WBI ENERGY TRANSMISSION, INC.

Wahpeton Expansion Project

Resource Report 2
Water Use and Quality

Final

Docket No.
CP22-XXX-000

May 2022

WBI ENERGY TRANSMISSION, INC.
WAHPETON EXPANSION PROJECT
RESOURCE REPORT 2—WATER USE AND QUALITY

Minimum Filing Requirements for Environmental Reports:	Addressed In Section:
1. Identify and describe by milepost perennial waterbodies and municipal water supply or watershed areas, specially designated surface water protection areas and sensitive waterbodies, and wetlands that would be crossed. For each waterbody crossing, identify the approximate width, state water quality classifications, any known potential pollutants present in the water or sediments, and any potable water intake sources within 3 miles downstream. – Title 18 Code of Federal Regulations ("CFR") part 380.12(d)(1).	Section 2.2 through section 2.3; table 2.2-2 and table 2.3-1; appendix 2B
2. Compare proposed mitigation measures with the staff's current "Wetland and Waterbody Construction and Mitigation Procedures," which are available from the Commission Internet home page or the Commission staff, describe what proposed alternative mitigation would provide equivalent or greater protection to the environment, and provide a description of site- specific construction techniques that would be used at each major waterbody crossing. – 18 CFR 380.12(d)(2).	Sections 2.2.6, 2.2.7, and 2.3.4
3. Describe typical staging area requirements at waterbody and wetland crossings. Also, identify and describe waterbodies and wetlands where staging areas are likely to be more extensive. – 18 CFR 380.12(d)(3).	Not Applicable
4. Include National Wetlands Inventory ("NWI") maps. If NWI maps are not available, provide the appropriate state wetland maps. Identify for each crossing, the milepost, the wetland classification specified by the U.S. Fish and Wildlife Service, and the length of the crossing. Include two copies of the NWI maps (or the substitutes, if NWI maps are not available) clearly showing the proposed route and mileposts directed to the environmental staff. Describe by milepost, wetland crossings as determined by field delineations using the current Federal methodology. – 18 CFR 380.12(d)(4).	Appendices 2A and 2B
5. Identify aquifers within excavation depth in the project area, including the depth of the aquifer, current and projected use, water quality and average yield, and known or suspected contamination problems. – 18 CFR 380.12(d)(5).	Section 2.1.1
6. Describe specific locations, the quantity required, and the method and rate of withdrawal and discharge of hydrostatic test water. Describe suspended or dissolved material likely to be present in the water as a result of contact with the pipeline, particularly if an existing pipeline is being retested. Describe chemical or physical treatment of the pipeline or hydrostatic test water. Discuss waste products generated and disposal methods. – 18 CFR 380.12(d)(6).	Section 2.2.4
7. If underground storage of natural gas is proposed: i. Identify how water produced from the storage field will be disposed of, and ii. For salt caverns, identify the source locations, the quantity required, and the method and rate of withdrawal of water for creating salt cavern(s), as well as the means of disposal of brine resulting from cavern leaching. – 18 CFR 380.12(d)(7).	Not Applicable
8. Discuss proposed mitigation measures to reduce the potential for adverse impacts to surface water, wetlands, or groundwater quality to the extent they are not described in response to paragraph (d)(2) of this section. Discuss the potential for blasting to affect water wells, springs, and wetlands, and measures to be taken to detect and remedy such effects. – 18 CFR 380.12(d)(8).	Sections 2.1.4, 2.2.7, 2.2.8, 2.3.3, and 2.3.4
9. Identify the location of known public and private groundwater supply wells or springs within 150 feet of proposed construction areas. Identify locations of United States Environmental Protection Agency or state-designated sole source aquifers and wellhead protection areas crossed by the proposed pipeline facilities. – 18 CFR 380.12(d)(9).	Sections 2.1.2 and 2.1.3
Federal Energy Regulatory Commission's April 4, 2022 Comments on Draft Resource Report 2:	
1. Include the depth below ground surface for the Wahpeton Buried Valley Aquifer. If trenching, boring or other planned activities could intersect or otherwise affect this aquifer, then describe impacts and mitigation as needed.	Section 2.1.1.1. Boring and trenching activities will not intersect or otherwise affect the Wahpeton Buried Valley Aquifer.

2.	The text in section 2.1.4 indicates that the nearest residence is greater than 200 feet from the planned pipeline. Resource Report 1 states that the nearest residence is about 400 feet away. Section 10.7.1 states that the nearest residence is about 350 feet from the planned route. Include the specific distance to the nearest residence. In addition, clarify that the landowner coordination for the seven residences would be for septic systems, not wells.	The nearest residence discrepancy is resolved and the text of section 2.1.4 is revised to clarify that landowner coordination is regarding septic systems, and not wells.
3.	A "relatively small footprint of impervious surfaces" is discussed in section 2.1.5. Include the actual or estimated area in square feet for planned impervious surfaces for each facility. In addition, section 2.1.5 discusses potential impacts on groundwater based on a presumed trenching depth "of about 5 feet (or deeper…)." Include a discussion of potential impacts on groundwater where trenching or boring would occur approximately 6 feet below ditches, 12 feet below railroads, and up to 25 feet or more below waterbodies.	Section 2.1.5 is revised to specify the approximate amount of impervious surface associated with the valve sites and border stations, and to include a discussion of potential groundwater impacts associated with the pipeline boring activities.
4.	Revise sections 2.1.3 and 2.1.5 to include a discussion of water supply springs and swallets within 150 feet of planned workspaces. Outline measures to avoid, reduce, or mitigate impacts as applicable.	No swallets or springs were identified within 150 feet of the planned workspace during the wetland delineation.
5.	In section 2.1.5, provide details regarding the specific water quality parameters that WBI Energy would analyze for domestic water sources located within 150 feet of the planned construction workspace.	See revised section 2.1.5.
6.	Provide the Hydrologic Unit Code (HUC) 12 watersheds crossed by the Project and the MP entry and exit points of those watersheds.	Section 2.2.1
7.	Section 2.2.1 indicates that 24 waterbodies would be crossed (9 intermediate and 15 minor waterbodies), but elsewhere the section and associated table indicate that 23 waterbodies would be crossed. Resolve the apparent discrepancy.	The discrepancy is resolved in section 2.2.1.
8.	In table 2.2-1, include the fishery classification/type and associated watershed identifier.	In North Dakota, the fishery classification type is a designation assigned to lakes and reservoirs. No lakes or reservoirs are crossed by the Project. The North Dakota stream classifications are included in table 2.2-2, and the watershed identifier has also been added to table 2.2-2.
9.	Discuss measures to avoid, reduce, or mitigate impacts on waterbodies and wetlands during construction from non-pipeline facilities (such as contractor yards and access roads).	All wetland impacts associated with the contractor yards will be temporary. These wetland areas will be restored to the original contours and seeded with a native mix after completion of construction. Further, following the draft Resource Report submission, WBI Energy reduced workspaces at contractor yards to avoid wetlands to the extent feasible. The majority of access road impacts will be temporary. Permanent access Road 034 will result in less than 0.01 acre of permanent impact to a low-quality roadside ditch wetland. All the streams crossed by access roads are low quality ephemeral roadside ditches. The majority of these crossings are on existing roads with existing culverts. It is likely that there will be little to no flow in the ditches during construction. No streams will be impacted as a result of the aboveground facilities. Impacts associated with access road crossings of streams is discussed in section 2.2.7.3. Wetland impacts associated with access roads and the contractor yards is discussed in section 2.3.3.
10.	Section 2.2.2 states the pipeline corridor would cross one Class IV open waterbody. Table 2.2-1 does not include a Class IV designation. Denote which waterbody crossing is a Class IV waterbody.	The pipeline corridor no longer crosses the Class IV open waterbody. The text in section 2.2.2 no longer references the Class IV open waterbody.

11. Regarding hydrostatic testing: a) include specific surface waters (waterbody identification code and name) and locations or specific municipal water sources that may be used for hydrostatic test water including expected month water would be withdrawn and discharged; b) identify whether any surface waters that would be used as hydrostatic test water sources contain invasive aquatic or invasive plant species. For any such withdrawal where invasive species are present, identify the discharge location and describe how WBI Energy would avoid transfer of invasive species outside of HUC 12 watersheds; identify locations where test water would not be cascaded into the next section of the pipeline as prohibited by the *Aquatic Nuisance Species Prevention Plan*; c) identify any chemicals that may be added to the test water, along with the associated safety data sheets and ecotoxicity data. If chemicals would be used, then include concentration(s) at discharge, and the planned treatment and/or disposal method for treated discharge water, if appropriate; d) include the source and volume of water for each bore pre-test segment and make-up of drilling fluid; e) clarify if WBI Energy would commit to discharging hydrostatic test water that came from surface water sources into the same watershed as the source water; and f) indicate the anticipated discharge location, volume, and rate for each hydrostatic test water discharge.	See section 2.2.4.
12. In section 2.2.4, indicate how much water is anticipated to be used for dust suppression, and compaction and decompaction at the border stations.	The anticipated discharge rate for dust suppression is included in section 2.2.4. The total amount of water used for dust suppression will be dependent on conditions at the time of construction.
13. List and describe by location any riparian areas that would not be avoided by the use of a guided bore. Include a description of anticipated impacts and any post-construction restoration methods WBI Energy would implement.	All the riparian areas will be avoided by the use of guided bore.
14. Section 2.2.5 indicates at least three aboveground facilities (the MDU-Kindred Border Station, Valve #2, and the existing Mapleton Compressor Station) would be located within floodplains. Include the Federal Emergency Management Agency flood zone classification, if applicable. Indicate any required loss of flood storage and describe the volume removed. Discuss the potential for flash flooding, including measures WBI Energy would implement to protect the construction right-of-way and aboveground facilities from flooding, including any applicable permitting requirements. Indicate whether there are suitable alternatives located outside the floodplain for the MDU-Kindred Border Station and Valve #2.	Section 2.2.5
15. Section 2.2.7.2 indicates that the open-cut method would be used at nine locations, however table 2.2-1 states only eight open-cut crossings. Resolve the apparent discrepancy.	With the filing of these final Resource reports, there are now only two open-cut crossings. The identified discrepancy is corrected in section 2.2.7.2 and table 2.2-2.
16. Section 2.2.8 indicates "portable bridges <u>may</u> be utilized at minor stream crossings." Clarify the apparent discrepancy with the *FERC Wetland and Waterbody Construction and Mitigation Procedures* which require equipment bridges at all waterbodies.	Section V.B.7.c of the Federal Energy Regulatory Commission (FERC) *Wetland and Waterbody Construction and Mitigation Procedures* states that "equipment bridges are not required at minor waterbodies that do not have a state-designated fishery classification or protected status (e.g., agricultural or intermittent drainage ditches)." The NDGFD noted that the Sheyenne, Maple, and Wild Rice Rivers and Antelope Creek are classified fisheries that it requested be crossed via direction boring. All minor waterbodies crossed by the project are roadside drainage ditches. Therefore, equipment bridges at the minor stream crossings for the Project qualify for the exemption above.

17. Identify which guided bore waterbody crossing locations will require equipment bridges and associated travel lanes, indicate why the bridges are needed, and describe impacts on the waterbody and riparian area.	Section 2.2.7.1 is updated to include information on temporary bridges.
18. Evaluate and discuss the potential for scour at waterbodies due to high flows and flooding that could expose or damage the pipeline. Outline specific measures WBI Energy would implement to prevent or mitigate stream scour.	Section 2.2.8 is updated to include a discussion of scouring.
19. Section 2.3.4 states "the permanent conversion of palustrine-forested wetland [to palustrine emergent wetlands] will likely not require compensatory mitigation under the Clean Water Act (CWA) Section 404 permitting process with the Omaha District [U.S. Army Corps of Engineers] USACE." Pending the outcome of consultations with the USACE, provide any relevant correspondence concerning compensatory mitigation for the Project.	WBI Energy conducted a pre-application meeting with the United States Army Corps of Engineers on March 24, 2022. During that meeting the United States Army Corps of Engineers indicated that compensatory mitigation for the minimal amount of PFO conversion would likely not be required. A copy of the meeting minutes for this pre-application meeting is included in appendix 2F. Any additional relevant correspondence regarding Clean Water Act Section 404 permitting will be filed with FERC upon receipt.
20. Indicate whether impacts on palustrine forested wetlands could be avoided or further minimized through extension of planned bores, new bores (such as at MP 36.0), re-routes, adjustments to workspaces, or through other means, including in the Wahpeton Yard.	The existing pipeline route only contains two palustrine forested wetlands. The width of workspace through these wetlands has been reduced to 65 feet. Following the draft Resource Report submission, WBI Energy reduced workspaces at several contractor yards, including the Wahpeton Yard (now called the Comstock South Yard) to avoid wetlands to the extent feasible.
21. Describe typical conditions within each identified wetland class in the Project area, including typical species identified during field surveys. Also include any state wetland classifications (i.e., exceptional value or protected).	The wetland species identified during the field survey are documented in the Wetland Delineation Report included in appendix 2B. No exceptional value or protected wetlands were identified.
22. Add a FERC staff contact or a FERC staff representative to the notification list for significant discoveries of contaminated media in the *Plan for Unanticipated Discovery of Contaminated Environmental Media*.	FERC staff contact is added to the contact list of the *Plan for Unanticipated Discovery of Contaminated Environmental Media* in appendix 2A.
23. Regarding appendix 2C (Wetlands Crossed or Otherwise Affected by the Project): a) include the access road name from appendix 8B; b) include wetland impacts from farm taps and cathodic protection (if necessary); c) clarify why wetland Wcab004e was included under the "Access Roads" header as 0.0 acres would be impacted during construction and operation and a crossing method isn't planned; d) clarify why some wetlands would be crossed via the open-cut method, but the centerline crosses the wetland for 0 feet (example at MP 13.7); and e) revise to show construction acre impacts to two decimals rather than <0.1.	Addressed in appendix 2E (Previously 2C). a) access road names now included; b) not applicable; c) acreage revised for wcab004e; d) some wetlands are crossed by the construction workspace but are not directly crossed by the pipeline centerline; and e) table now shows impacts to the hundredth decimal.

WBI ENERGY TRANSMISSION, INC.
WAHPETON EXPANSION PROJECT
RESOURCE REPORT 2—WATER USE AND QUALITY

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

APPENDICES

ACRONYMS AND ABBREVIATIONS

ATWS	Additional Temporary Workspace
BMP	best management practice
CFR	Code of Federal Regulations
CWA	Clean Water Act
FERC	Federal Energy Regulatory Commission
FERC Plan	FERC's *Upland Erosion Control, Revegetation, and Maintenance Plan*
FERC Procedures	FERC's *Wetland and Waterbody Construction and Mitigation Procedures*
Guided Bore Plan	*Guided Bore Drilling Fluid Monitoring and Operations Plan*
HUC	Hydrologic Unit Code
MDU	Montana-Dakota Utilities Company
MP	milepost
NDDEQ	North Dakota Department of Environmental Quality
NDDOT	North Dakota Department of Transportation
NWI	National Wetland Inventory
Project	Wahpeton Expansion Project
RFFA	reasonably foreseeable future action
SPCC Plan	*Spill Prevention, Control, and Countermeasure Plan*
USACE	United States Army Corps of Engineers
USEPA	United States Environmental Protection Agency
USGS	United States Geological Survey
WBI Energy	WBI Energy Transmission, Inc.
WHPA	Wellhead protection area

WBI ENERGY TRANSMISSION, INC.
WAHPETON EXPANSION PROJECT

2.0 RESOURCE REPORT 2—WATER USE AND QUALITY

WBI Energy Transmission, Inc. (WBI Energy) proposes to construct, modify, operate, and maintain the Wahpeton Expansion Project (Project). The Project will involve the construction of approximately 60.5 miles of 12-inch-diameter natural gas transmission pipeline from WBI Energy's existing Mapleton Compressor Station near Mapleton, North Dakota to a new Montana-Dakota Utilities Company (MDU)—Wahpeton Border Station near Wahpeton, North Dakota. The Project will also include minor modifications at the Mapleton Compressor Station; a new MDU—Kindred Border Station near Kindred, North Dakota; new block valve settings; and new pig launcher/receiver settings. The Project may also include newly constructed farm taps along the pipeline route. The proposed Project facilities will be located in Cass and Richland Counties, North Dakota. Figure 1.1-1 of Resource Report 1 provides an overview of the proposed pipeline and associated facilities.

