Federal Energy Regulatory Commission Office of Energy Projects, Division of Gas-Environment & Engineering

ENVIRONMENTAL ASSESSMENT REPORT

Name of Applicant: WBI Energy Transmission, Inc. (WBI)									
Date Filed: 10/12/21	I	Docket No: CP22-6-000							
Type: Sections 157.205, 157.208	(1)	Cost: \$10.4 million							
Facilities:									
WBI proposes to install about 9.6 miles of 8-inch-diameter natural gas lateral pipeline and associated receipt and delivery point facilities, in McLean and Morton Counties, North Dakota, to provide incremental natural gas service to an existing ethanol processing plant. WBI also requested authorization to construct and operate three farm taps along the new pipeline for a local distribution company to serve customers along the proposed route. WBI refers to these facilities as its Line Section 7 Expansion Project.									
	Environmental Impact Conclusions: Categorical Exclusion Deficiency Letter Required								
Environment Not Involved EA/EIS Required									
X Environment Com	No NO	No NOI Required							
	NOI F	NOI Required							
Environmental Considerations or Comments: See Environmental Comments (attached)									
Prepared by:	Date:	Approved by Branch	n Chief:	Date:					

Attachment

WBI Energy Transmission, Inc. (WBI)
Line Section 7 Expansion Project
Prior Notice Application
Docket No. CP22-6-000

ENVIRONMENTAL COMMENTS

Proposed Action

Pursuant to the regulations of the Federal Energy Regulatory Commission (FERC or Commission) at Title 18 Code of Federal Regulations (CFR) Parts 157.205, 157.208(b), and 157.211(a)(1), on October 12, 2021 WBI Energy Transmission, Inc. (WBI) filed a request for Prior Notice authorization for its Line Section 7 Expansion Project (Project), located in McLean and Morton Counties, North Dakota, under WBI's blanket certificate issued by the Commission in Docket Nos. CP82-487-000, et al.

The Project includes the installation of about 9.6 miles of 8-inch-diameter natural gas lateral pipeline and associated receipt and delivery point facilities to provide natural gas to an existing ethanol processing plant operated by Blue Flint Ethanol, LLC (Blue Flint). Blue Flint requested a total of 6,700 equivalent dekatherms per day of incremental firm natural gas transportation service from WBI's existing Northern Border Pipeline-Glen Ullin receipt point, in Morton County, North Dakota.

The new take off valve setting facilities would be located on the existing Line Section 7 mainline at the east end of the proposed lateral, in Section 23, T145N, R081W, McLean County. The facilities would consist of a 12-inch block valve with 8-inch Siamese valves and a 4-inch bypass/blowdown loop. A new pig launcher/receiver would be constructed at the take off point. A new 75-foot by 75-foot graveled/fenced tract (about 0.13-acre in size) would be used for operation of the take off valve facility.

Minor upgrades would need to be made to the existing receipt facilities within the Glen Ullin Compressor Station. This would include installation of additional regulation equipment, relief valves for overpressure protection, a larger odorization tank and pump, associated aboveground and belowground piping, and new tubing and fittings. These facilities would be installed within the existing fenced boundary of the station.

The new pipeline lateral would begin at WBI's existing Line Section 7 mainline and proceed west to the existing Blue Flint plant located south of Underwood. The Blue Flint Delivery Station would be constructed within the boundaries of the Blue Flint processing plant. The delivery station would be located in the SE ½ of Section 17,

T145N, R82W, in McLean County. The Blue Flint Delivery Station would occupy an area in the plant about 200 feet by 200 feet in dimension (about one acre in size). A security fence would be built around the delivery station, and a permanent access road from the west side of the station would be constructed. A new pig launcher/receiver would be installed at the plant delivery station, together with a 6-inch meter skid with a 3-inch Coriolis meter, valves, gas quality instrumentation, communication equipment, necessary piping, and appurtenant facilities.

At three locations, about station numbers 195+00, 299+00, and 407+00 along the new lateral pipeline, WBI would install 2-inch farm taps. The taps would allow a local distribution company, Montana-Dakota Utilities Co. (MDU), to serve adjacent landowners. The farm taps would consist of the tap, riser, valve, and a telemetry device that will be tied into a non-jurisdictional meter. Landowners along the lateral plan to use the supplied gas for grain drying, and home and shop heating applications.

