (or similar project scheduling diagram), and dates for:
  - 1. the completion of all required surveys and reports;
  - 2. the environmental compliance training of onsite personnel;
  - 3. the start of construction; and
  - 4. the start and completion of restoration.

7. Columbia Gulf shall employ at least one EI for the Project. The EI(s) shall be:

- a. responsible for monitoring and ensuring compliance with all mitigation measures required by the Order and other grants, permits, certificates, or other authorizing documents;



- b. responsible for evaluating the construction contractor's implementation of the environmental mitigation measures required in the contract (see condition 6 above) and any other authorizing document;
  - c. empowered to order correction of acts that violate the environmental conditions of the Order, and any other authorizing document;
  - d. a full-time position, separate from all other activity inspectors;
  - e. responsible for documenting compliance with the environmental conditions of the Order, as well as any environmental conditions/permit requirements imposed by other federal, state, or local agencies; and
  - f. responsible for maintaining status reports.
8. Beginning with the filing of its Implementation Plan, Columbia Gulf shall file updated status reports with the Secretary on a **biweekly** basis until all construction, abandonment, and restoration activities are complete. On request, these status reports would also be provided to other federal and state agencies with permitting responsibilities. Status reports shall include:
- a. an update on Columbia Gulf's efforts to obtain the necessary federal authorizations;
  - b. the construction status of the Project, work planned for the following reporting period, and any schedule changes for stream crossings or work in other environmentally sensitive areas;
  - c. a listing of all problems encountered and each instance of noncompliance observed by the EI during the reporting period both for the conditions imposed by the Commission and any environmental conditions/permit requirements imposed by other federal, state, or local agencies;
  - d. a description of the corrective actions implemented in response to all instances of noncompliance;
  - e. the effectiveness of all corrective actions implemented;
  - f. a description of any landowner/resident complaints which may relate to compliance with the requirements of the Order, and the measures taken to satisfy their concerns; and
  - g. copies of any correspondence received by Columbia Gulf from other federal, state, or local permitting agencies concerning instances of noncompliance, and Columbia Gulf's response.
9. Columbia Gulf must receive written authorization from the Director of OEP, or the Director's designee, **before commencing construction or abandonment by removal of any Project facilities**. To obtain such authorization, Columbia Gulf must file with the Secretary documentation that it has received all applicable authorizations required under federal law (or evidence of waiver thereof).

10. Columbia Gulf must receive written authorization from the Director of OEP, or the Director's designee, **before placing the Project into service**. Such authorization would only be granted following a determination that rehabilitation and restoration of the areas affected by the Project are proceeding satisfactorily.
11. **Within 30 days of placing the authorized facilities in service**, Columbia Gulf shall file an affirmative statement with the Secretary, certified by a senior company official:
  - a. that the facilities have been constructed/abandoned in compliance with all applicable conditions, and that continuing activities would be consistent with all applicable conditions; or
  - b. identifying which of the conditions in the Order Columbia Gulf has complied with or would comply with. This statement shall also identify any areas affected by the Project where compliance measures were not properly implemented, if not previously identified in filed status reports, and the reason for noncompliance.

## SECTION E – REFERENCES

- EPA. 2020. Sole Source Aquifer Locations. <https://epa.maps.arcgis.com/apps/webappviewer/index.html?id=9ebb047ba3ec41ada1877155fe31356b>. Accessed September 2020.
- Federal Emergency Management Agency. 2019. National Flood Hazard Layer Viewer. <https://www.fema.gov/national-flood-hazard-layer-nfhl>. Accessed September 2020.
- Fenneman, N.M., and Johnson, D.W. 1946. Physiographic Divisions of the Conterminous United States. U.S. Geological Survey. Reston, VA. <http://app.fw.ky.gov/speciesinfo/speciesinfo.asp>. Accessed May 2020. <https://coast.noaa.gov/czm/mystate/>. Accessed June 2020.
- KDFWR. 2020b. Species Information. Available online:
- Kentucky Department of Environmental Protection (KDEP). 2020. Division of Water, Kentucky Watershed Viewer. <https://eppcgis.ky.gov/watershed/>. Accessed August 2020.
- Kentucky Geological Survey (KGS). 2001. Karst Occurrence in Kentucky - Map and Chart 33 Series XII. [https://kgs.uky.edu/kgsweb/olops/pub/kgs/mc33\\_12.pdf](https://kgs.uky.edu/kgsweb/olops/pub/kgs/mc33_12.pdf). Accessed September 2020.
- Kentucky Infrastructure Authority (KIA). 2020. Kentucky's Water Infrastructure (Drinking Water) online viewer. Available online at: <http://kygeonet.ky.gov/kia/dw/index.html>. Accessed May 2020.
- KGS. 2016. Bluegrass Region. <https://www.uky.edu/KGS/geoky/regionbluegrass.htm>. Accessed September 2020.
- KGS. 2018. The Eastern Kentucky Coal Field. <http://www.uky.edu/KGS/geoky/regioneastern.htm>. Accessed September 2020.
- National Conservation Easement Database (NCED). 2020. NCED Mapping Application. Available online at <https://www.conservationeasement.us/interactivemap/>. Accessed June 2020.
- National Oceanic and Atmospheric Administration (NOAA). 2020. Coastal Zone Management Programs. Office for Coastal Management. Available online at