In accordance with Title 18 of the Code of Federal Regulations Part 380.12(d), Resource Report 2 describes existing water resources—including groundwater resources, watersheds, surface waters, water supplies, and wetlands potentially affected by WBI Energy's proposed Project. This report documents the potential impacts of the Project on water resources and describes the measures that will be implemented to mitigate these impacts.

2.1 GROUNDWATER RESOURCES

This section describes the existing groundwater resources in the Project area, including groundwater use and quality. It also discusses potential impacts on groundwater resources from Project construction and operation and methods to avoid, minimize, and mitigate these impacts.

2.1.1 Regional Aquifers

Groundwater resources in the Project area consist of aquifers that occur in sedimentary bedrock within the Northern Great Plains region (Sun and Johnston, 1994). The aquifer lithology occurs as two primary types—sand and/or sandstone beds in the Dakota Sandstone and sand and gravel deposits associated with glacial drift (Klausing, 1968; Baker & Paulson, 1967).

2.1.1.1 Bedrock Aquifers

Most of the water yielded from bedrock within the Project area is obtained from the Dakota Sandstone. The most significant bedrock aquifer along the Project route is the Wahpeton Buried Valley aquifer that crosses the pipeline from milepost (MP) 52.4 to MP 53.1 and from MP 55.2 to MP 56.2 and provides the majority of drinking water for the City of Wahpeton. The Wahpeton Buried Valley Aquifer is approximately 150 feet below the surface and would not be impacted by trenching activities. A small amount of groundwater is also obtained from Precambrian granite located approximately 300 feet below the surface; however, most of the granite is decomposed and not water bearing. Wells within the Dakota Sandstone are typically greater than 200 feet below the land surface. Most wells within the Dakota Sandstone have relatively small yields and, due to high concentrations of chloride and sulfate, are generally not suitable for human consumption and are used for watering livestock (Baker & Paulson, 1967).

2.1.1.2 Alluvial and Glacial Aquifers

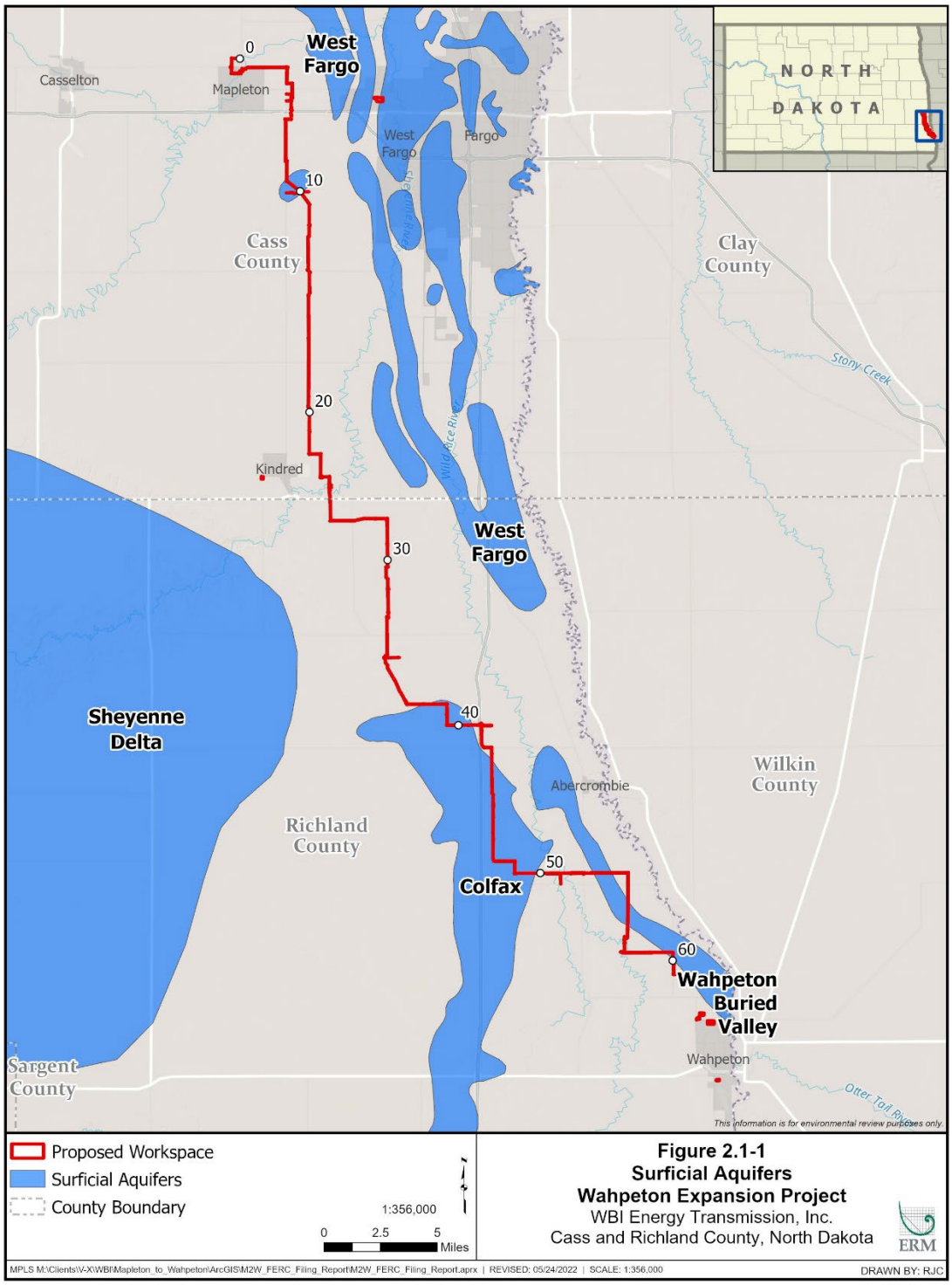
Overlying the bedrock aquifer systems are localized alluvial and glacial aquifers comprised of unconsolidated glacial deposits. Aquifers developed in alluvial and glacial deposits are more sporadically located than bedrock aquifers. Alluvial and glacial aquifers can be separated into four categories—valley-fill aquifers, blanket sand and gravel aquifers, glacial-deposit aquifers, and stream-valley aquifers (USGS, 2021). Aquifers developed in alluvial and glacial deposits are less continuous aquifers compared to bedrock aquifers. These aquifers are composed of more recent alluvial and glacial deposits comprised of loose beds of gravel, sand, silt, and/or clay resulting from glacial outwash deposits and they are generally more productive and of better water quality than aquifers found in the underlying bedrock (Paulson, 1983).

Water quality in the alluvial and glacial aquifers is generally less mineralized than in the underlying bedrock aquifers; generally, the deeper the aquifer results in less saline the water. The dissolved-solids concentration in the unconsolidated aquifers is commonly less than 1,000 milligrams per liter, although in some places the water is very hard and may also be high in iron and manganese. Generally, these upper aquifers are suitable for irrigation, but there are local exceptions based on water quality, soil type, and the crop being irrigated (Paulson, 1983).

The proposed Project pipeline route crosses two alluvial and glacial aquifers. The West Fargo aquifer is crossed between MPs 9.2 and 10.1 in Cass County and the Colfax aquifer is crossed between MPs 37.7 and 40.6 and between MPs 42.9 and 49.8 in Richland County.

The West Fargo aquifer consists of a glacialfluvial deposit mainly consisting of fine to coarse sand. The average aquifer thickness is approximately 60 feet. The depth to the top of the aquifer ranges from 80 to over 100 feet below the ground surface (Klausing, 1968). The West Fargo Aquifer is used for municipal, industrial, and agricultural uses. Prior to 2016, the West Fargo Aquifer was used to supply drinking water to the residents of West Fargo; however, as of June 2016, the City of West Fargo began purchasing water from the City of Fargo (City of West Fargo, 2016).

The Colfax aquifer consists of buried glacial outwash sand. The maximum aquifer thickness ranges from 50 to 80 feet. The depth to the top of the aquifer ranges from approximately 100 to 150 feet below the ground surface. There are no large users for the Colfax aquifer. A minimal amount of water is withdrawn from the aquifer for agricultural purposes (Baker & Paulson, 1967).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West Fargo
Casselton
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West Fargo
Fargo
NORTH DAKOTA
10
Cass County
Clay County
Stony Creek
20
Kindred
Wild Rice River
West Fargo
30
Sheyenne Delta
40
Wilkin County
Abercrombie
Richland County
50
Colfax
60
Wahpeton Buried Valley
Wahpeton
Sargent County
Otter Tail River
This information is for environmental review purposes only
Proposed Workspace
Surficial Aquifers
County Boundary
1:356,000
0 2.5 5 Miles
Figure 2.1-1
Surficial Aquifers
Wahpeton Expansion Project
WBI Energy Transmission, Inc.
Cass and Richland County, North Dakota
ERM
MPLS M:\Clients\V-X\WBI\Mapleton_to_Wahpeton\ArcGIS\M2W_FERC_Filing_Report\M2W_FERC_Filing_Report.aprx | REVISED: 05/24/2022 | SCALE: 1:356,000
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In addition to the named alluvial and glacial aquifers, potable and domestic use water is obtainable in some places from unnamed and unconsolidated aquifers consisting of thin beds of sand and gravel that seem to have a random distribution both vertically and laterally (Paulson, 1983). Well yields from these minor aquifers are generally less than 10 gallons per minute; however, these aquifers occur in sufficient quantities to produce adequate yields for domestic needs for many farmsteads in the area (Paulson, 1983).

2.1.2 Designated Sole Source Aquifers

The United States Environmental Protection Agency (USEPA) defines Sole or Principal Source Aquifers as those aquifers which supply at least 50 percent of the drinking water consumed in the area overlying the aquifer. These areas can have no alternative drinking water source(s) that could physically, legally, and/or economically be supplied to those who depend upon the aquifer for drinking water. There are currently no designated sole source aquifers in North Dakota (USEPA, 2021b).

2.1.3 Public and Private Water Supply Wells

Of the incorporated communities in the state, 94 percent rely on groundwater for private wells, municipal distribution systems, or rural water systems. Groundwater is effectively the sole source of all water used by farm families and residents of small communities having no public water distribution system (NDDEQ, 2018a). A public water system is defined as “a system that provides water via piping or other constructed conveyances for human consumption to at least 15 service connections or serves an average of at least 25 people for at least 60 days each year” (NDDEQ, 2020a).

The North Dakota Department of Environmental Quality (NDDEQ) oversees the Source Water Protection Program, which was developed in response to the 1996 Safe Drinking Water Act amendments that require all states to define and assess the source waters of public water systems (groundwater and surface water). All public water systems that have wells or intakes are participants in this program (NDDEQ, 2020a). The Source Water Protection Program has three mandatory program elements for public water systems: (1) the delineation of a wellhead protection area (WHPA) or source water protection area based on existing hydrogeologic and geologic information; (2) a contaminant source inventory that identifies the presence and location of sources or activities within the protection area that may contaminate groundwater or surface water; and (3) a susceptibility analysis that determines the susceptibility (ranking) of the public water systems’ wells or intakes to contamination by sources inventoried within the protection area (NDDEQ, 2020a).

WHPAs are delineated zones around public water well(s) based on existing hydrogeologic and geologic information to reduce the susceptibility to contamination. Further, to protect the water quality of these wells, the exact locations of the public water supply wells within WHPAs are not provided by the NDDEQ. Based on maps prepared by the NDDEQ, WBI Energy determined that no WHPAs are crossed by the Project and no WHPAs are located within 0.25 mile of the construction workspace (NDDEQ, 2020b). Therefore, no public water supply wells are located within 150 feet of the pipeline construction workspaces.

WBI Energy reviewed the North Dakota State Water Commission well permit database and online map system to evaluate the potential presence of wells within 150 feet of the Project footprint. This review determined that based on the data available, two private water supply wells

exist within 150 feet of the proposed pipeline route. One well used for domestic purposes was identified approximately 144 feet northwest of MP 9.3 and one observation well was identified approximately 135 feet northwest of MP 55.9 (NDSWC, 2021). WBI Energy will verify the locations of the two identified wells and will identify any other wells within 150 feet of the Project workspace as part of the civil survey. If any additional wells are identified, WBI Energy will notify the Federal Energy Regulatory Commission (FERC) in a supplemental filing.

2.1.4 Contaminated Groundwater

The primary potential sources of groundwater contamination in the vicinity of the Project are related to agricultural activities, including the leaching of pesticides, herbicides, and fertilizers into underlying aquifers. Other possible sources of groundwater contamination in the area include cattle feedlots, municipal landfills, septic tanks, sewage lagoons, and leaking underground storage tanks (Paulson, 1983). Based on a review of recent aerial photographs and 2021 field surveys, WBI Energy did not identify any livestock feedlots, municipal landfills, or sewage lagoons within 0.25 mile of the construction workspace. In addition, a review of the USEPA's Facility Registration System map service and the NDDEQ underground storage tank data identified no known sites of potential contamination within 500 feet of the Project area (NDDEQ, 2021d). As discussed in Resource Report 8, WBI Energy reviewed the USEPA's EnviroFacts Website and a USEPA dataset for landfills to identify hazardous waste sites, landfills, or other sites with potential for soil or groundwater contamination within 0.25 mile of the Project.

On-site septic systems are the primary form of wastewater treatment in rural North Dakota; however, it is unlikely that septic systems will be affected by the Project. WBI Energy preferentially routed the pipeline facilities to avoid residences, thereby avoiding potential impacts on septic systems. The Project workspace (excluding contractor yards) will pass within 500 feet of 14 residences near MPs 1.6, 8.4, 16.2, 17.7, 19.8, 20.2, 22.3, 37.0, and 48.0 and near Access Roads 006, 013 (three residences are within 500 feet of AR_013), and 027. The closest location is a residence east of MP 24.1, which is approximately 75 feet east of Access Road 027. All other residences are greater than 200 feet from the workspace. WBI Energy does not anticipate that construction activity will affect active septic systems; however, WBI Energy will coordinate with the landowners in those nine locations to determine the exact location of the septic systems to protect septic systems during construction. In the unforeseen instance that an active septic system is impacted by Project construction, WBI Energy will repair the system to its previous condition or better.