Purpose and Need

Currently, Blue Flint receives steam from an adjacent coal fired generating station and uses the steam in its manufacturing process. Blue Flint seeks natural gas from WBI to ensure a long-term, reliable source of energy for its ethanol manufacturing needs. The three farm taps along the new lateral pipeline would provide interruptible natural gas service for a local distribution company (MDU).

Construction Techniques

The pipeline would have a Maximum Allowable Operating Pressure (MAOP) of 700 pounds per square inch gauge (psig). The construction right-of-way for the lateral would be 75 feet wide, with a 50-foot permanent easement. Additional temporary workspaces would be required at bores, road crossings, and points-of-intersection. Two temporary storage yards would be used.

The pipeline would be installed using standard cross-country techniques, in a linear fashion, with sequences including surveying, clearing, grading, stringing, trench excavation, lowering-in, backfilling, hydrostatic testing, tie-ins, clean-up and restoration. The horizontal directional drill (HDD) method would be used at seven road, railroad, and wetland crossings to install the pipeline.

In general, all construction activities will occur between the hours of 7 AM and 7 PM. However, HDD and hydrostatic test operations may extend outside this specific timeframe. WBI estimates the duration of construction for the proposed pipeline and aboveground facilities will be approximately 90 days. The pipeline construction will occur as a single spread, with one contractor crew completing installation of the proposed pipeline. Separate workgroups will conduct aboveground facility work at the Glen Ullin

Compressor Station, Blue Flint Delivery Station, Blue Flint Take Off Valve Setting, and farm tap locations

WBI would adhere to the protocols outlined in our May 2013 version of the *Upland Erosion Control, Revegetation, and Maintenance Plan* (Plan) and our May 2013 version of the *Wetland and Waterbody Construction and Mitigation Procedures* (Procedures). In addition, WBI would supplementally adhere to its own construction, restoration, and mitigation plans, including its:

- Spill Prevention Control and Countermeasure Plan (Appendix II-G of its Prior Notice application);
- Guided Bore (HDD) Fluid Monitoring and Operations Plan (Appendix II-H of its Prior Notice application);
- Plan for Unanticipated Discovery of Historic Properties or Human Remains (Appendix II-I of its Prior Notice application);
- Plan for Unanticipated Discovery of Paleontological Resources During Construction (Appendix II-J of its Prior Notice application);
- Plan for Unanticipated Discovery of Contaminated Environmental Media (Appendix II-K of its Prior Notice application); and
- Fugitive Dust Control Plan (Appendix II-L of its Prior Notice application)

The Project would be designed, constructed, tested, operated and maintained in accordance with the requirements of 49 CFR Part 192, *Transportation of Natural and Other Gas by Pipeline: Minimum Federal Safety Standards*, and with all other applicable local, state, and federal regulations and codes.

Land Requirements

Construction of the Project would affect a total of about 158.5 acres of land. Operation would affect about 59.5 acres. Table 1 outlines land requirements for proposed facilities.

3

¹ The pronouns "we," "us," and "our" refer to the environmental staff of the Commission's Office of Energy Projects.

TABLE 1								
and Requirements of the Facilities Proposed for WBI's Line Section 7 Expansion Project								
Facilities	Acres Affected by Construction	Acres Affected by Operation						
Lateral Pipeline	113.5	58.4						
Glen Ullin Receipt Point	0.1	0						
Take-off Valve Setting	3.5	0.1						
Blue Flint Delivering Station	1.4	0.9						
Yards	21.0	0						
Temporary Access Roads	18.9	0						
Permanent Access Roads	0.1	0.1						

Environmental Analysis

Geology

Physiographic Settings, Mineral Resources and Geologic Hazards

McLean County lies mostly within the Great Plains physiographic province. Morton County lies within the Missouri Plateau of the Great Plains physiographic province, in the southwestern part of North Dakota.

Bedrock in the project area consists of the Sentinel Butte and Bullion Creek formations of Paleocene age, which comprise the Fort Union Group. Glacial deposits of Pleistocene age, consisting of unconsolidated fragments of older rock eroded and transported by glaciers, cover most of the Project area and unconformably overlie sedimentary rocks of Paleocene age.