- North American Bird Conservation Initiative (NABCI) Committee, 2016 Bird Conservation Regions Map. Available online: <http://nabci-us.org/resources/bird-conservationregions-map/#bcr24>. Accessed May 2020.
- U.S. Army Corps of Engineers (USACE). 1987. *Corps of Engineers Wetlands Delineation Manual, Technical Report Y-87-1*, U.S. Army Engineer Waterway Experiment Station, Vicksburg, Mississippi.
- U.S. Fish and Wildlife Service (USFWS). 2020. National Wild and Scenic Rivers System. Available Online at <http://www.rivers.gov/index.php>. Accessed June 2020.
- U.S. Geological Survey (USGS). 2020. Gap Analysis Program (GAP), Protected Areas Database of the United States (PAD-US), version 2.0 combined feature class.
- United States Environmental Protection Agency (USEPA). 2020. Ecoregion Download Files by State – Region 4. Available online: <https://www.epa.gov/ecoresearch/ecoregion-download-files-state-region-4#pane-15>. Accessed May 2020.
- USACE. 2012. *Regional Supplement to the Corps of Engineers Wetlands Delineation Manual: Eastern Mountains and Piedmont Region (Version 2.0)*, ed. J.F. Berkowitz, J.S. Wakeley, R.W. Lichvar, and C.V. Noble. ERDC/EL TR-12-9. Vicksburg, MS: U.S. Army Engineer Research Development Center.
- USGS. 2020b. Earthquake Catalog. <https://earthquake.usgs.gov/earthquakes/search/>. Accessed September 2020.

## **SECTION F – LIST OF PREPARERS**

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**Appendix 1 Recently Completed,  
Contemporary, or Ongoing, and  
Reasonably Foreseeable Future Projects  
in the Geographic Scope Impact  
Assessment Area**

**Appendix 1 – Recently Completed, Contemporary, or Ongoing, and Reasonably Foreseeable Future Projects in the Geographic Scope Impact Assessment Area**

<b>Project Name</b>	<b>Project Type</b>	<b>Proponent</b>	<b>County</b>	<b>Closest Distance and Direction</b>	<b>Description</b>	<b>Status of Project</b>	<b>Potential Area of Surface Disturbance (areas)</b>	<b>Potentially Affected Resources</b>
Mainline 100 and 200 Replacement FERC Docket CP19-193-000	Natural Gas Transmission Pipeline Replacement	Columbia Gulf Transmission, LLC	Menifee and Montgomery	Partially Overlapping CWA	Replacement of two (2) sections of Mainline (ML) 100, including the replacement of approximately 0.24 miles of existing 30-inch diameter Line ML100 with approximately 0.24 miles of new, 30-inch diameter natural gas transmission pipeline; and replacement of two (2) sections of ML 200, including the replacement of approximately 0.26 miles of existing 30-inch diameter Line ML100 with approximately 0.26 miles of new, 30-inch diameter natural gas transmission pipeline.	On Hold	10.6 during construction	Surface Water, Wetlands, Vegetation, Wildlife, Soils, Land Use, Air Quality (Construction), Noise (Construction)
US-460 at Lucky Stop Hill	State – Roadway Improvements	Kentucky Transportation Cabinet	Montgomery	2.4 mi to northwest	Reconstruction/straightening of the portion of US-460 between MP 18.1 and 19.6.	Completed in 2020	17.9 acres during construction	Surface Water, Wetlands, Vegetation, Wildlife, Soils
Pump Station No. 5 Project	Municipal – Sanitary Sewer Construction	Montgomery County Sanitation District #2	Montgomery	4.9 mi to northwest	Repair wastewater treatment plant pump station and replace 3,640 LF of existing force main.	Preliminary planning; construction expected within 5 years	4.2 acres during construction	Surface Water, Wetlands, Vegetation, Wildlife, Soils
Welch Road Project –	Municipal – Waterline Construction	City of Jeffersonville	Montgomery	5.8 mi to west	Construction of 15,280 LF 6” PVC waterline to provide water service to 25 un-served households.	Preliminary planning; construction expected within 5 years	17.5 acres during construction	Surface Water, Wetlands, Vegetation, Wildlife, Soils