2.1.5 Groundwater Construction Impacts and Mitigation

The potential for impacts on groundwater resulting from construction and operation of the proposed Project facilities is a function of the degree to which the proposed facilities would cause localized changes to existing groundwater flow paths that could result from soil compaction. Permanent effects could also occur to groundwater recharge as a result of the development of impervious surfaces and structures at the proposed aboveground facility sites. The addition of impervious surface for the Project is minimal. New impervious surface will be limited to the new valve sites and the new MDU Border Stations. WBI Energy will install seven block valves along the length of the pipeline, with Valve #1 located within the Mapleton Compressor Station and Valves #3 and #7 located within the operational footprints of the MDU—Kindred Border Station and the MDU—Wahpeton Border Station, respectively. The remaining four valves will be installed in between those points. In total, the Project will result in approximately 0.05 acres of new impervious surface. The proposed new MDU Border Stations will have buildings with roofs that

will reduce the area of direct infiltration and recharge below the structure, but runoff from the roofs would still eventually be conveyed to pervious surfaces that would provide groundwater recharge. Stormwater facilities will be added as necessary at new and modified aboveground facilities to comply with state and local stormwater requirements. The overall effect on groundwater recharge resulting from facility construction will not be significant due to the relatively small footprint of impervious surfaces in relation to the total potential recharge area.

Construction of the proposed pipeline will generally require a trench excavation of about 5 feet (or deeper at crossings of some roads, utilities, foreign pipelines, and waterbodies). Dewatering of the pipeline trench will be necessary if shallow groundwater is encountered within the excavation zone. Water pumped from the trench or excavated areas will be discharged in accordance with FERC's *Wetland and Waterbody Construction and Mitigation Procedures* (FERC Procedures) and applicable permits. The potential impact of dewatering will be minimized by discharging the pumped water to well-vegetated areas or properly constructed temporary retention structures that will promote infiltration and minimize or eliminate runoff. Because trenching typically proceeds at a relatively rapid rate and depression of the local water table around the trench is expected to recover quickly once the trench is backfilled, it is anticipated that any impacts associated with pipeline trenching will be temporary and that surface groundwater will return to preconstruction conditions after construction.

Backfill placed within the pipeline trench may temporarily be more permeable than the surrounding soil and rock substrate until the natural pore structure of the backfilled soils is reestablished through tamping or compaction during backfill. As a result, the trench could act as a preferential pathway for groundwater flow in areas where it intersects the water table and potentially alter the existing groundwater flow patterns within shallow saturated zones. WBI Energy will install trench breakers at specified intervals where appropriate in accordance with FERC's *Upland Erosion Control, Revegetation, and Maintenance Plan* (FERC Plan) and FERC Procedures and in areas determined by WBI Energy and its environmental inspectors to reduce the potential for the trench to act as a preferential groundwater flow path.

Soil compaction from construction has the potential to affect groundwater recharge. WBI Energy will implement measures documented in the FERC Plan and the Project-specific construction plans to minimize compaction during construction and to identify and mitigate areas that may have been compacted. Measures that may be taken, as necessary, to minimize soil compaction include the use of timber mats for heavy equipment and soil ripping to increase porosity in soils that are significantly compacted due to construction activities.

Guided bores will be used to cross all flowing streams, railroads, and graveled or paved roads. Cross contamination within the soil profile and translocation of drilling fluid during the boring process could cause impacts on groundwater; however, no areas of known contaminated groundwater or hazardous waste sites have been identified along the proposed route. If contaminated soils are encountered, WBI Energy will implement measures identified in its *Plan for Unanticipated Discovery of Contaminated Environmental Media*, provided in appendix 2A. The *Plan for Unanticipated Discovery of Contaminated Media* describes measures for containing and characterizing contaminated media, notifying the landowner and appropriate regulatory agencies of the contamination, and responding to the contaminated media. WBI Energy will also implement the procedures outlined in its *Guided Bore Drilling Fluid Monitoring and Operations Plan* (Guided Bore Plan), provided in appendix 1F-2 of Resource Report 1, to mitigate potential impacts of drilling fluid from guided bore operations.

Accidental spills and leaks of hazardous materials could cause impacts on groundwater resources through the introduction of contaminants, especially in highly permeable soils near wells. WBI Energy will implement the spill prevention and control measures identified in both its *Spill Prevention, Control, and Countermeasure Plan* (SPCC Plan)—which is included in appendix 1F-1 of Resource Report 1—and in the FERC Procedures.

As described above, for any wells identified within 150 feet of the proposed workspace, WBI Energy will—where permitted by the landowner—conduct preconstruction and post-construction water quality and yield testing and/or sampling to verify that construction of the Project does not permanently affect water wells. WBI Energy will obtain landowner or municipality permission prior to testing. Pre- and post-construction well testing will include a bacterial test, general chemistry (mineralogical) analysis, and a nitrate test. WBI Energy will analyze any damaged well or water supply system and perform the necessary repairs and/or modifications to return it to its former capacity as determined by the testing and/or sampling. In the event that a private well or water supply system is damaged beyond repair due to construction-related activities, WBI Energy will provide for a temporary water source and replace the well as necessary. In addition, in the event that an active well is identified within construction work areas and must be taken out of service, WBI Energy will provide an alternate water source or negotiate a mitigation plan with the landowner to offset any adverse impacts.

No blasting activities are anticipated during construction of the proposed Project; therefore, no adverse effects due to blasting on groundwater associated with water wells, springs, and wetlands are expected.

2.2 SURFACE WATER RESOURCES

This section describes the surface water resources that are crossed by the proposed Project, regulations that apply to those resources, and measures proposed by WBI Energy to mitigate impacts on those resources.

2.2.1 Waterbodies Crossed

The Project lies within the Devils Lake-Sheyenne and Upper Red River watersheds. The Project area crosses two Hydrologic Unit Code (HUC)-8 sub-basins within the Devils Lake-Sheyenne basin—Maple River (HUC 09020205) and Lower Sheyenne River (HUC 09020204). The Project crosses three HUC-8 sub-basins within the Upper Red River watershed—the Western Wild Rice River (HUC 09020105), the Bois De Sioux River (HUC 09020101), and the Upper Red River (HUC 09020104; NDDEQ, 2021a). The Project crosses 16 HUC-12 watersheds summarized in table 2.2-1 below. Two HUC 12 watersheds, Calvary Cemetery-Wild Rice River and County Ditch No. 1-Red River, are crossed twice.

TABLE 2.2-1

Wahpeton Expansion Project
HUC-12 Watersheds Crossed by the Project

HUC-12#	Name	MP In	MP Out
090202050704	Outlet Maple River	0.0	2.6
090202050603	City of Fife	2.6	7.2
090202050602	City of Mapleton	7.6	8.2
090202040605	City of Warren	8.2	18.8
090202040604	City of Norman- Sheyenne River	18.8	24.8

TABLE 2.2-1

Wahpeton Expansion Project
HUC-12 Watersheds Crossed by the Project

HUC-12#	Name	MP In	MP Out
090201051005	Town of Walcott	24.8	36.0
090201051004	South Pleasant Cemetery- Wild Rice River	36.0	41.0
090201051003	Town of Colfax-Wild Rice River	41.0	43.3
090201051002	Pitcairn Creek	43.3	45.4
090201051001	090201051001-Wild Rice River	45.4	50.4
090201050906	Town of Glachutt	50.4	50.4
090201050907	Outlet Antelope Creek	50.4	51.0
090201050805	Calvary Cemetery-Wild Rice River	51.0	52.0
090201040401	County Ditch No. 1-Red River	52.0	56.0
090201050805	Calvary Cemetery-Wild Rice River	56.0	58.6
090201040401	County Ditch No. 1-Red River	58.6	60.5
090202050601	City of Kindred	Kindred Border Station	
090201010507	Bois de Sioux River	Comstock Contractor Yard	

FERC defines waterbodies as “any natural or artificial stream, river, or drainage with perceptible flow at the time of crossing, and other permanent waterbodies such as lakes and ponds” (FERC, 2013). Perennial waterbodies are expected to contain water and flow for most of the year. Intermittent streams include those that flow seasonally and ephemeral streams include those that flow only as a result of precipitation events. FERC further categorizes surface waters as major, intermediate, or minor waterbodies based on the width of the water’s edge at the time of crossing. Major waterbodies are equal to or greater than 100 feet in width, intermediate waterbodies are greater than 10 feet but less than 100 feet in width, and minor waterbodies are 10 feet or less in width.

Based on review of the United States Geological Survey (USGS) mapping, aerial photography, and field investigations conducted on properties where permission to survey was granted in 2021, the Project will require 20 waterbody crossings consisting of 10 perennial stream crossings and 10 ephemeral stream crossings. Five of the ephemeral roadside ditches are crossed by both the pipeline and temporary access roads. Based on the field surveys and desktop review of areas where surveys are not yet complete, the Project has two major waterbody crossings, nine intermediate waterbody crossings, and nine minor waterbody crossings.

Of the 20 waterbodies crossed by the pipeline, 18 will be crossed using the guided bore method and two will be crossed using the open cut method. All perennial waterbodies will be crossed using the guided bore method. The waterbody and wetland delineation report for the Project is included as appendix 2B. These 20 waterbody crossings include five crossings of the Wild Rice River at MPs 51.1, 51.2, 51.3, 57.0, and 57.6 (three of which will be crossed with a single guided bore crossing).

None of the waterbodies crossed by the Project are considered a Section 10 navigable water under the Rivers and Harbors Act (USACE, 2012). However, the Sheyenne River is a North Dakota State designated navigable waterway and its crossing will require a Sovereign Lands Permit from the North Dakota State Water Commission for the proposed bore crossing and any water withdrawals.

Table 2.2-2 provides a list of the waterbodies crossed by the proposed pipeline route and includes the field survey designation (feature ID), USGS waterbody name, water quality classification, flow regime (intermittent, ephemeral, or perennial), approximate crossing width, and proposed construction crossing method.

TABLE 2.2-2

Wahpeton Expansion Project
Waterbodies Crossed by the Project [a]

MP	Unique ID	Waterbody Name [b]	North Dakota Water Quality Classification [c]	Flow Regime [d]	Crossing width (feet) [e]	Pipeline Crossing Method [f]
HUC 12 Watershed 090202050704						
1.2	scad001p	Maple River	Class II	PN	79	Bore
HUC 12 Watershed 090202050603						
3.9	scaa002e	Unnamed tributary to the Maple River	Class III	E	13	Bore
5.9	scaa003e	Roadside ditch	Class III	E	<10	Bore
HUC 12 Watershed 090202040605						
10.7	scab001e	Roadside ditch	Class III	E	<10	Bore
HUC 12 Watershed 090202040604						
19.7	scab005e	Roadside ditch	Class III	E	<10	Open Cut
HUC 12 Watershed 090201051005						
24.1	scab006p	Sheyenne River	Class IA	PN	42	Bore
HUC 12 Watershed 090201051005						
29.3	sria001e	Roadside ditch	Class III	E	<10	Bore
HUC 12 Watershed 090201051004						
39.9	sria002e	Unnamed ditch	Class III	E	<10	Bore
41.0	sric002p	Unnamed tributary to Wild Rice River	Class III	PN	23	Bore
HUC 12 Watershed 090201051001						
45.0	srid002p	Pitcairn Creek	Class III	PN	15	Bore
47.4	sird001e	Roadside ditch	Class III	E	<10	Open Cut
HUC 12 Watershed 090201050907						
50.9	Desktop	Antelope Creek	Class II	PN	65	Bore
HUC 12 Watershed 090201050805						
51.1	DSK_WB_03	Wild Rice River	Class II	PN	122	Bore
51.2	DSK_WB_03	Wild Rice River	Class II	PN	146	Bore
51.3	DSK_WB_03	Wild Rice River	Class II	PN	92	Bore
HUC 12 Watershed 090201040401						
55.4	sirb006e	Roadside ditch	Class III	E	<10	Bore
HUC 12 Watershed 090201050805						
56.4	sirb005e	Roadside ditch	Class III	E	<10	Bore
57.0	sirc006p	Wild Rice River	Class II	PN	78	Bore
57.6	srib004p	Wild Rice River	Class II	PN	38	Bore
HUC 12 Watershed 090201040401						
58.7	sirb003e	Roadside ditch	Class III	E	<10	Bore
Access Roads						
HUC 12 Watershed 090201051005						
19.3	scab005e	Roadside ditch	Class III	E	<10	NA
HUC 12 Watershed 090201051005						
29.3	sria001e	Roadside ditch	Class III	E	<10	NA
HUC 12 Watershed 090201051001						

TABLE 2.2-2

Wahpeton Expansion Project
Waterbodies Crossed by the Project [a]

47.3	srid001e	Roadside ditch	Class III	E	<10	NA
HUC 12 Watershed 090201050805						
56.4	srib005e	Roadside ditch	Class III	E	<10	NA
HUC 12 Watershed 090201040401						
58.7	sirb003e	Roadside ditch	Class III	E	<10	NA

[a] Based on the data from Project field surveys to date, USGS mapping, National Hydrography Dataset data, the North Dakota State Water Commission's geographic information system data viewer, and review of aerial photographs.

[b] Waterbody names are based on USGS topographic maps.

[c] See section 2.2.2 below for category definitions (NDDEQ, 2020e). None of the Class III streams are specifically identified in the Stream Classifications Table located in Appendix I of the NDDEQ Standards of Quality for Waters of the State and are classified as Class III as a default based on specifications included in that appendix.

[d] Based on field surveys, National Hydrography Dataset designations, and/or aerial photography interpretation for unmapped streams:
PN = Perennial
E = Ephemeral
NA = Not applicable (USACE, 2012).

[e] Approximate width based on field surveys and/or estimated from aerial photography. Where National Hydrography Dataset data have been used to supplement areas where surveys are not complete an assumed less than 10-feet-wide has been used for all intermittent National Hydrography Dataset features.

[f] Refer to Resource Report 1, section 1.3.2.1, for detailed descriptions of each crossing method.

Antelope Creek and three of the Wild Rice River crossings were not surveyed in 2021 as a result of route variations identified after the conclusion of the 2021 field survey season and are referred to in the Unique ID column of table 2.2-2 as Desktop. Waterbody characteristics for these features are based on the National Hydrography Dataset and/or recent aerial photography. Water quality classifications for the waterbodies along the pipeline route are described in section 2.2.2 of this resource report. Construction crossing methods and related mitigation measures are further described in sections 2.2.6 and 2.2.7. A description of fishery resources associated with the waterbodies listed in table 2.2-2 is provided in section 3.1 of Resource Report 3.

2.2.2 Water Quality and Contaminated Sediments

The NDDEQ classifies waterbodies into categories based on water quality, flow regime, and beneficial uses. Streams are classified according to four categories (NDDEQ, 2021e):

- Class I streams: The quality of the waters in this class shall be suitable for the propagation or protection, or both, of resident fish species and other aquatic biota and for swimming, boating, and other water recreation. The quality of the waters shall be suitable for irrigation, stock watering, and wildlife without injurious effects. After treatment consisting of coagulation, settling, filtration, and chlorination, or equivalent treatment processes, the water quality shall meet the bacteriological, physical, and chemical requirements of the department for municipal or domestic use.

- Class IA streams: The quality of the waters in this class shall be the same as the quality of class I streams, except that where natural conditions exceed class criteria for municipal and domestic use, the availability of softening or other

treatment methods may be considered in determining whether ambient water quality meets the drinking water requirements of the department.

- Class II streams: The quality of waters in this class shall be the same as the quality of class I streams, except that additional treatment may be required to meet drinking water requirements of the department. Streams in this classification may be intermittent in nature, which would make these waters of limited value for beneficial uses such as municipal water, fish life, irrigation, bathing, or swimming.

- Class III streams: The quality of the waters in this class shall be suitable for agricultural and industrial uses. Streams in this class generally have low average flows with prolonged periods of no flow. During periods of no flow, they are of limited value for recreation and fish and aquatic biota. The quality of these waters must be maintained to protect secondary contact recreation uses (e.g., wading), fish and aquatic biota, and wildlife uses.