Due to the geologic history and structural features in the Project vicinity, the geologic units underlying the Project area host oil and gas resources, as well as deposits of coal/lignite. Further, glacial sediments contain sand and gravel that is mined for industrial and commercial purposes. No active or abandoned surface or subsurface oil and natural gas wells or coal mines were identified within 0.25 mile of the Project area. Therefore, we conclude that the Project would not impact the availability of or access to mineral resources.

Geologic hazards (e.g., seismicity, soil liquefaction, landslide, land subsidence potential) that could impact or be impacted by the Project were not identified. If paleontological resources are discovered during construction, they will be managed in accordance with WBI's *Plan for Unanticipated Discovery of Paleontological Resources during Construction*.

Soils

Approximately 14.1 acres of soils with high water erodibility are located within the Project area. These soils are located within wetlands crossed by the Project and would be temporarily impacted by construction. There are no soils identified as having high wind erodibility within the Project area and slopes within the Project area are flat to gently sloping. As such, no steep slope erosion hazards are anticipated. Approximately 2.1 acres of compaction-prone soil are located within the Project area.

The Project area includes 21.1 acres of soils classified as prime farmland and 107.2 acres of soils classified as farmland of statewide/local importance. Approximately 17.6 acres of soils identified as prime farmland are located within the pipeline and storage yard construction work areas. Approximately 3.4 acres of soils designated as prime farmland are located within areas to be used as access roads. However, for the Project, WBI would use existing public and private access roads. As such, soils in these areas are already disturbed and no additional impacts are expected. No soils designated as prime farmland are located within the proposed footprint of any aboveground facilities. Approximately 3.5 acres of soils designated of farmland of statewide/local importance are located within the proposed footprint of aboveground facilities and a portion of these soils may be converted to permanent use for operation of these facilities. Potential impacts to prime farmland soils include loss of soil due to wind or water erosion, reduction of soil quality by mixing topsoil with subsoil, soil compaction from equipment, rutting, and disruption of the soil drainage systems. During construction, WBI would restore all disturbed areas outside of the permanent aboveground facility boundaries to approximate pre-disturbance conditions following construction. In areas currently designated as agricultural land, WBI would work directly with landowners and would strip the entire topsoil layer (up to 12 inches) during construction. The topsoil would be stored separately from the subsoil and returned following construction activities.

To limit impacts on soil resources, WBI would install erosion and sediment controls in accordance with the FERC Plan and Procedures and the Project SWPPP. After completion of construction, temporary workspaces would be seeded in accordance with landowner requests and would take place within the National Resource Conservation Service (NRCS) timeframes and in accordance with NRCS-recommended seeding methods and rates.

If contaminated or suspect soils are encountered during construction, WBI would implement its *Plan for Unanticipated Discovery of Contaminated Media*. During construction, WBI would also implement its Project SPCC Plan, which specifies measures to prevent contamination from accidental spills or leaks of fuels or lubricants, and cleanup procedures in the event of inadvertent spills. With the implementation of

WBI's Project SWPP, SPCC Plan, and the Plan and Procedures, we anticipate adverse impacts on soils would generally be temporary to short-term (lasting until revegetation is successful) and not significant.

Water Resources

Groundwater

There are no U.S. Environmental Protection Agency (EPA)-designated sole-source aquifers, or state-designated wellhead protection areas underlying Project areas. WBI identified three water wells within 150 feet of the Project area. Of the three wells identified, two are monitoring wells and not used as water supply wells. The third water well is WBI's water supply well for the Glen Ullin Compressor Station. WBI would clearly mark/flag confirmed water wells to avoid physical damage/destruction during construction activities.

Groundwater withdrawal is not proposed for the Project, except as necessary for trench dewatering. If trench dewatering is necessary, shallow groundwater resources immediately adjacent to Project work areas could be affected during construction activities; however, this effect would be temporary and flow patterns would return to preconstruction conditions once dewatering activities cease.