**Appendix 1 – Recently Completed, Contemporary, or Ongoing, and Reasonably Foreseeable Future Projects in the Geographic Scope Impact Assessment Area**

<b>Project Name</b>	<b>Project Type</b>	<b>Proponent</b>	<b>County</b>	<b>Closest Distance and Direction</b>	<b>Description</b>	<b>Status of Project</b>	<b>Potential Area of Surface Disturbance (areas)</b>	<b>Potentially Affected Resources</b>
System Improvements Project	Municipal – Sanitary Sewer	Menifee County	Menifee and Montgomery	0.25 mi to South	Construction of 35,750 LF 6" PVC interceptor force main to connect Menifee County Sanitation District #1 to Montgomery County Sanitation District #2.	2020-2021 Project is fully funded	41.0 acres during construction	Surface Water, Wetlands, Vegetation, Wildlife, Soils, Land Use, Air Quality



## **Appendix 2 Interagency ESA Consultation Checklist for the MSHCP**

# INTERAGENCY ENDANGERED SPECIES ACT CONSULTATION CHECKLIST FOR THE NISOURCE MULTI-SPECIES HABITAT CONSERVATION PLAN

## APPLICANT SECTION

ACTION AGENCY (Recipient): Federal Energy Regulatory Commission

OTHER INVOLVED FEDERAL AGENCIES: U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service

PROJECT NAME: Columbia Gulf Transmission, LLC Mainline 300 Replacement

PROJECT I.D. NO. (if applicable): FERC Docket CP20-490-000

NiSource and Columbia Pipeline Group (Columbia) has provided the attached documentation to involved federal agencies in accordance with "Project Review and Documentation Protocols" of the NiSource/Columbia Pipeline MSHCP Consultation Implementation Guidance<sup>4</sup>. This documentation describes if and how the project is covered by the NiSource Multi-Species Habitat Conservation Plan (MSHCP), programmatic biological opinion (BO), and/or programmatic concurrence letters. In addition, the action agency could refer to the following sections and/or pages of the MSHCP, BO, and/or concurrence letters to verify that the activity is covered by the MSHCP and associated Section 7 consultation under the Endangered Species Act (ESA):

### Reference:

- [NiSource MSHCP Chapter 2.3 Covered Lands \(pp 2-11\)](#)
- [NiSource MSHCP Chapter 2.4 Covered Activities \(pp 11- 25\)](#)
- [NiSource/Columbia Pipeline MSHCP Consultation Implementation Guidance Quick Reference for Species Consultation Categories \(pp 5-6\)](#)
- [NiSource/Columbia Pipeline Group's, "Habitat Conservation Program Best Management Practices Guidebook". v.1.0. March 12, 2014 \(specific pages for each species are referenced in the attached application material\)](#)

By signing below, Columbia certifies that its proposed activity, as outlined in the accompanying application or notification, is consistent with the MSHCP, BO, and/or concurrence letters.

  
\_\_\_\_\_  
Columbia Pipeline representative

8/28/2020  
\_\_\_\_\_  
Date

By checking the box, Columbia is notifying the involved federal agencies that the proposed activity will require additional ESA Section 7 consultation because part of the activity may include: (1) any of the 10 Likely to Adversely Affect (LAA) species that are not included in the MSHCP<sup>5</sup>, (2) species not addressed in the MSHCP, BO, or concurrence letters<sup>5</sup>, (3) non-covered activities, (4) activities outside of the covered lands, or (5) activities otherwise deviating from the MSHCP, BO, and/or concurrence letters. Additional biological information about the species, habitat, or effects of the action may be required. The federal agencies can contact the U.S. Fish and

<sup>4</sup> See NiSource/Columbia Pipeline MSHCP Consultation Implementation Guidance. February 13, 2014. Pg 11.