The antidegradation policy of the Standards of Water Quality for the State of North Dakota, Rule 33-16-02 furthermore mandates the NDDEQ to classify waterbodies based on the level of water quality protection consistent with their beneficial uses. All waterbodies are classified into one of three levels under this antidegradation protection. Below are the three categories outlined in Chapter 33-16-02.1 of Standards of Quality for Waters of the State (NDDEQ, 2021e):

- Category 1: Very high level of protection that automatically applies to Class I and Class IA streams, Class I, II, and III lakes, and wetlands that are functioning at their optimal level. In addition, Category 1 is presumed to apply to Class II and Class III streams. Particular Class II and Class III streams may be excluded from Category 1 if, at the time of the antidegradation review, it is determined that one or both of the following criteria are applicable: 1) there is no remaining assimilative capacity for any of the parameters that may potentially be affected by the proposed regulated activity in the segment in question; or 2) an evaluation submitted by a project applicant demonstrates (based on adequate and representative chemical, physical, and biological data) that aquatic life and primary contact recreation uses are not currently being attained because of stressors that will require a long-term effort to remedy.

- Category 2: Class IV and Class V lakes and particular wetlands after antidegradation review and Class II and Class III streams or wetlands that meet one of the criteria identified above at the time of the antidegradation review shall be included in Category 2.

- Category 3: Highest level of protection; Outstanding State Resource Waters.

The state water quality classifications for waterbodies crossed by the Project are listed in table 2.2-2. The proposed pipeline corridor has one Class IA stream crossing (the Sheyenne River), seven Class II crossings (Maple River, Antelope Creek, and five crossings of the Wild Rice River), and seven Class III crossings. Five of the Class III waterbodies are crossed by the pipeline and proposed access roads (NDDEQ, 2021e). The Project does not cross any Category 3 waterbodies designated as Outstanding State Resource Waters. By following the FERC

Procedures, the Project is not expected to result in permanent changes to water quality or the water quality classifications of the waterbodies crossed.

Section 305(b) of the Clean Water Act (CWA) requires states to submit biennial water quality reports to the USEPA. These reports, referred to as 305(b) reports or Integrated Water Quality Monitoring and Assessment Reports, describe surface water and groundwater quality and trends and the extent to which waters are attaining their designated uses (such as aquatic life use). Section 303(d) of the CWA requires states to identify waters that are not attaining their designated use(s) and to develop total maximum daily loads, which represent the maximum amount of a given pollutant that a waterbody can assimilate and still meet its designated use(s). The Project crosses four waterbodies—the Maple River, the Sheyenne River, the Wild Rice River (which is crossed five times by the Project), and the Antelope Creek—that are listed as impaired waters in North Dakota's 2018 Integrated Section 305(b) Water Quality Assessment Report and Section 303(d) List of Waters needing Total Maximum Daily Loads. The segment of the Maple River crossed by the Project is listed as not supporting its designated use of fish and other aquatic biota due to sedimentation/siltation and is considered a low priority for total maximum daily loads. The segment of the Sheyenne River crossed by the Project is listed as fully supporting, but threatening to not support, the use of fish and other aquatic biota due to sedimentation/siltation and is considered a low priority for total maximum daily loads. The segments of the Wild Rice River crossed by the Project are listed as not supporting the use of fish and other aquatic biota due to sedimentation/siltation and low dissolved oxygen and are considered a low priority for total maximum daily loads. The segment of Antelope Creek crossed by the Project is listed as not supporting the use of fish and other aquatic biota and threatening to not support the designated use of recreation. The use of fish and other aquatic biota in the segment of Antelope Creek crossed by the Project is not supported due to sedimentation/siltation and is a low priority for total maximum daily loads. The use of recreation in the segment of Antelope Creek crossed by the Project is threatened by Escherichia coli and is a high priority for total maximum daily loads (NDDEQ, 2018b).

According to the USEPA's List of Sediment Sites with Substantial Contamination, there are no sites identified in North Dakota (USEPA, 2021a). The most recent (2018) Section 303(d) impaired waterbody list and 305(b) Water Quality Inventory Report for North Dakota were reviewed to determine if any of the waterbodies crossed by the Project are known to contain contaminated sediments. None of the waterbodies crossed by the Project are known to contain contaminated sediments (NDDEQ, 2018b).

2.2.3 Surface Water Intakes and Surface Water Protection Areas

As discussed in section 2.1.3, the North Dakota Source Water Protection Program has the following three federally mandated program elements for public water systems: (1) the delineation of a WHPA or source water protection area based on existing hydrogeologic and geologic information; (2) a contaminant source inventory, which identifies the presence and location of sources or activities within the protection area that may contaminate groundwater or surface water; and (3) a susceptibility analysis that determines the susceptibility (ranking) of the public water system wells or intakes to contamination by sources inventoried within the protection area (NDDEQ, 2019e). Based on the review of the source water protection status list of North Dakota's public water systems, no surface water-dependent communities, non-transient non-communities, or transient non-community systems exist within the Project area (NDDEQ, 2021b).

2.2.4 Water Use

Water use for the Project will consist of hydrostatic testing of the pipe, dust control, guided bore drilling fluid, and operational water needs.

Hydrostatic testing will occur prior to placing the pipeline in service to test the integrity of the pipeline. WBI Energy anticipates construction of the proposed pipeline will be completed by October 2024. WBI Energy has not yet determined specific water sources for hydrostatic testing activities but anticipates using municipal water or water obtained from surface waters located near the Project area.

Potential municipal sources for hydrostatic test water include the North Dakota cities of Mapleton, Horace, Kindred, Walcott, Colfax, Galchutt, and Wahpeton. Municipal water used for hydrostatic testing will be trucked on-site. Potential surface water sources for hydrostatic test water include: the Maple River, Sheyenne River, Wild Rice River, Antelope Creek, Pitcarn Creek, and an unnamed tributary to the Wild Rice River. The exact water withdrawal locations for surface waters are not known at this time; however, any withdrawal location will be within the survey corridor of the Project. All surface waters that may be sourced for hydrostatic testing may contain aquatic nuisance species and, therefore, any water sourced from an infested waterbody will be either returned to the same waterbody or discharged to an upland area within the same HUC-12 as it was withdrawn from. It is anticipated that the final hydrostatic test water discharge will be in October 2024; however, other additional hydrostatic pretest water will be withdrawn and discharged throughout the entirety of the Project.

WBI Energy is proposing to add “Vita-D-chlor,” a de-chlorination agent to any municipal water sources used for hydrostatic testing. Vita-D-chlor is necessary to reduce chlorine levels below the National Pollution Discharge Elimination System (NPDES) permit thresholds in chlorinated municipal water. A copy of the Material Safety Data Sheet is included in appendix 2C. The exact concentration for discharge of Vita-D-chlor is not known at this time; however, it is a non-toxic chemical that should not require planned treatment or specialized disposal methods.

The hydrostatic discharge locations for the bore locations will be located on one end of the bore segment. For the mainline hydrostatic testing, the discharge locations will be dependent on whether a single or multiple-section hydrostatic test is conducted. For single-section testing, discharge locations will be located at either end of the new pipeline. If a multi-section hydrostatic test is completed, discharge locations have yet to be determined. It is anticipated that the discharge flow rate will be approximately 250 to 500 gallons per minute.

WBI Energy plans to hydrostatically test the pipeline following installation and backfilling of the entire pipeline trench. Hydrostatic testing of guided bore segments may be conducted in addition to the final hydrostatic test. A summary of the hydrostatic test water necessary for the guided bore crossings is included in appendix 2D. WBI Energy has not finalized its hydrostatic test water plan but anticipates approximately 2,175,000 gallons of water will be needed for hydrostatic testing. To complete hydrostatic testing activities, the test sections will be filled by a pump while using bi-directional pigs. The bi-directional pig is used to ensure a positive displacement of air. At each test segment, the pipe will then be pressurized to at least 125 percent of the maximum allowable operating pressure and maintained at that pressure for a minimum of eight hours. If leaks are detected during the eight-hour test period, the line will be dewatered, the leaks will be repaired, and the test segment will again be refilled and re-pressurized until 49 Code of Federal Regulations Part 192 specifications are met. After successfully testing each segment,

the pipeline will be dewatered or the test water will be moved or cascaded into the next section of the pipeline, except where prohibited by the Aquatic Nuisance Species Prevention Plan. To minimize water withdrawals, WBI Energy anticipates cascading water between test segments (where feasible) to reuse as much water from prior test segments as possible. Depending on the source water, de-chlorination products may be used to treat water prior to discharge. Dewatering will occur in a well-vegetated upland area with appropriate erosion control devices in accordance with the requirements of the FERC Plan and FERC Procedures and the General Permit to Discharge under the North Dakota Pollutant Discharge Elimination System Permit (NDG070000). WBI Energy will utilize diffusers, sediment control devices, and other energy dissipating devices to minimize erosion. Hydrostatic test water discharges into waterbodies is not currently proposed. WBI Energy's SPCC Plan (Resource Report 1, appendix 1F-1) identifies measures to be implemented in the unlikely event of a leak of fuel, lubricants, or hydraulic fluids during the hydrostatic testing process. Following successful hydrostatic test, the pipeline will be dried by pushing foam pigs with compressed air through the test section.

Water will also be required for dust control and to control moisture levels to achieve optimum soil compaction while grading at the MDU—Kindred Border Station and the MDU—Wahpeton Border Station sites. Trucks necessary to supply water for these applications will be available on-site during construction. Water for fugitive dust control may be obtained from municipal sources and/or nearby surface waters where the necessary permits required by federal, state, and local agencies for the procurement of water have been secured. Hydrostatic test water may also be used for dust control in accordance with NDDEQ National Pollution Discharge Elimination System permit requirements. The designated environmental inspectors and construction staff will monitor dust conditions during construction. The amount of water needed for dust control will depend on precipitation conditions during construction but will generally be approximately 0.5 gallons of water per square yard of bare ground. It is assumed that water will only be used in areas where stringing, welding, coating, ditching, and backfilling take place. Water required for optimum soil compaction at the MDU Border Stations will be determined based on existing conditions at the time of construction. WBI Energy anticipates using municipal water or water obtained from nearby surface waters for dust and compaction control. Dust control procedures are outlined in the Fugitive Dust Control Plan included as appendix 9A in Resource Report 9.

Eighteen waterbody crossings will utilize the guided bore method. The pipe segments utilized for these guided bore crossings may be pre-tested prior to installation and again as part of the overall hydrostatic testing of the installed pipeline. Water will be used during hydrostatic testing of bore pipe and in the drilling mud during guided bore operations. WBI Energy anticipates using municipal water or water obtained from nearby surface waters as a water source, as described above.

2.2.5 Flood Control

The MDU—Kindred Border Station and one valve site at MP 11.6 are within the mapped floodplain. No floodplain maps are available for the existing Mapleton Compressor Station; however, the area immediately east of the compressor station is within the mapped floodplain and, thus, it is likely that the compressor station is also within the 100-year floodplain associated with the Maple River (FEMA, 2021). The amount of new impervious surface for the valve sites and MDU Border Stations will not significantly impact flooding (approximately 778 square feet total). Any reduction in flood storage from fill will be compensated as required by Cass County

as part of the permitting process. WBI Energy will obtain all necessary floodplain permits from Cass County prior to construction of these facilities.

2.2.6 Sensitive Surface Waters

Sensitive waterbodies include those that meet the following criteria:

- are designated as National Wild and Scenic Rivers;
- are state-designated high quality or outstanding natural resource waters;
- provide habitat for threatened and/or endangered species or critical habitat;
- have potable surface water intakes located within 3.0 miles downstream of the pipeline crossing; and/or
- do not currently support designated uses.

The Project does not cross any designated National Wild and Scenic Rivers or state-designated high quality or outstanding natural resource waters (Wild and Scenic Rivers Council, 2014). As discussed in section 2.2.3, there are no potable surface water intakes within 3.0 miles downstream of the pipeline routes.

2.2.7 Waterbody Construction Procedures

Construction methods for waterbody crossings will comply with the FERC Procedures, which are designed to minimize the extent and duration of construction-related disturbance within waterbody features. WBI Energy plans to use the guided bore method (see section 2.2.7.1) for 18 of the 20 pipeline crossings. The other two pipeline crossings will be done using the open-cut method. Use of the flume or dam and pump methods are not currently proposed but could be used if chosen by the construction contractor. Proposed construction methods for all waterbody crossings are identified in table 2.2-2 above; detailed descriptions of construction methods are provided in section 1.3.2.1 of Resource Report 1.

2.2.7.1 Guided Bore Crossing

WBI Energy proposes to cross eight ephemeral streams and ten perennial waterbodies (of which the Wild Rice River will be crossed five times) using the guided bore method. Proposed construction methods for all waterbody crossings are identified in table 2.2-2 above; a detailed description of the guided bore construction method is provided in section 1.3.2.2 of Resource Report 1.

Temporary equipment bridges will likely be needed for each of the ten perennial waterbody crossings. Impacts will be minimized by placing a geotextile fabric under the temporary bridge and will be regularly inspected and cleaned during construction. The bridges will be removed after construction and all areas will be restored to pre-construction conditions.

In the unanticipated event that a guided bore crossing cannot be completed successfully, WBI Energy will implement the contingency measures identified in its Guided Bore Plan, which is provided in appendix 1F-2 of Resource Report 1.

2.2.7.2 Open-Cut Crossings

With the exception of waterbodies listed above which will be crossed using the guided bore method, WBI Energy proposes to cross the remaining waterbodies using the open-cut method (two pipeline crossings). The open-cut method involves the use of backhoe-type excavators operating from the banks of the waterbody to open a trench. Spoil excavated from the trench will be placed on the bank above the high water mark for use as backfill. Once the trench is backfilled, the banks will be restored as near as practical to preconstruction contours and stabilized. Stabilization measures could include seeding or installation of erosion control blankets. Excavated material that is not required for backfill will be removed and disposed of at upland disposal sites.

Throughout the open-cut construction process, WBI Energy will follow the FERC Procedures to avoid or minimize impacts on water quality. Construction activities will be scheduled so that the trench is not excavated across the waterbody until immediately prior to pipe laying activities. The duration of in-stream construction activities (excluding blasting, if required) will be limited to 24 hours across minor waterbodies (those 10 feet in width or less) and 48 hours across intermediate waterbodies (those between 10 and 100 feet in width). Excavated spoil will be stockpiled at least 10 feet from the edge of the waterbody and appropriate erosion control devices will be installed as necessary.

The use of the flume or dam and pump dry crossing methods is not currently proposed but may be utilized by the construction contractor in lieu of the open-cut wet method. Dry crossing methods involve the installation of flume pipe(s) and/or a dam and pump(s) prior to trenching across a waterbody to divert the stream flow over or around the construction area and allow trenching across the stream crossing in drier conditions that are isolated from the stream flow. Spoil removed during the trenching will be stored away from the water's edge and protected by sediment containment structures. Pipe strings will be fabricated on one bank and either pulled across the stream bottom to the opposite bank or carried into place by side-boom tractors and lowered into the trench, after which the trench will be backfilled with native material. Once the trench is backfilled, the banks will be restored as near as practical to preconstruction contours and stabilized. Stabilization measures could include seeding or installation of erosion control blankets. Excavated material not required for backfill will be removed and disposed of at upland disposal sites.

2.2.7.3 Access Roads

Five streams will be crossed by access roads. All of these streams consist of ephemeral roadside ditch features. Three of the five access road crossings are on existing roads with existing culverted crossings. If feasible, WBI will use the existing culverts to avoid impacts on the streams. Any culvert replacements required on the existing access roads will be permitted with the United States Army Corps of Engineers (USACE) under Section 404 of the CWA, as necessary. The two new access road crossings are temporary access roads that will be restored to pre-existing conditions after construction. During construction, culverts will be installed, as necessary, to maintain flow that may be present during construction. All the crossed ditches are ephemeral, so it is likely that there will be little to no flow during construction.