The potential exists for HDD drilling fluid to be lost to groundwater, resulting in a localized increase in aquifer turbidity. However, inadvertent releases would not permanently impact groundwater quality within the Project area. Further, WBI Energy would utilize only non-petrochemical-based, non-hazardous drilling fluid additives that comply with NSF International/American National Standards Institute 60.

Known groundwater contamination was not identified within 0.25 mile of Project areas. Therefore, given an absence of other groundwater users within 150 feet of Project areas and WBI's mitigation measures, including implementation of our Plan and Procedures and its SPCC Plan, Unanticipated Discovery of Contaminated Environmental Media, and Guided Bore (HDD) Fluid Monitoring and Operations Plan, we conclude that impacts from Project construction and operation on groundwater resources would not be significant.

Project activities within the 100-year floodplain would be limited to receipt facility upgrades within WBI's Glen Ullin Compressor Station, and all disturbances would take place within the existing fenced facility boundaries. Therefore, Project construction and operation would not significantly impact floodplain storage capacity and would not be significantly impacted by flood hazards.

Surface Waterbodies and Fisheries

The Project would cross two minor, intermittent, waterbodies and numerous agricultural/ephemeral drainages/surface water conveyance features. These features do not support fisheries. WBI would cross these features in accordance with our Plan and Procedures. Our Plan and Procedures require affected lands to be restored to preconstruction conditions, grade, and contours; therefore, we expect that impacts on waterbodies would be minor and temporary in nature.

The total volume of water to conduct hydrostatic testing and HDD operations, is approximately 336,417 gallons. This includes approximately 142,214 gallons for the final hydrostatic test of the new pipeline, approximately 15,073 gallons for the HDD string hydrostatic testing, and approximately 179,130 gallons for HDD operations and dust suppression. WBI would obtain water for hydrostatic testing, HDD operations, and dust suppression from a nearby lake and/or a municipal source. This withdrawal would be consistent with our Procedures and all other required permits. Based on the number and characteristics of waterbodies and surface water features crossed, we have determined that impacts on these resources would be temporary and minor.

Wetlands

Constructing the Project would affect 13 palustrine emergent wetlands many of which are also considered prairie pothole wetlands or wetland drainageways/depressions. Many of the wetlands that will be crossed lack natural vegetation due to agricultural practices (cultivated/farmed wetlands). Vegetation observed in wetlands included smooth brome (*Bromus inermis*), quackgrass (*Elymus repens*), reed canary grass (*Phalaris arundinacea*) and cattail (*Typha latifolia*).

Wetlands affected range in size between 0.01 acre and 2.9 acres. A total of about 7.4 acres of wetlands would be crossed by the proposed pipeline. Open cut crossings of wetlands would require vegetation clearing and soil disturbance. These actions could affect wetland characteristics.

Generally, WBI would implement our Procedures to cross wetlands, including the erection of erosion control measures, soil segregation, and mat installation. Based on the characteristics of the wetlands that will be affected and WBI's implementation of measures to reduce impacts on these wetlands, we conclude Project-related impacts would be minor and temporary.

HDD Feasibility and Inadvertent Returns of Drilling Fluid to the Ground Surface

WBI proposes seven HDD crossings of wetlands, roads, and waterbodies. These crossings range in length from 317 to 1,993 feet and would reach maximum depths of

between approximately 10 and 30 feet below the ground surface. WBI anticipates that proposed drill paths would encounter post-glacial alluvium deposits and glacial deposits. Subsurface conditions that can affect feasibility of HDD installation include unconsolidated gravel and boulder materials, which may occur in glacial deposits. If an HDD proves unfeasible, WBI would complete the proposed crossing via the open-cut method.

During HDD operations, drilling fluid consisting primarily of water and bentonite clay would be pumped under pressure through the inside of the drill pipe and flow back (return) to the drill entry point along the annular space between the outside of the drill pipe and the drilled hole. Formational drilling fluid losses may occur when the drilling fluid flows through the pore spaces in soil or within fractures in clay formations. Chances for an inadvertent return to occur are greatest near drill entry and exit points where the drill paths have the least amount of ground cover.