<sup>5</sup> See NiSource/Columbia Pipeline MSHCP Consultation Implementation Guidance. February 13, 2014. Pg. 5.

Wildlife Service's NiSource/Columbia MSHCP Implementation Coordinator (Karen Herrington, 850.348.6495, karen\_herrington@fws.gov) for more information.

## FEDERAL AGENCY SECTION

This checklist serves as the official documentation that each action agency involved has completed its Section 7 responsibilities under the ESA for NiSource and Columbia Pipeline Group (Columbia) projects conducted as described in the MSHCP, BO, and/or concurrence letters. Every agency that receives a copy of this checklist should fill it out. The MSHCP, BO, and concurrence letters can be found on the U.S. Fish and Wildlife Service (FWS) NiSource website:

<http://www.fws.gov/midwest/endangered/permits/hcp/nisource/index.html>

Quick access to the required Avoidance and Minimization Measures (AMMs) and Best Management Practices (BMP) can be found in the Columbia BMP Guidebook, which is also posted on the above website.

1. Does the federal action occur entirely within the covered lands as described in the MSHCP?  
 Yes. Go to #2.  
 No. Additional consultation is required because the action is not consistent with the MSHCP, BO, and/or concurrence letters. If the project may affect listed species, contact your local FWS Field Office.
2. Is the proposed action as described in the MSHCP, programmatic BO, and/or concurrence letter?  
 Yes. Go to #3.  
 No. Additional consultation is required because the action is not consistent with the MSHCP, BO, and/or concurrence letters. If the project may affect listed species, contact your local FWS Field Office.
3. Does the proposed action pose any effects on species not included in the MSHCP, BO or concurrence letters<sup>65</sup>?  
 Yes. Additional consultation is required because the species was not included in the MSHCP, BO, and/or concurrence letters. If the project may affect listed species not included in the consultation, contact your local FWS Field Office.  
 No. Go to #4.
4. Does the proposed action include MSHCP species<sup>65</sup> only?  
 Yes. Go to #6.  
 No. Go to #5.
5. Does the proposed action include any of the 10 Likely to Adversely Affect (LAA) species that are not included in the MSHCP (i.e., LAA non-MSHCP species) as addressed in the BO?  
 Yes. Additional consultation is required. Enter into tiered consultation with your local FWS office for any LAA non-MSHCP species.  
 No. Go to #6.

Snuffbox (*Epioblasma triquetra*) is one of the 10 LAA species not covered by the MSHCP. In a letter dated April 8, 2020, Columbia Gulf initiated informal consultation with the USFWS Kentucky Field Office.

<sup>65</sup> See NiSource/Columbia Pipeline MSHCP Consultation Implementation Guidance. February 13, 2014. Pg. 5

6. Are all mandatory AMMs and/or BMPs for each species included in the action?<sup>7</sup>  
 Yes. Go to #7.  
 No. Additional consultation is required because the proposed action is not consistent with the MSHCP, BO, and/or concurrence letter. Request additional information from Columbia about AMMs.
7. Are all non-mandatory AMMs and/or BMPs for each species included in the action?  
 Yes. Consultation is complete because the proposed action is consistent with the MSHCP, BO, and/or concurrence letter.  
 No. Go to #8.
8. Are reasons provided for not including non-mandatory AMMs for each species?<sup>8</sup>  
 Yes. Consultation is complete.  
 No. Request justification from Columbia, and attach documentation here. Once justification is provided, consultation is complete.

It is the federal agency's responsibility to comply with ESA Section 7 requirements for this project. The programmatic BO and/or the concurrence letters cover most of Columbia's activities implemented under the MSHCP within the covered lands. By signing below, the federal agency verifies that the proposed action within the agency's authority complies with the programmatic BO, and/or concurrence letters. If additional Section 7 consultation is required, the U.S. Fish and Wildlife Service's supplemental concurrence letter or biological opinion will be attached to this documentation.

AGENCY COMMENTS:

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*Jeff Smith*

\_\_\_\_\_  
 Federal Agency representative

09/17/2020

\_\_\_\_\_  
 Date

<sup>7</sup> See NiSource/Columbia Pipeline Group's, "Habitat Conservation Program Best Management Practices Guidebook", v.1.0, March 12, 2014.

<sup>8</sup> Per the MSHCP, explanation for non-mandatory AMM use is not required for the Indiana Bat.