2.2.7.4 Workspace

Construction across waterbodies will require additional temporary workspace (ATWS) for equipment staging, pipe string fabrication, and spoil storage. ATWS will be set back 50 feet from the edges of waterbodies in compliance with the FERC Procedures except in locations where the adjacent upland consists of cultivated or rotated cropland or other disturbed land. If ATWS is required within 50 feet of a waterbody that is not bordered by cropland or disturbed land, WBI Energy will formally request a modification from the FERC Procedures—including site-specific justification. Table 1.3-1 of Resource Report 1 describes the areas where WBI Energy is requesting approval of modifications to the FERC Procedures.

2.2.7.5 Construction Timing

WBI Energy may commence certain preconstruction activities (e.g., preparing pipe and contractor yards) in the fall of 2023 and Project construction is planned to begin in April 2024. WBI Energy anticipates that construction of the Project facilities will be completed by October 2024 with all facilities being placed into service by November 2024. Therefore, waterbody crossings may occur in the spring months during periods of high flow. WBI Energy will assess flow conditions and constructability at the time of crossing. If high flow conditions impact constructability across a feature, crossings will be delayed until conditions improve or if necessary, a different crossing method will be evaluated. WBI Energy anticipates that each waterbody crossing (with the exception of guided bore waterbody crossings) will typically be completed within a 24- to 48-hour period in accordance with the FERC Procedures.

2.2.8 Waterbody Construction-Related Impacts and Mitigation

Construction of the proposed pipeline could result in short-term and localized impacts on the waterbodies crossed. These impacts could occur as a result of construction activities in stream channels and on adjacent banks. Clearing and grading of stream banks, in-stream trenching, trench dewatering, and backfilling could each result in temporary local modifications of aquatic habitat involving sedimentation, increased turbidity, and decreased dissolved oxygen concentrations. In almost all cases, these impacts are limited to the period of in-stream construction and conditions will return to normal shortly after stream restoration activities are completed.

To minimize adverse impacts at stream crossings, WBI Energy will install the pipeline in accordance with the FERC Plan and FERC Procedures. Construction activities at waterbody crossings will also comply with other federal, state, and local regulations and permit requirements.

Clearing of vegetation, grading for construction, and soil compaction by heavy equipment near stream banks could promote erosion of the banks and result in the transport of sediment into waterbodies by stormwater runoff. To minimize these potential impacts, WBI Energy will install equipment bridges, mats, and pads at waterbody crossings. The equipment bridges will also serve as temporary travel lanes during construction. WBI Energy will also locate ATWS at least 50 feet from stream banks wherever possible and install temporary sediment barriers around disturbed areas as outlined in the FERC Plan and FERC Procedures. Upon completion of construction, WBI Energy will implement temporary and permanent erosion control measures at stream crossing locations to stabilize soil until successful restoration is achieved, providing long-term protection of water quality.

Stream scouring due to high velocity flows may result in streambank erosion that could expose the pipeline. The topography around the perennial streams is relatively gentle and the pipeline will be installed approximately 15 to 25 feet below the streambed, so pipeline exposure due to scouring is unlikely. WBI Energy will periodically inspect the integrity of the streambanks along the pipeline route and will perform streambank maintenance as necessary if significant scouring does become apparent.

Sedimentation and increased turbidity may occur as a result of in-stream construction activities, trench dewatering, or stormwater runoff from construction areas. In slow moving waters, increases in suspended sediments (turbidity) may increase the biochemical oxygen demand and reduce levels of dissolved oxygen in localized areas during construction. Suspended sediments also may alter the chemical and physical characteristics of the water column (e.g., color and clarity) on a temporary basis. WBI Energy will use material excavated from the pipeline trench to backfill the trench once the pipe is installed to avoid introduction of foreign substances into waterbodies. Potential effects on fisheries due to increased turbidity and sedimentation resulting from in-stream construction activities are addressed in Resource Report 3.

As noted above, WBI Energy will install temporary equipment bridges across waterbodies to reduce the potential for turbidity and sedimentation resulting from construction equipment and vehicular traffic. Temporary bridges will consist of purpose-built structures as described in the FERC Procedures. For temporary bridges, a geotextile fabric will be placed under the bridge such that gravel or dirt from equipment used in the construction of the bridge or equipment crossing the bridge can be collected and removed when the bridge is dismantled.

If excessively soft soils are encountered in the streambed or if high water flows occur, portable bridges may be utilized at minor stream crossings. Equipment bridges will be maintained throughout construction and removed in accordance with the FERC Procedures once construction is complete. Equipment bridges will be designed to accommodate normal to high stream flow and will be maintained to prevent restriction of flow during the period of time the bridge is in place.

In-stream construction associated with the installation of the pipeline will be completed within 24 to 48 hours at each stream crossing according to requirements in the FERC Procedures. To minimize sedimentation during construction across minor or intermediate waterbodies, trench spoil will be placed at least 10 feet from the top of the bank. Silt fence and/or straw wattles or bales will be placed around the spoil piles to prevent spoil from flowing into the waterbody. Once the pipe is placed in the trench, the excavated material will be promptly replaced and the stream banks and streambed will be restored as close as possible to their preconstruction contours. Additional measures, such as the installation of erosion control blankets, will be implemented as necessary to stabilize the bed and banks of the waterbody. During final restoration and according to the FERC Procedures, stream banks and riparian areas will be revegetated using appropriate seed mixes to further stabilize the banks.

During construction, the open trench may accumulate water either from the seepage of groundwater or from precipitation. In accordance with the FERC Procedures and when necessary, trench water will be removed and filtered to remove sediment. The filtered water will be discharged into a well-vegetated upland area.

The Project SPCC Plan (see appendix 1F-1 of Resource Report 1) describes measures that WBI Energy personnel and contractors will implement to prevent and, if necessary, control inadvertent spill of fuels, lubricants, solvents, and other hazardous materials. As required in the

FERC Procedures and WBI Energy's SPCC Plan, hazardous materials, chemicals, lubricating oils, and fuels used during construction will be stored in upland areas at least 100 feet from wetlands and waterbodies. Refueling of construction equipment will be conducted at least 100 feet from wetlands and waterbodies, whenever possible. Where refueling cannot be accomplished more than 100 feet from wetlands and waterbodies, additional precautions such as continual monitoring of fuel transfer and spill kit readiness will be employed. Implementing the SPCC Plan will limit risks of affecting water quality due to inadvertent spills.

WBI Energy's use of guided bore methods will allow the pipe to be installed underneath the ground surface, avoiding direct impacts to the stream bed and bank of each waterbody crossing. However, a temporary and localized increase in turbidity could occur in the event of an inadvertent release of drilling fluid to the waterbody during guided bore operations (i.e., an inadvertent return). Additionally, equipment bridges used as temporary travel lanes will likely be required at the perennial waterbody guided bore crossing locations. Drilling fluid to be used on this Project will be primarily composed of water and bentonite clay to achieve the properties necessary to facilitate guided bore operations. Drilling fluid additives used during construction will be limited to non-petrochemical based, non-hazardous additives currently certified to the American National Standards Institute / National Sanitation Foundation International Standard 60 (see the Guided Bore Plan in appendix 1F-2 of Resource Report 1 for additional details on drilling fluid additives and Safety Data Sheets). The USEPA does not list bentonite as a hazardous substance and no long-term adverse environmental impacts would be expected should an inadvertent return occur. Similarly, while native soils may mix with the drilling fluid as a result of the drilling process, no adverse environmental impacts from these materials would be expected should an inadvertent return occur. WBI Energy will only use non-petrochemical based, non-hazardous drilling fluid additives.

Due to the possibility of drilling fluid loss during guided bore operations, WBI Energy has developed a Guided Bore Plan, which is provided in appendix 1F-2 of Resource Report 1. This plan describes measures to prevent, detect, and respond to inadvertent returns including, but not limited to, the following: monitoring during drilling operations, equipment, and materials that must be readily available to contain and clean up drilling mud; containment and mitigation measures; notification requirements; and guidelines for abandoning the directional drill, if necessary.

2.2.9 Proposed Facility Operations

Operation of the new pipeline and aboveground facilities is not expected to result in any impacts on surface water use or quality unless maintenance activities involving pipe excavation and/or repair are required in proximity to waterbodies. If excavation of the pipeline within or adjacent to a waterbody is required during operations, WBI Energy would mitigate impacts by obtaining the appropriate permits and employing mitigation similar to that previously described for pipeline construction activities.

2.3 WETLANDS

2.3.1 Existing Wetland Resources

Wetlands are communities situated in the transition zone between upland and aquatic communities where vegetation and soil characteristics are influenced by intermittent to permanent saturation or flooding.

Glaciation in North Dakota created a unique landscape characterized by isolated depressions, which catch runoff from localized watersheds. The wide-ranging area defined by this type of topography is commonly referred to as the "prairie potholes" region. These depressions are saturated or inundated during the wetter spring and early summer months, but frequently dry out during the summer and fall months as precipitation decreases. During drier months or when low rainfall conditions are present throughout the year, many of these prairie potholes are dry enough that they can be cultivated and farmed along with the surrounding upland areas.

WBI Energy conducted field surveys during the 2021 field survey season to identify and delineate wetlands within the proposed pipeline construction corridor and other workspace areas. In total, the field surveys examined approximately 53.6 miles (89 percent) of the proposed pipeline route and the proposed aboveground facilities, access roads, and contractor yards. Approximately 6.9 miles (11 percent) of the pipeline route and some additional access roads and contractor yards were not field surveyed as a result of route variations identified after the conclusion of the 2021 field survey season or frozen conditions late in the survey season. All delineated wetlands were delineated in accordance with the 1987 *Corps of Engineers Wetlands Delineation Manual* and the Regional Supplement to the 1987 Manual, *Great Plains Region* (USACE, 1987; 2010). Delineated wetlands were classified according to methodologies set forth in *Wetlands and Deepwater Habitats of the United States* (Cowardin et al., 1979). A copy of the Project's wetland and waterbody delineation report is provided in appendix 2B of this report. In addition, appendix 2B (*to be filed as a supplement*) includes a map of the National Wetland Inventory (NWI) wetlands for the Project area.

The proposed Project area has 55 wetland crossings. Table 2.3-1 provides a summary of wetland impacts by wetland type along the proposed pipeline route. Appendix 2E provides a complete list of wetlands identified along the proposed pipeline route with MP locations, classification, crossing length, and area affected by construction and operation of the proposed facilities. Data provided in table 2.3-1 and appendix 2E are based on WBI Energy's 2021 field surveys. WBI Energy reviewed the NWI in areas that were not surveyed in 2021. No additional NWI wetlands were identified. Additional field survey data will be provided after completion of the 2022 field survey season.

Following submission of the draft Resource Reports in March 2022, WBI Energy revised the footprints of contractor yards to avoid wetlands to the extent possible.

TABLE 2.3-1

Wahpeton Expansion Project
Wetland Types Crossed by the Project [a]

NWI Classification [b]	Approximate Crossing Length (feet) [c]	Acreage Affected During Construction (acres) [d]	Acreage Affected During Operation
PEM	4,452	8.13	<0.01[e]
PFO	178	0.36	<0.10[f]
Project TOTAL	**4,666**	**8.51**	**<0.10**

[a] Wetland crossings are based on WBI Energy's field survey data as of the end of the 2021 field season.
[b] Types listed are those occurring within the 75-foot-wide construction corridor based on Cowardin classifications.
PEM = Palustrine emergent; may be temporarily, seasonally, or semi-permanently flooded
PSS = Palustrine scrub shrub
PFO = Palustrine forested

TABLE 2.3-1

Wahpeton Expansion Project
Wetland Types Crossed by the Project [a]

NWI Classification [b]	Approximate Crossing Length (feet) [c]	Acreage Affected During Construction (acres) [d]	Acreage Affected During Operation

[c] The length of the centerline crossing was calculated from field-delineated or NWI polygons, rounded to the nearest foot, and summed for each type. Values are rounded to the nearest tenth of an acre.

[d] Based on the construction corridor and additional workspace areas associated with the construction corridor.

[e] All palustrine emergent wetlands crossed by the Project will be restored to their original contour and re-seeded with a native emergent seed mix after construction; therefore, no permanent impacts will occur for the palustrine emergent wetlands crossed by the Project.

[f] Woody vegetation will likely be permanently removed in the forested wetlands identified within the 10-foot-wide permanent easement along the pipeline route. The vegetation removal will constitute a wetland conversion from palustrine forested to palustrine emergent and, therefore, is considered an operational impact.

2.3.2 Wetland Crossing Methods

WBI Energy will construct wetland crossings in accordance with the FERC Procedures, approved site-specific modifications to the FERC Procedures, and/or other applicable federal and state permit requirements such as the conditions included in the USACE authorization under Section 404 of the CWA. Section 1.3.2.2 of Resource Report 1 describes wetland crossing methods in detail.

2.3.3 Wetland Impacts and Mitigation

As shown in table 2.3-1 above and appendix 2E, the proposed pipeline route, access roads, aboveground facilities, and contractor yards will temporarily affect approximately 8.51 acres of wetlands, will result in the conversion of less than 0.1 acre of palustrine forested wetland to emergent wetland, and will result in less than 0.01 acre of permanent fill of a palustrine emergent roadside ditch for the creation of a permanent access road. After construction, all temporary wetland impacts will be restored.

Pipeline construction will result in temporary alterations of the vegetative cover in wetlands along the proposed right-of-way. In the short-term, construction activities have the potential to diminish the recreational and aesthetic value of wetlands through clearing, trenching, spoil placement, vehicle traffic, and related construction disturbances. Wetland functions such as erosion control, buffering, flood flow attenuation, sediment retention, and nutrient retention will be affected by construction. These effects typically will be greatest during and immediately following construction through the short term. Impacts on palustrine emergent wetlands will likely be of short duration as these types of wetlands can regenerate relatively rapidly. Revegetation will typically occur during the growing season following construction and the disturbed wetland will likely become re-established to preconstruction conditions in two or three growing seasons after construction. Impacts on palustrine forested and scrub shrub wetlands will be longer term. Moreover, pipeline construction is likely to permanently alter the vegetation within a portion of the affected palustrine forested wetlands as the regrowth of trees and shrubs will likely be prevented by WBI Energy's vegetation maintenance on the permanent right-of-way. In wetlands, this may include maintaining a corridor centered on the pipeline up to 10 feet wide in a herbaceous state and selective cutting and removal of trees within 15 feet of the pipeline with roots that could compromise the integrity of pipeline coating.

Other types of impacts associated with construction of the pipeline facilities could include temporary changes to wetland hydrology and water quality. During construction, failure to segregate topsoil over the trench in wetlands could result in the mixing of the topsoil with subsoil material. This could result in reduced fertility and limit the success of revegetation efforts after construction. In addition, inadvertent compaction and furrowing of soils during construction could result from the temporary stockpiling of soil and the movement of heavy machinery. This could alter the natural hydrologic patterns of the wetlands, inhibit seed germination, or increase seedling mortality. Altered surface drainage patterns and hydrology could increase the potential for siltation and turbidity could result from construction and trenching activities.

WBI Energy will minimize impacts on wetlands by using the construction techniques described in section 1.3 of Resource Report 1 by implementing measures identified in the FERC Procedures and by complying with the conditions of applicable permits. The primary means to minimize impacts on wetlands during construction are limiting the width of the construction right-of-way in wetlands; limiting the amount of equipment and use of extra workspace in and adjacent to wetlands; using equipment stabilization measures such as timber mats, which help minimize compaction; limiting grading in wetlands; and segregating topsoil over the trenchline (but not in saturated conditions in accordance with the FERC Procedures).