WBI provided its Guided Bore Fluid Monitoring and Operations Plan that would be implemented as applicable, and WBI would utilize only non-petrochemical-based, non-hazardous additives that comply with NSF International/American National Standards Institute 60. WBI's Guided Bore Fluid Monitoring and Operations Plan addresses the prevention, detection, notification, and response to inadvertent returns of drilling fluid to the ground surface. We have reviewed this plan and find it acceptable. Based on the length and depth of proposed drills, mitigation measures in WBI's Guided Bore Fluid Monitoring and Operations Plan, and WBI's contingency crossing plans, we conclude that impacts from HDD construction would not be significant.

Vegetation and Wildlife

The Project would affect agricultural, pasture, and unmanaged herbaceous vegetation. No forests would be impacted. Typical agricultural vegetation includes wheat, hay, and corn. Pasture vegetation includes a variety of grasses.

Constructing the Project would require the temporary clearing of vegetation. Clearing vegetation could affect soil characteristics, erosion, and increase the spread of noxious and invasive species. Once construction is complete, affected lands would be reseeded and vegetation would be allowed to return to pre-construction conditions. To address impacts associated with the clearing of vegetation, WBI would implement measures consistent with our Plan and would require equipment be cleaned prior to going onsite.

About 120 acres of agricultural vegetation and about 10 acres of pasture and unmanaged herbaceous vegetation would be affected by construction of the Project. Operating the Project would affect about 50 acres of agricultural vegetation and 5 acres of pasture and unmanaged herbaceous vegetation.

Vegetation occurring on affected lands along with other natural structures/features and to a lesser extent artificial structures/features provides numerous habitats (food and shelter) for a variety of commonly found wildlife species. Wildlife known to occur in the Project area includes games birds, migratory birds, deer, and other wildlife generalists accustomed to agricultural disturbance. Wildlife present and transitory wildlife would be displaced by and would likely avoid construction activities. Changes to wildlife behaviors would increase the rates of stress, injury, and mortality experienced by wildlife; however, given the scope of the Project and the availability of similar habitats nearby, any impacts on wildlife would likely be minor and temporary.

To reduce impacts on migratory birds, WBI would mow vegetation prior to bird migration into the Project area to deter nesting. If nests are identified during preconstruction surveys, work would be stopped up to 0.1-mile of the active nest, the nest would be monitored, and construction would not occur until fledgling has occurred. Therefore, we conclude that the Project would not result in population-level impacts or significant measurable negative impacts on birds of conservation concern or migratory birds.

Lastly, a bald eagle nest was identified about 250 feet from construction workspace. WBI has coordinated with the U.S. Fish and Wildlife Service's North Dakota Ecological Services Field Office (FWS) to avoid and minimize potential impacts on this nest. Specifically, WBI would attempt to avoid construction during the bald eagle breeding season and should construction occur during the breeding season and an active nest is observed, WBI would avoid constructing within 660 feet of the nest.

Protected Species

In correspondence dated October 1, 2021, the FWS indicated it had no objection to WBI's proposed project. Therefore, based on the FWS' input, the scope of the project, known habitats potentially affected, the mobility of the listed species identified, and WBI's efforts to avoid and reduce impacts on wildlife including migratory birds, , we have determined that constructing and operating the Project would result in *no effect* on the three federally-listed threatened and endangered species identified as having the potential to occur in the Project area: the endangered whooping crane (*Grus americana*), threatened Dakota skipper (*Hesperia dacotae*), and threatened Northern long-eared bat (*Myotis septentrionalis*). Additionally, the state of North Dakota does not have a state endangered or threatened species list and the Project is unlikely to significantly impact North Dakota Species of Conservation Priority.

Cultural Resources

A literature and site file review by WBI's consultant revealed 10 other investigations that had been previously conducted within the sections where the Project is located. Five sites, one site lead, and one isolated find were previously recorded within one mile of the Project. None of the previously recorded cultural resources are within the survey area for the Project.

Between May and August 2021, an intensive pedestrian cultural resources inventory was conducted to cover the Project area. The survey recorded an historic artifact scatter, and two prehistoric isolated finds. All resources encountered during the inventory were recommended ineligible for inclusion in the National Register of Historic Places (Lembo and Baker, August 2021).

In a letter to WBI dated August 17, 2021, the North Dakota State Historic Preservation Office (SHPO), after reviewing the cultural resources report, concluded that there were "no historic properties affected" by the Project.