WBI Energy proposes to utilize a 75-foot-wide construction right-of-way through wetlands consistent with the FERC Procedures and will request site-specific modifications if it identifies any wetland areas where there is a need for additional right-of-way width. Within wetlands, herbaceous vegetation will generally be left intact except for the trenchline. Tree clearing will be necessary in the forested wetlands within the proposed workspace. WBI Energy will also take precautionary measures outside wetlands to prevent construction in uplands from having impacts on wetlands. These measures are outlined in the FERC Plan and include the following:

- installing sediment barriers across the entire construction right-of-way immediately upslope of the wetland boundary at unfarmed wetland crossings, where necessary, to prevent sediment flow into wetlands; and

- installing sediment barriers along the edge of the construction workspace where unfarmed wetlands are adjacent to the construction right-of-way and the ground surface slopes toward the unfarmed wetlands—this will minimize the risk of sediment flowing into unfarmed wetlands.

In addition to the protective measures described above, WBI Energy will locate ATWS areas a minimum of 50 feet from the edge of wetlands, except in locations where the adjacent upland consists of cultivated or rotated cropland or other disturbed land. If ATWS is required within 50 feet of a wetland, WBI Energy will formally request a modification from the FERC Procedures including site-specific justification (see section 1.3 of Resource Report 1). In both wetland and upland workspace, original topographic conditions and contours will be restored to the maximum extent practicable after completion of construction.

WBI Energy plans to complete pipe bending and welding prior to excavating the trench in wetlands. Once the trench is excavated, the pipe will be installed and the trench will be backfilled as quickly as possible. For wetlands that could be inadvertently drained as a result of trenching activities, trench plugs will be left in place until immediately prior to pipe installation. Drag sections and tie-ins may be utilized outside of the wetland for wetlands where trench plugs are not practical

and where a minimum section of trench is open each day and a prefabricated section of pipe is installed and backfilled in the same day. To prevent affecting hydrology of wetlands that may be subject to drainage as a result of water following from the pipeline along the trench, permanent trench breakers will be installed at the boundaries of wetlands to maintain wetland hydrology.

In unfarmed wetlands that are not saturated at the time of construction, WBI Energy will segregate topsoil from the trenchline in order to protect its integrity and help preserve the seed bank. Segregating the topsoil should preserve the potential for natural revegetation of the right-of-way to its preconstruction plant community. In most cases, trench spoil excavated in wetlands will be stored in the construction corridor adjacent to where it was excavated. In areas where excavated trench spoil may flow into undisturbed areas of the wetland, silt fence, straw bales, or other appropriate sedimentation control devices will be installed at the edges of the construction right-of-way to prevent sediment migration.

Following pipeline installation, the trench will be backfilled with material excavated within the wetland and preconstruction contours will be restored to the maximum extent practicable. Additionally, WBI Energy will replace segregated topsoil to the surface layer of the trench during backfilling. Replacing the wetland topsoil and restoring preconstruction hydrology will promote re-establishment of wetland vegetation. Following construction, WBI Energy will conduct three years of follow-up monitoring and reporting to monitor restoration of unfarmed wetland plant communities in accordance with the FERC Procedures.

In saturated wetlands where soils are unable to support equipment and safely excavate the trench, temporary work surfaces of timber mats or travel pads will be installed adjacent to the pipeline trench. Construction will proceed as in unsaturated wetlands, except topsoil will not be segregated due to the saturated conditions where these conditions are present. Pipe stringing and fabrication may occur within the wetland adjacent to the trench or in a designated extra workspace adjacent to the wetland.

In accordance with the FERC Procedures, WBI Energy will construct the pipeline facilities across farmed wetlands using the same methods as adjacent farmed uplands. Most seasonally saturated farmed wetlands are used for crop production and topsoil will be segregated in the same manner as topsoil in upland agricultural lands. Pipe stringing and fabrication will generally occur within the farmed wetland adjacent to the trench or adjacent to the farmed wetland in a designated ATWS.

Inadvertent spills of fluids used during construction—such as fuels, lubricants, and solvents—may contaminate wetland soils during construction. To minimize the potential for spills in wetlands and any impacts from such spills, WBI Energy will implement the measures identified in its SPCC Plan (see appendix 1F-1 of Resource Report 1) as described above in section 2.2.7.

During construction, erosion controls will be placed where necessary along the pipeline right-of-way and extra workspaces to minimize impacts on adjacent unfarmed wetlands in accordance with the FERC Plan, the FERC Procedures, and applicable permits. Erosion and sedimentation barriers will be installed and maintained throughout the construction period to prevent disturbed soils and sediment from migrating into adjacent undisturbed wetland areas. During trench-dewatering activities, trench water will be removed and filtered to remove sediments and dewatering will occur outside of wetlands within well vegetated upland areas.

2.3.4 Compensatory Wetland Mitigation

As noted earlier, no wetlands will be permanently drained or filled as a result of Project construction. The Project will result in less than 0.01 acre of permanent wetland fill as a result of the widening of a permanent access road and may result in less than 0.1 acre of wetland conversion of palustrine forested to palustrine emergent wetlands in the permanent pipeline easement. Both the permanent wetland fill and potential wetland conversion are below the thresholds requiring compensatory mitigation under the CWA Section 404 permitting process with the Omaha District USACE.

2.4 CUMULATIVE IMPACTS

Section 1.10 of Resource Report 1 defines a cumulative impact and describes the general scope of the cumulative impact analysis. This section describes the potential cumulative impacts on groundwater, surface water, and wetlands from the Project combined with the reasonably foreseeable future actions (RFFA) identified in appendix 1I and figure 1.10-1 of Resource Report 1. The location, proposed schedule, and a description of each RFFA are provided in appendix 1I.

The cumulative impact assessment for groundwater, surface water, and wetlands focuses on impacts from RRFAs that could reasonably extend throughout an HUC-12 subwatershed that will also be affected by the proposed Project during the time of active construction until successful revegetation has been achieved.

2.4.1 Groundwater Resources

The potential for impacts on groundwater resulting from construction and operation of the Project facilities could cause localized changes to existing groundwater flow paths. Permanent impacts on groundwater recharge could also occur from development of impervious surfaces and structures at the proposed aboveground facility sites.

The following RFFAs fall within the HUC-12 subwatersheds crossed by the Project and the Project's temporal scope for surface water resources (time of active construction through successful revegetation of disturbed areas):

- Meridian Grove 2nd Addition and Asmoor Glen Projects and Flickertail Solar Project: The two housing developments in Cass County and the construction of the Flickertail Solar Project could result in temporary localized impacts to existing groundwater flow paths during construction and permanent impacts on groundwater recharge from the additional impervious surfaces resulting from the new structures.

- NuStar Pipeline Operating Partnership's Pipeline Relocation Project: The NuStar Pipeline Operating Partnership, L.P. is proposing to relocate approximately 2 miles of 10-inch-diameter pipeline in Cass County. Impacts on existing groundwater flow paths will likely be temporary during construction as the area of disturbance will be restored to pre-construction conditions after replacement of the pipeline. The pipeline project will be required to implement measures to minimize the risk of groundwater contamination.

- MDU—Kindred Border Station and MDU—Wahpeton Border Station: MDU is proposing a non-jurisdictional distribution system to provide natural gas to industrial and residential customers in Kindred and Wahpeton, North Dakota. The distribution project footprints are anticipated to overlap with the Project footprint by approximately 1 acre at each site and will result in increased impervious surface that will have a slight impact on groundwater recharge. The distribution systems will consist of underground distribution lines that distribute natural gas from the MDU—Kindred Border Station to industrial and residential customers in Kindred and from the MDU—Wahpeton Border Station to customers in Wahpeton, distribution facilities to provide natural gas to landowners from farm taps along the mainline, and power lines to serve non-jurisdictional facilities at the proposed MDU Border Stations. These appurtenances will likely have only minimal impact to groundwater recharge and will likely result in temporary localized impacts to groundwater flow paths during construction. The MDU Distribution System project will be required to implement best management practices (BMP) to address potential impacts from groundwater contamination.

- Kindred Airport Runway Expansion Project: The Kindred Airport is planning to expand its existing runway and departure surface. This project will result in additional impervious surface that will permanently impact groundwater recharge and there will be temporary localized impacts to groundwater flow paths during construction.

- North Dakota Department of Transportation (NDDOT) Projects: The NDDOT has numerous projects to improve existing road surfaces. There is the potential to have temporary localized impacts to groundwater recharge during construction; however, there will be no increase in impervious surface and, thus, there should be no long-term permanent impacts to groundwater.

- Ongoing agricultural activities: The majority of the Project is located within agricultural land that will continue to be utilized for the production of row crops. There will continue to be alterations in drainage to maintain fields and areas of compaction from the use of farm equipment, which will impact groundwater recharge. There is also the potential for fertilizers and pesticides to leach into the groundwater.

- Fargo Moorhead Area Diversion Project: The diversion project is designed to control flooding, which would ultimately decrease the amount of contaminants that could migrate to groundwater during flood events. There will be no significant increase in impervious surface as part of this project that would reduce groundwater recharge (MNDNR, 2016).

As described in section 2.1.5, WBI Energy will use several mitigation measures to minimize modifications to preferential groundwater flow paths. These include BMPs to reduce erosion from trench dewatering, trench breakers to reduce erosion within the trench, and minimizing compaction during construction. WBI Energy will implement the SPCC Plan to minimize the potential for discharge of hazardous materials that could affect groundwater. WBI Energy will develop plans to mitigate the potential spread of contamination or discharges of hazardous materials. The overall effect on groundwater recharge resulting from facility

construction will not be significant due to the relatively small footprint of impervious surfaces in relation to the total potential recharge area. Additionally, the footprint of each RFFA that falls within the geographic scope for impacts on groundwater is relatively small compared to the size of the subwatershed. Project impacts, when combined with the RFFAs, are not expected to have a significant cumulative impact on groundwater resources as a result.

2.4.2 Surface Water Resources

Small-scale, short-term impacts on waterbodies could occur as a result of construction activities in stream channels within waterbodies and on their adjacent banks. Clearing and grading of stream banks, blasting (if required), in-stream trenching, trench dewatering, and backfilling could each result in temporary local modifications of aquatic habitat involving sedimentation, increased turbidity, and decreased dissolved oxygen concentrations. There is a possibility of drilling fluid loss during guided bore operations. In most cases, these impacts are limited to the period of in-stream construction and conditions will return to normal shortly after stream restoration activities are completed. Operation of the new pipeline and aboveground facilities is not expected to result in any impacts on surface water use or quality.

The following RFFAs fall within the HUC-12 subwatersheds crossed by the Project and the Project's temporal scope for surface water resources:

- Numerous Projects: The two housing developments in Cass County, the Flickertail Solar Project, the MDU Border Stations, the Kindred Airport expansion, the NuStar pipeline relocation, and various road improvement projects could affect surface water resources by increasing sedimentation in surface waters primarily due to vegetation removal and ground-disturbing construction activities. The projects could potentially result in permanent impacts on surface waters from construction of permanent structures and access roads.

- Ongoing agricultural activities: The continuing agricultural activities could result in increased sedimentation and surface runoff of fertilizers and pesticides to surface waters.

- Fargo Moorhead Area Diversion Project: The diversion project is designed to control flooding, which should ultimately improve water quality in the subwatershed (MNDNR, 2016).

Mitigation measures for surface water impacts are described in section 2.2.7. Equipment bridges, mats, and pads will be used at stream crossings to minimize stormwater runoff. Fencing or straw bales will be placed around spoil piles at least 10 feet from the top of the bank. WBI Energy will implement its Guided Bore Plan (see appendix 1F of Resource Report 1). It is expected that all RFFAs will comply with applicable local, state, and federal water quality requirements. The majority of Project impacts will be limited to the relatively brief period of in-stream construction and stream restoration, which will not be expected to coincide with the known construction schedules for the RFFAs described above. As a result, significant cumulative impacts on surface waters are not expected.

2.4.3 Wetlands

Pipeline construction will result in temporary impacts on wetlands, primarily involving soil disturbance and potential for soil compaction, vegetation removal, and potential spills during construction activities. The Project will result in approximately 8.51 acres of temporary wetland impacts, less than 0.01 acre of permanent impact, and less than 0.1 acre of wetland conversion.

The following RFFAs fall within the two HUC-12 subwatersheds crossed by the Project and the Project's temporal scope for wetland resources:

- Flickertail Solar Project: The Flickertail Solar Project could result in permanent impacts on wetlands associated with the solar panel structures and permanent access roads. Each of the solar panel structures are assumed to affect less than 0.1 acre at each location and the project will be required to comply with all applicable local, state, and federal wetland impact permitting requirements.

- Meridian Grove 2nd Addition and Asmoor Glen Projects, MDU—Kindred Border Station and MDU—Wahpeton Border Station, and Kindred Airport Runway Expansion Project: The two housing developments, MDU Border Stations, and the Kindred Airport expansion could also result in temporary and permanent impacts on wetlands; however, the projects would be required to comply with all applicable local, state, and federal wetland impact permitting requirements, which include mitigation requirements to offset any potential wetland impacts.

- NuStar Pipeline Operating Partnership's Pipeline Relocation Project: The NuStar pipeline relocation project will likely result only in temporary wetland impacts during construction as the workspace will be restored to its original contour after the pipeline is installed. There is the potential for permanent wetland conversion for scrub shrub or forested wetlands.

- Ongoing Agricultural Activities: The National Food Security Act prohibits the draining of farmed wetlands for agricultural activity; therefore, there should be no permanent impacts to wetlands resulting from the continued production of row crops throughout the Project area and surrounding HUC-12 watershed.

- NDDOT Projects: The proposed road improvement projects are on existing roadway surfaces and should not result in any permanent wetland impacts.

- Fargo Moorhead Area Diversion Project: The diversion project is designed to control flooding. No permanent wetland impacts are proposed as part of this project (MNDNR, 2016).

It is assumed that RFFAs would comply with federal wetlands regulations, which require mitigation measures for impacts on USACE-jurisdictional wetlands. Stormwater pollution prevention regulations require the use of BMPs to prevent runoff from the construction corridor from entering waters of the United States. Additionally, the footprint of each RFFA that falls within the geographic scope for impacts on wetlands is relatively small compared to the size of the subwatershed. As a result, Project impacts when combined with the RFFAs are not expected to have a significant cumulative impact on wetlands.

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APPENDIX 2A PLAN FOR UNANTICIPATED DISCOVERY OF CONTAMINATED MEDIA

WBI ENERGY TRANSMISSION, INC.

Wahpeton Expansion Project

Appendix 2A

Plan for Unanticipated Discovery of Contaminated Environmental Media

Draft

Docket No.
CP22-XXX-000

May 2022

WBI ENERGY TRANSMISSION, INC.
WAHPETON EXPANSION PROJECT
APPENDIX 2A
PLAN FOR UNANTICIPATED DISCOVERY OF CONTAMINATED ENVIRONMENTAL MEDIA

TABLE OF CONTENTS

ACRONYMS AND ABBREVIATIONS

EI	Environmental Inspector
Project	Wahpeton Expansion Project
WBI Energy	WBI Energy Transmission, Inc.

1.0 INTRODUCTION

WBI Energy Transmission, Inc. (WBI Energy) has developed this Plan for Unanticipated Discovery of Contaminated Environmental Media for its proposed Wahpeton Expansion Project (Project). WBI Energy recognizes that there is the potential to encounter contaminated soil or sediment during construction activities associated with the Project. This plan describes the steps that WBI Energy and its contractors will implement in the unanticipated event that contaminated environmental media is encountered during construction.

2.0 IDENTIFICATION OF CONTAMINATED MEDIA AND INITIAL RESPONSE

During Project activities, construction personnel and WBI Energy's Environmental Inspectors (EI) will observe work areas for signs of potential contamination such as the following:

- discoloration of soils;
- chemical-like odors from soils or water;
- oily sheens on soils or water;
- buried drums or other waste containers; and
- buried waste such as garbage and debris.

If signs of contamination are encountered, the contractors will stop work in the vicinity of the suspected contamination, restrict access to the suspected contamination site, and immediately notify the EI and Spill Coordinator of the find. The EI will contact the WBI Energy Designated Representative as soon as possible after discovery of the site. The WBI Energy Designated Representative or Land Agent will inform the landowner of the site.

Environmental Inspector:	To Be Determined
Phone:	To Be Determined
Spill Coordinator:	To Be Determined
Phone:	To Be Determined
WBI Energy Designated Representative:	To Be Determined
Office Phone:	To Be Determined
Cell Phone:	To Be Determined
Land Agent:	To Be Determined
Phone:	To Be Determined

3.0 CONTAMINATED MEDIA CONTAINMENT, TESTING, AND NOTIFICATION PROCEDURES

The EI and contractor will initiate measures to avoid the spread of contaminants until the nature and type of contamination is properly evaluated. Work in the area will not resume until an assessment of the types and levels of contaminants have been determined by qualified personnel.

Measures to avoid the spread of potential contamination will vary depending on the situation. The following measures will be implemented as appropriate:

- If potentially contaminated soil or groundwater is exposed during excavation, work will stop in the area of contamination and the EI will take measures (if it is safe to do so) to flag the area.

- If potentially contaminated soil has been excavated and stockpiled, it may be transferred to a bermed area lined with a sheet of impervious plastic, with a second sheet of impervious plastic placed over the new stockpile and berm. These measures will be implemented to prevent surface water or precipitation from carrying contaminants off the site. The contaminated media will not be removed from the site unless approved to do so by the EI or by WBI Energy.

- If groundwater is draining from the sides of the excavation and standing in the trench, temporary trench plugs may be installed to avoid migration of the groundwater and the spread of contaminants through water.

- In the unlikely event that groundwater is to rise above the surface of the trench berms or spill control booms will be placed around the open portion of the trench to contain the water and prevent the spread of contaminants.

- All potentially contaminated media will be handled in accordance with all federal, state, and local regulations.

The potential contaminant will be characterized concurrently with the installation of containment measures. Representative samples of soils or groundwater will be collected and analyzed as necessary. Appropriate tests or analyses will be conducted by a qualified laboratory based on field observations, the suspected nature of the contaminants, and any recommendations from qualified environmental contractors and regulatory agencies if consulted. Laboratory analyses may include: total petroleum hydrocarbons, oil & grease, volatile hydrocarbons, semi-volatile hydrocarbons, metals, polychlorinated biphenyls, and pH.

Depending on the nature of the contamination, WBI Energy will notify the appropriate federal, state, and local regulatory agencies. Appropriate agencies include, but may not be limited to, the following:

- North Dakota Department of Health—Spill Investigation Program
  Bill Suess, Spill Investigation Program Manager
  Phone: 1-701-328-5216
  Email: bsuess@nd.gov

- The National Response Center (Washington, D.C.)
  Phone: 1-800-424-8802 (24 hours)

4.0 AVOIDANCE OR RESPONSE PLANS

If the contaminant identified is found to be a health or safety hazard, the area of contamination will be evacuated and secured until trained personnel are on-site and mitigation measures are implemented to allow the safe installation of Project facilities. Alternatively, reroutes or new aboveground facility sites may be considered to avoid the area of contamination. Applicable permits and regulatory approvals will be obtained prior to proceeding with a reroute.

If the contaminant does not pose a health or safety concern and will not otherwise interfere with the Project, a plan for completing construction within the contaminated area will be prepared. Test pits or borings may be excavated within the right-of-way or aboveground facility site to assess the extent of the contamination. Depending on the nature and extent of the contaminated media, site-specific measures will be identified to complete construction across the contaminated area. These measures may include the following:

- storing excavated soil on a sheet of impervious plastic;
- avoiding water withdrawals from the trench;
- removing and properly disposing of contaminated media;
- replacing contaminated soil with clean backfill; and/or
- implementing staged withdrawal and disposal of standing trench water during backfilling to avoid overflow and runoff.

Contaminated soil will not be placed back in the trench unless approved in writing by the appropriate regulatory agency and by WBI Energy. Special construction plans developed for areas of contamination will be in compliance with environmental regulations and approval of the plans by appropriate jurisdictional agencies will be obtained prior to implementation.

APPENDIX 2C VITA-D-CHLOR MATERIAL SAFETY DATA SHEET

VITA-D-CHLOR™

Manufactured by:
Integra Chemical Co
1216 6th Ave N
Kent WA 98032
253.479.7000

SAFETY DATA SHEET

SDS Number: 26643, Revision 002
Revision date: July 7, 2017

24 Hour Emergency Response: CHEMTREC 800-424-9300
(Outside USA: 703-527-3887)

1. IDENTIFICATION

Product name: Vita-D-Chlor™
Chemical family: Organic acid
Product number: All Integra Chemical item numbers beginning with V322.50
Recommended use: Dechlorination
Restrictions on use: No information available

2. HAZARDS IDENTIFICATION

OSHA classification: Not a hazardous substance or mixture
Label elements & precautionary statements: Not applicable
Hazards not otherwise classified: None identified

3. COMPOSITION/INFORMATION ON INGREDIENTS

The organic acid contained in this product is not a hazardous material.

4. FIRST AID PROCEDURES

Skin contact: Wash with soap and water. Seek medical attention if irritation develops.
Eye contact: Flush eyes with plenty of water. If irritation persists, seek medical attention.
Inhalation: Remove to fresh air.
Ingestion: Do not induce vomiting. Rinse mouth. If adverse symptoms develop, seek medical attention.

5. FIRE-FIGHTING MEASURES

Extinguishing media: Water spray, carbon dioxide, dry chemical, or foam.
Special equipment/precautions: Use water to cool nearby containers and structures. Wear full protective equipment, including suitable respiratory protection.
Specific hazards: As with most organic solids, combustion is possible at elevated temperatures.
Hazardous combustion products: Oxides of carbon (CO, CO_2)

6. ACCIDENTAL RELEASE MEASURES

Spill procedures: Prevent spread of spill. Wear suitable protective equipment. Sweep or scoop into clean, dry disposal container. Flush spill area with water.

7. HANDLING AND STORAGE

Storage and handling: Store in a cool, dry, well-ventilated area away from incompatible materials. Keep containers tightly closed and protect them from physical damage. Protect from direct light and minimize contact with air.
Incompatible materials: Incompatible with strong acids, strong bases, strong oxidizers.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

OSHA & ACGIH exposure limits: None established
Engineering controls: Use adequate general or local exhaust ventilation to keep fume and/or dust levels as low as possible.
Respiratory protection: None needed unless use generates annoying or irritating dusts, mists or vapors. Use a NIOSH approved respirator mask if necessary.
Skin & eye protective equipment: Safety glasses.
Facilities storing or utilizing this material should be equipped with an eyewash facility and safety shower.
Always handle material in accordance with good chemical handling, industrial hygiene, and safety practices.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Fine white crystals	Boiling point:	Not available
Odor:	No odor	Flash point:	Not available
Odor threshold:	Not available	Evaporation rate:	Not available
pH (1% aqueous solution):	2 to 3	Flammability:	Not available
Melting/freezing point:	192°C		

VITA-D-CHLOR™

Manufactured by:
Integra Chemical Co
1216 6th Ave N
Kent WA 98032
253.479.7000

SAFETY DATA SHEET

24 Hour Emergency Response: CHEMTREC 800-424-9300
(Outside USA: 703-527-3887)

9. PHYSICAL AND CHEMICAL PROPERTIES continued

Flammable or explosive Limits (% by volume in air)	Upper: Not available Lower: Not available	Solubility:	33g/100mL water @25°C
Vapor pressure:	Not available	Partition coefficient:	Not available
Vapor density:	Not available	Auto-ignition temperature:	660°C
Relative density:	1.65	Decomposition temperature:	218°C
		Viscosity:	Not available

10. STABILITY AND REACTIVITY

Reactivity:	No information available
Stability:	Stable
Possibility of hazardous reactions:	Hazardous polymerization will not occur
Conditions to avoid:	Exposure to light, air, moisture and high temperatures
Incompatibles:	Incompatible with strong acids, strong bases, strong oxidizers
Decomposition products:	Oxides of carbon (CO, CO_2)

11. TOXICOLOGICAL INFORMATION

Effects of overexposure:

Inhalation:	Inhalation may irritate the nose, throat and upper respiratory tract.
Skin contact:	Excessive contact may cause skin irritation.
Eye contact:	Contact may cause eye irritation.
Ingestion:	Ingestion of small amounts is not likely to produce harmful effects.
Chronic effects:	Chronic ingestion of large quantities may cause gastrointestinal effects including nausea, diarrhea, urine acidification, oxalate and uric crystallization in the bladder and kidneys, decreased reaction times, psychomotor coordination.
Target organs:	None identified
Additional effects:	No information available
Reproductive effects:	None identified
Carcinogenicity:	No listings by NTP, IARC, or OSHA
Toxicity data:	LD50 (oral, rat) 11,900 mg/kg

12. ECOLOGICAL INFORMATION

No information available

13. DISPOSAL CONSIDERATIONS

Dispose in accordance with all local, state and federal regulations.

14. TRANSPORTATION INFORMATION

Material is not classified as a dangerous good via either ground or air transportation.

15. REGULATORY INFORMATION

All components are listed in the United States TSCA inventory.
This product is not controlled under WHMIS

16. OTHER INFORMATION

FDA Recommended Dietary Allowance for ascorbic acid: 60mg/day
NSF60 maximum use: 12mg/L

OSHA SDS #: 26643, rev 002, July 7, 2017

-CHLOR

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...attention
...symptoms develop, seek

...shing agents suitable
...ce with local, state and

...FORMATION

...EHOLD USE

Vita-D-Chlor calculators for reservoirs, pipelines & injectors can be found at:
www.vita-d-chlor.com/calculator_overview.asp

Use the following information to calculate a rough estimate of your Vita-D-Chlor requirements. Many factors affect the dechlorination reaction, so always test treated water for residual chlorine levels to assure complete dechlorination.

High levels of chlorine (>5 ppm) should not be neutralized in closed systems or confined areas.

Dosing:

1 teaspoon (about ten grams) neutralizes 1,000 gallons (3800 L) of water with 1 ppm chlorine
1 pound (about two cups) neutralizes 45,000 gallons (170,000 L) of water with 1 ppm chlorine
25 kg treats 2,500,000 gallons (9,500,000 L) of water with 1 ppm chlorine

Solubility:

1 pound dissolves in 1 gallon of cold water in the field
Maximum solubility is 3 pounds in 1 gallon of warm water with consistent mixing

pH:

Properly dosed Vita-D-Chlor does not create a notable change in pH when treating potable water with less than 5 ppm chlorine.

Additional Calculations:

When liquid or dry bleach has been used to chlorinate a water main or reservoir to levels less than 100 ppm, using 3.25 lb (1.5 kg) of Vita-D-Chlor will neutralize the chlorine of 1 gal of sodium hypochlorite 12.5% or using 1.65 lb (750 g) will neutralize the chlorine of 1 lb (450 g) of calcium hypochlorite 65%

INTEGRA
Chemical
Kent, WA 98032
...fax (253) 479-7079
...D-Chlor.com

APPENDIX 2D GUIDED BORE SUMMARY TABLE

APPENDIX 2D
Wahpeton Expansion Project
Guided Bore Summary Table

No.	Crossing Feature	Milepost	Length (feet)	Pre-testing Water (gallons)	Test Water Source	Drilling Fluid
1	35th St SE	0.74	193	1,408	surface/municipal	H_2O+Bentonite
2	Maple River	1.23	750	5,472	surface/municipal	H_2O+Bentonite
3	163rd Ave SE	1.55	231	1,685	surface/municipal	H_2O+Bentonite
4	164th Ave SE	2.67	96	700	surface/municipal	H_2O+Bentonite
5	165th Ave SE	3.67	134	978	surface/municipal	H_2O+Bentonite
6	Drainage Ditch	3.85	400	2,918	surface/municipal	H_2O+Bentonite
7	36th St SE	4.90	388	2,831	surface/municipal	H_2O+Bentonite
8	BNSF Railroad	5.14	461	3,363	surface/municipal	H_2O+Bentonite
9	Driveway	5.44	96	700	surface/municipal	H_2O+Bentonite
10	Interstate 94/Ephemeral Road Side Ditch	5.94	766	5,589	surface/municipal	H_2O+Bentonite
11	165th Ave SE	6.48	200	1,459	surface/municipal	H_2O+Bentonite
12	Drainage Ditch/Wetland	6.64	450	3,283	surface/municipal	H_2O+Bentonite
13	38th St SE	7.19	179	1,306	surface/municipal	H_2O+Bentonite
14	39th St SE	8.19	96	700	surface/municipal	H_2O+Bentonite
15	165th Ave SE	8.36	160	1,167	surface/municipal	H_2O+Bentonite
16	40th St SE	9.24	96	700	surface/municipal	H_2O+Bentonite
17	Wetland	10.03	322	2,349	surface/municipal	H_2O+Bentonite
18	41st St SE	10.61	225	1,642	surface/municipal	H_2O+Bentonite
19	42nd Ave SE	11.67	96	700	surface/municipal	H_2O+Bentonite
20	166th Ave SE	12.15	156	1,138	surface/municipal	H_2O+Bentonite
21	43rd St SE	12.67	96	700	surface/municipal	H_2O+Bentonite
22	44th St SE	13.68	245	1,787	surface/municipal	H_2O+Bentonite
23	45th St SE	14.70	320	2,335	surface/municipal	H_2O+Bentonite
24	46th St SE	15.73	120	875	surface/municipal	H_2O+Bentonite
25	Red River RR	16.69	139	1,014	surface/municipal	H_2O+Bentonite
26	47th St SE	16.73	120	875	surface/municipal	H_2O+Bentonite
27	48th St SE	17.74	180	1,313	surface/municipal	H_2O+Bentonite
28	49th St SE	18.75	350	2,554	surface/municipal	H_2O+Bentonite
29	50th St SE	19.75	294	2,145	surface/municipal	H_2O+Bentonite
30	51st St SE	20.82	162	1,182	surface/municipal	H_2O+Bentonite
31	52nd St SE	21.82	96	700	surface/municipal	H_2O+Bentonite
32	53rd St SE	23.33	143	1,043	surface/municipal	H_2O+Bentonite
33	Sheyenne River	24.15	750	5,472	surface/municipal	H_2O+Bentonite
34	County Rd 46	24.72	230	1,678	surface/municipal	H_2O+Bentonite