FERC staff concurs with the SHPO that the Project would have no effects on historic properties. Therefore, this Prior Notice application complies with Appendix II to Subpart F of Part 157 of the Commission's regulations, Procedures for Compliance with the National Historic Preservation Act.

Land Use and Recreation

Construction of the Project would impact about 75 percent agricultural lands (118.5 acres); 14.6 percent developed lands (23.1 acres); and 6 percent open lands (9.5 acres).

Topsoil (up to 12 inches) would be stripped and segregated from subsoil materials. There are no known agricultural drain tile systems located within the Project area. All disturbed areas would be restored to original conditions following construction.

There are no planned residential or commercial areas within the Project area. The nearest residence is located approximately 250 feet north of the proposed pipeline.

The Project crosses private lands. There are no public lands, recreation areas, scenic byways, trails, state parks, national parks, conservation easements, wildlife management areas, National Wild and Scenic Rivers, National Forests, or Indian reservations within the Project area.

Air Quality and Noise

Air Quality

Federal and state air quality standards are designed to protect human health. The EPA has developed National Ambient Air Quality Standards (NAAQS) for criteria air pollutants such as oxides of nitrogen (NO_x), carbon monoxide (CO), sulfur dioxide (SO₂), and inhalable particulate matter (PM_{2.5} and PM₁₀). PM_{2.5} includes particles with an aerodynamic diameter less than or equal to 2.5 micrometers, and PM₁₀ includes particles with an aerodynamic diameter less than or equal to 10 micrometers.

The NAAQS were set at levels the EPA believes are necessary to protect human health and welfare. Volatile organic compounds (VOC) are regulated by EPA mostly to prevent the formation of ozone, a constituent of photochemical smog. Many VOCs form ground-level ozone by reacting with sources of oxygen molecules such as NO_x in the atmosphere in the presence of sunlight. NO_x and VOCs are referred to as ozone precursors. Hazardous air pollutants (HAP) are also emitted during fossil fuel combustion and are suspected or known to cause serious health effects or adverse environmental effects.

Greenhouse Gases (GHG) produced by fossil-fuel combustion are carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O). GHGs status as a pollutant is not related to toxicity. GHGs are non-toxic and non-hazardous at normal ambient concentrations, and there are no applicable ambient standards or emission limits for GHG under the Clean Air Act. GHGs emissions due to human activity are the primary cause of increased atmospheric concentration of GHGs since the industrial age. These elevated levels of GHGs are the primary cause of warming of the climatic system. These existing and future emissions of GHGs, unless significantly curtailed, will cause further warming and changes to the local, regional and global climate systems.

During construction and operation of the Project, these GHGs would be emitted from construction equipment. Emissions of GHGs are typically expressed in terms of CO_2 equivalents (CO_{2e}).

If measured ambient air pollutant concentrations for a subject area remain below the NAAQS criteria, the area is in attainment with the NAAQS. The Project areas are in attainment for all NAAQS.

The Clean Air Act is the basic federal statute governing air pollution in the United States. We have reviewed the following federal requirements and determined that they are not applicable to the proposed Project:

- New Source Review;
- Title V:
- National Emissions Standards for Hazardous Air Pollutants;
- New Source Performance Standards:
- Greenhouse Gas Reporting Rule; and
- General Conformity of Federal Actions.

During construction, a temporary reduction in ambient air quality may result from criteria pollutant emissions and fugitive dust generated by construction equipment. The quantity of fugitive dust emissions would depend on the moisture content and texture of the soils that would be disturbed. Fugitive dust and other emissions due to construction activities generally do not pose a significant increase in regional pollutant levels; however, local pollutant levels could increase. Dust suppression techniques, such as watering the right-of-way may be used as necessary in construction zones near residential and commercial areas to minimize the impacts of fugitive dust on sensitive areas.

TABLE 2											
	Construction Emissions (tons)										
Source	NOx	CO	VOC	SO ₂	PM ₁₀	PM _{2.5}	GHG (as CO _{2e})	Total HAPS			
Off-Road Construction Equipment Engines	5.27	4.09	0.5	0.007	0.67	0.0	913	0.03			
On-Road Vehicle Engines	0.26	0.5	0.07	0.002	0.02	0.02	199	0			
Off-Road Vehicle Fugitives					13.8	2.03					
Construction Fugitives					61.25						
Total	5.53	4.59	0.57	0.009	75.81	25.84	1,111	0.03			

The results of the construction emission estimates demonstrate that the construction of the Project would not cause or contribute to an exceedance of the NAAQS. Moreover, the Project would not be subject to review under the general conformity thresholds because the Project is in an area classified as attainment/unclassifiable for all criteria pollutants. Given the small size of the Project footprint and short duration of construction (approximately five months), the Project is not anticipated to significantly affect regional air quality. Additionally, operational emissions would be limited to fugitive releases from the pipeline and replacement mainline valve and would be negligible and consistent with current operations.

Noise

The noise environment can be affected both during construction and operation of pipeline projects. The magnitude and frequency of environmental noise may vary

considerably over the course of the day, throughout the week, and across seasons, in part due to changing weather conditions and the effects of seasonal vegetative cover. Two measures to relate the time-varying quality of environmental noise to its known effect on people are the 24-hour equivalent sound level (L_{eq}) and day-night sound level (L_{dn}). The L_{eq} is the level of steady sound with the same total (equivalent) energy as the time-varying sound of interest, averaged over a 24-hour period. The L_{dn} is the L_{eq} plus 10 decibels on the A-weighted scale (dBA) added to account for people's greater sensitivity to nighttime sound levels (between the hours of 10 p.m. and 7 a.m.). The A-weighted scale is used because human hearing is less sensitive to low and high frequencies than mid-range frequencies. The human ear's threshold of perception for noise change is considered to be 3 dBA; 6 dBA is clearly noticeable to the human ear, and 10 dBA is perceived as a doubling of noise.

Construction Noise

Noise associated with construction activities would be short term. The Project does not involve new, significant aboveground facilities and will not result in operational noise impacts.

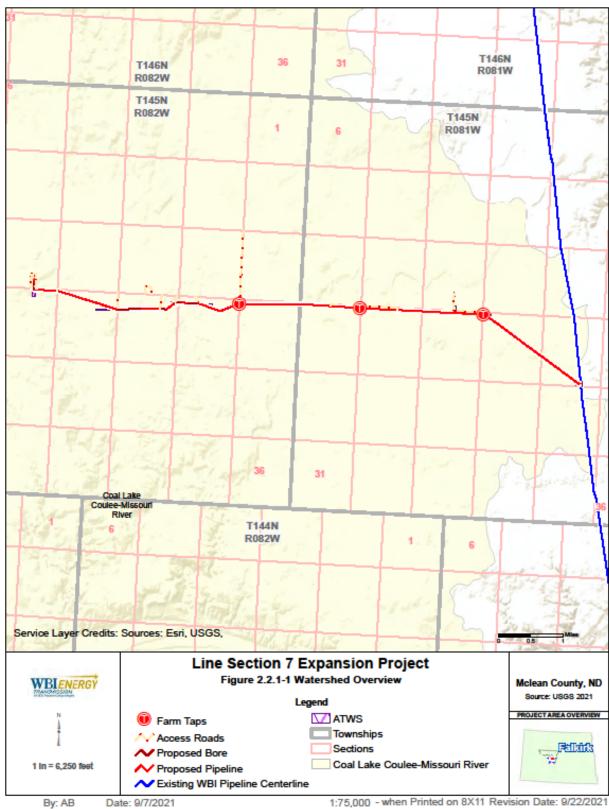
Conclusion

During our evaluation, we did not identify any reasonable alternatives to the Project. Based on the above environmental analysis, the staff has determined that approval of the proposed Project would not constitute a major federal action significantly affecting the quality of the human environment.

REFERENCES CITED

Lembo, R., and A. Baker August 2021. A Class I and Class III Cultural Resource Inventory of the Blue Flint Ethanol Plant Lateral Natural Gas Pipeline, Delivery Station, and Access Roads in McLean County, North Dakota. Beaver Creek Archaeology, Bismark.

Appendix 1 Project Location Map



Date: 9/7/2021 1:75,000 - when Printed on 8X11 Revision Date: 9/22/2021