APPENDIX 2D
Wahpeton Expansion Project
Guided Bore Summary Table

No.	Crossing Feature	Milepost	Length (feet)	Pre-testing Water (gallons)	Test Water Source	Drilling Fluid
35	County Rd 26	26.64	104	759	surface/municipal	H_2O+Bentonite
36	167th Ave SE	27.65	123	897	surface/municipal	H_2O+Bentonite
37	55th St SE	28.30	300	2,189	surface/municipal	H_2O+Bentonite
38	56th St SE/Ephemeral Roadside Ditch	29.30	96	700	surface/municipal	H_2O+Bentonite
39	57th St SE	30.32	128	934	surface/municipal	H_2O+Bentonite
40	58th St SE	31.36	413	3,013	surface/municipal	H_2O+Bentonite
41	59th St SE	32.37	96	700	surface/municipal	H_2O+Bentonite
42	County Rd 2	33.43	180	1,313	surface/municipal	H_2O+Bentonite
43	62nd St SE	35.63	111	810	surface/municipal	H_2O+Bentonite
44	168th Ave SE	36.14	263	1,919	surface/municipal	H_2O+Bentonite
45	63rd St SE	36.76	108	788	surface/municipal	H_2O+Bentonite
46	County Rd 1	37.54	130	948	surface/municipal	H_2O+Bentonite
47	170th Ave SE	38.54	96	700	surface/municipal	H_2O+Bentonite
48	Irrigation Drainage Unit Ephemeral Ditch	39.87	400	2,918	surface/municipal	H_2O+Bentonite
49	171st Ave SE	40.47	111	810	surface/municipal	H_2O+Bentonite
50	Interstate 29	40.97	500	3,648	surface/municipal	H_2O+Bentonite
51	64th St SE/Unnamed Perennial Trib. to Wild Rice River	41.03	400	2,918	surface/municipal	H_2O+Bentonite
52	County Rd 4	42.40	130	948	surface/municipal	H_2O+Bentonite
53	67th St SE	44.41	217	1,583	surface/municipal	H_2O+Bentonite
54	Pitcarin Creek	44.95	413	3,013	surface/municipal	H_2O+Bentonite
55	County Rd 6	45.42	96	700	surface/municipal	H_2O+Bentonite
56	69th St SE	46.42	96	700	surface/municipal	H_2O+Bentonite
57	Private Driveway	47.97	96	700	surface/municipal	H_2O+Bentonite
58	70th St SE	48.35	96	700	surface/municipal	H_2O+Bentonite
59	173rd Ave SE	48.89	96	700	surface/municipal	H_2O+Bentonite
60	174th Ave SE	49.89	96	700	surface/municipal	H_2O+Bentonite
61	Antelope/Wild Rice River	51.10	2,879	21,005	surface/municipal	H_2O+Bentonite
62	County Rd 81	51.93	242	1,766	surface/municipal	H_2O+Bentonite
63	177thAve SE	52.93	96	700	surface/municipal	H_2O+Bentonite
64	71st St SE	54.40	130	948	surface/municipal	H_2O+Bentonite
65	72nd St SE	55.41	96	700	surface/municipal	H_2O+Bentonite
66	73rd St SE	56.41	110	803	surface/municipal	H_2O+Bentonite
67	Wild Rice River #2	57.00	630	4,596	surface/municipal	H_2O+Bentonite

APPENDIX 2D
Wahpeton Expansion Project
Guided Bore Summary Table

No.	Crossing Feature	Milepost	Length (feet)	Pre-testing Water (gallons)	Test Water Source	Drilling Fluid
68	74th St SE	57.49	96	700	surface/municipal	H_2O+Bentonite
69	Wild Rice River #3	57.57	640	4,669	surface/municipal	H_2O+Bentonite
70	178th Ave SE	57.72	96	700	surface/municipal	H_2O+Bentonite
71	179th Ave SE	58.65	148	1,080	surface/municipal	H_2O+Bentonite
72	180th Ave SE	60.10	257	1,875	surface/municipal	H_2O+Bentonite

APPENDIX 2E WETLANDS CROSSED OR OTHERWISE AFFECTED BY THE PROJECT

APPENDIX 2E
Wahpeton Expansion Project
Wetlands Crossed or Otherwise Affected by the Project [a, b]

Wetland ID	Cowardin Classification	Milepost	Centerline Distance Crossed (feet)	Construction Impact (acres)	Operation Impact [c] (acres)	Proposed Crossing Method
PIPELINE FACILITIES						
wcaa002e	PEM	4.9	54.1	0.00	0.00	Guided Bore
wcaa010e	PEM	5.1	11.6	0.00	0.00	Guided Bore
wcaa011e	PEM	5.2	10.5	0.00	0.00	Guided Bore
wcaa003e	PEM	5.9	32.0	0.00	0.00	Guided Bore
wcaa004e	PEM	6.0	24.0	0.00	0.00	Guided Bore
wcaa001e	PEM	6.6	14.7	0.03	0.00	Open Cut
wcaa005e	PEM	8.9	48.4	0.00	0.00	Guided Bore
DSK_WL_04	PEM	10.0	88.4	0.14	0.0	Open Cut
wcaa006e	PEM	10.0	0.0	0.01	0.00	Open Cut
wcab001e	PEM	13.7	0.0	0.01	0.00	Open Cut
wcab003e	PEM	13.7	0.0	0.00	0.00	Guided Bore
wcab002e	PEM	13.9	0.0	0.00	0.00	Guided Bore
wcab004e	PEM	14.7	21.5	0.00	0.00	Guided Bore
wcab005e	PEM	15.7	12.0	0.00	0.00	Guided Bore
wcab008e	PEM	18.8	29.1	0.00	0.00	Guided Bore
DSK_WL_05	PEM	27.6	9.4	0.02	0.00	Open Cut
wria002e	PEM	28.3	17.2	0.00	0.00	Guided Bore
wria003e	PEM	31.3	11.4	0.05	0.00	Open Cut
wria004e	PEM	31.4	14.6	0.0	0.0	Guided Bore
wrib001e	PEM	32.1	164.8	0.31	0.00	Open Cut
wrib003e	PEM	32.6	385.6	0.62	0.00	Open Cut
wrib005e	PEM	32.9	88.1	0.13	0.00	Open Cut
wrib006e	PEM	33.2	38.2	0.06	0.00	Open Cut
wrib007e	PEM	33.5	376.9	0.88	0.00	Open Cut
wrib013e	PEM	34.1	103.3	0.21	0.00	Open Cut
wrib014f	PFO	34.2	178.3	0.25	<0.10[d]	Open Cut
wrib014e	PEM	34.3	214.7	0.38	0.00	Open Cut
wrib021e	PEM	34.5	821.3	1.59	0.00	Open Cut
wrib015e	PEM	35.6	14.4	0.00	0.00	Guided Bore
wrib016e	PEM	35.6	22.7	0.00	0.00	Guided Bore
wrib017e	PEM	35.7	368.0	0.00	0.00	Guided Bore
wrib018e	PEM	35.8	245.1	0.36	0.00	Open Cut
wrib020f	PFO	36.0	0.0	0.11	<0.10[d]	Open Cut
wrib020e	PEM	36.0	96.3	0.08	0.00	Open Cut
wrib019e	PEM	36.0	586.2	0.00	0.00	Guided Bore
wria006e	PEM	36.3	463.4	0.81	0.00	Open Cut
wria005e	PEM	37.8	12.4	0.02	0.00	Open Cut
wria009e	PEM	42.4	10.8	0.00	0.00	Guided Bore
wria008e	PEM	42.4	15.7	0.00	0.00	Guided Bore
wrid004e	PEM	51.9	23.3	0.00	0.00	Guided Bore
DSK_WL_01	PEM	60.1	21.5	0.09	0.00	Open Cut
DSK_WL_02	PEM	60.2	0.0	0.09	0.00	Open Cut

APPENDIX 2E
Wahpeton Expansion Project
Wetlands Crossed or Otherwise Affected by the Project [a, b]

Wetland ID	Cowardin Classification	Milepost	Centerline Distance Crossed (feet)	Construction Impact (acres)	Operation Impact [c] (acres)	Proposed Crossing Method
	SUBTOTAL			**6.25**	**<0.10**	
ACCESS ROADS						
wcaa009e (TAR 005)	PEM	5.1	NA	0.11	0.00	NA
wcaa007e (TAR 013)	PEM	9.9	NA	0.02	0.00	NA
wcab003e (TAR 018)	PEM	13.7	NA	0.01	0.00	NA
wcab004e (TAR 019)	PEM	14.7	NA	0.01	0.00	NA
wria003e (PAR 034)	PEM	31.3	NA	0.00	<0.01	NA
wrib021e (TAR 038)	PEM	34.5	NA	0.26	0.00	NA
wria010e (TAR 046)	PEM	43.4	NA	<0.01	0.00	NA
wria014e (TAR 046.1)	PEM	44.2	NA	<0.01	0.00	NA
wrid001e (TAR 049)	PEM	46.3	NA	<0.01	0.00	NA
wrid003e (TAR 051)	PEM	47.3	NA	<0.01	0.00	NA
	SUBTOTAL			**0.44**	**<0.01**	
ABOVEGROUND FACILITIES						
WHAPETON BORDER STATION						
DSK_WL_03	PEM	NA	NA	0.13	0.00	NA
PIPE YARDS						
COMSTOCK YARD						
Wrib026e	PEM	NA	NA	0.04	0.00	NA
KOST YARD						
Wcab010e	PEM	NA	NA	1.65	0.00	NA
	SUBTOTAL			**1.82**	**<0.10**	
	TOTAL			**8.51**	**<0.10**	

[a] The numbers in this table have been rounded for presentation purposes. As a result, the subtotals and totals may not reflect the exact sum of the addends in all cases.

[b] NA = not applicable
PEM = Palustrine emergent wetland
PFO = Palustrine forested wetland
PSS = Palustrine scrub shrub wetland

[c] All PEM wetlands will be restored to their herbaceous state; therefore, no permanent impacts will occur.

[d] Permanent woody vegetation removal in PFO will occur in the 10-foot wide permanent pipeline easement. The permanent removal of woody vegetation will constitute a wetland conversion of PFO to PEM wetland.

APPENDIX 2F AGENCY CORRESPONDENCE

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, OMAHA DISTRICT
NORTH DAKOTA REGULATORY OFFICE
3319 UNIVERSITY DRIVE
BISMARCK, NORTH DAKOTA 58504-7565

September 28, 2021

NWO-2021-1653-BIS

WBI Energy Transmission, Inc.
Attn: Ms. Jill Linn
2010 Montana Avenue
Glendive, Montana 59330

Dear Ms. Linn:

This is in response to your solicitation letter dated September 13, 2021 requesting Department of the Army (DA), United States Army Corps of Engineers (Corps) comments on the proposed Wahpeton Expansion Project. The project involves constructing approximately 60 miles of 12-inch diameter natural gas pipeline from WBI Energy's existing Mapleton Compressor Station near Mapleton, North Dakota, to a new delivery station near Wahpeton, North Dakota.

Corps Regulatory Offices administers Section 404 of the Clean Water Act. Section 404 of the Clean Water Act regulates the discharge of dredge or fill material (temporarily or permanently) in waters of the United States. Waters of the United States may include, but are not limited to, rivers, streams, ditches, coulees, lakes, ponds, and their adjacent wetlands. Fill material includes, but is not limited to, rock, sand, soil, clay, plastics, construction debris, wood chips, overburden from mines or other excavation activities and materials used to create any structure or infrastructure in waters of the United States.

Enclosed for your information is the fact sheet for Nationwide Permit 12, Utility Line Activities (2021). Utility lines (oil or natural gas pipelines) are already authorized by Nationwide Permit 12 provided the utility line can be placed without any change to pre-construction contours and all other proposed construction activities and facilities are in compliance with the Nationwide's permit conditions and Section 401 Water Quality Certification. On Tribal Lands, Water Quality Certification is denied for all Nationwide Permits. Applicants must work with EPA to obtain individual water quality certification on Tribal lands. Please note the pre-construction notification requirements on page 2 of the fact sheet. If a project involves any one of the notification requirements, the project proponent must submit a DA application. Furthermore, a project must also be in compliance with the "Regional Conditions for Nationwide Permits within the State of North Dakota", found on pages 23 thru 30 of the fact sheet.

In the event your project(s) requires approval from the U.S. Army Corps of Engineers and cannot be authorized by Nationwide Permit(s), a Standard or Individual Permit will

be required. A project that requires a Standard or Individual Permit is intensely reviewed and will require the issuance of a public notice. A Standard or Individual Permit generally requires a minimum of 120 days for processing but based on the project impacts and comments received through the public notice may extend well beyond 120 days.

This correspondence letter does not approve the proposed construction work or does not verify the proposed project complies with the Nationwide Permit(s).

If this project requires a Section 404 permit, please complete and submit the enclosed Department of the Army permit application (ENG Form 6082) to the U.S. Army Corps of Engineers, North Dakota Regulatory Office, 3319 University Drive, North Dakota 58504 or to the email address below. If you are unsure if a permit is required, you may submit an application; include a project location map, description of work, and construction methodology.

The North Dakota Regulatory office can accept (and prefers) electronic submissions to the following email: CENWO-OD-RND@usace.army.mil.

If we can be of further assistance or should you have any questions regarding our program, please do not hesitate to contact Jason.J.Renschler@usace.army.mil at this office by email or phone at (701) 255-0015 ext. 2010.

Sincerely,

Jason Renschler
Project Manager
North Dakota Regulatory Office

Enclosures:
- NWP #12 Fact Sheet
- DA application

U.S. Army Corps of Engineers (USACE)

NATIONWIDE PERMIT PRE-CONSTRUCTION NOTIFICATION (PCN)

33 CFR 330. The proponent agency is CECW-CO-R.

Form Approved - OMB No. 0710-0003 Expires: 02-28-2022

DATA REQUIRED BY THE PRIVACY ACT OF 1974

Authority	Rivers and Harbors Act, Section 10, 33 USC 403; Clean Water Act, Section 404, 33 USC 1344; Regulatory Programs of the Corps of Engineers; Final Rule 33 CFR 320-332.
Principal Purpose	Information provided on this form will be used in evaluating the nationwide permit pre-construction notification.
Routine Uses	This information may be shared with the Department of Justice and other federal, state, and local government agencies, and the public and may be made available as part of the agency coordination process.
Disclosure	Submission of requested information is voluntary, however, if information is not provided the permit application cannot be evaluated nor can a permit be issued.

The public reporting burden for this collection of information, 0710-0003, is estimated to average 11 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or burden reduction suggestions to the Department of Defense, Washington Headquarters Services, at whs.mc-alex.esd.mbx.dd-dod-information-collections@mail.mil. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.

PLEASE DO NOT RETURN YOUR RESPONSE TO THE ABOVE EMAIL.

One set of original drawings or good reproducible copies which show the location and character of the proposed activity must be attached to this application (*see sample drawings and/or instructions*) and be submitted to the District Engineer having jurisdiction over the location of the proposed activity. An application that is not completed in full will be returned.

(ITEMS 1 THRU 4 TO BE FILLED BY THE CORPS)

1. APPLICATION NO.	2. FIELD OFFICE CODE	3. DATE RECEIVED	4. DATE APPLICATION COMPLETE

(ITEMS BELOW TO BE FILLED BY APPLICANT)

5. APPLICANT'S NAME	8. AUTHORIZED AGENT'S NAME AND TITLE (*agent is not required*)
First - Middle - Last -	First - Middle - Last -
Company -	Company -
Company Title -	E-mail Address -
E-mail Address -	
6. APPLICANT'S ADDRESS:	**9. AGENT'S ADDRESS:**
Address-	Address-
City - State - Zip - Country -	City - State - Zip - Country -
7. APPLICANT'S PHONE NOs. with AREA CODE	**10. AGENT'S PHONE NOs. with AREA CODE**
a. Residence b. Business c. Fax d. Mobile	a. Residence b. Business c. Fax d. Mobile

STATEMENT OF AUTHORIZATION

11. I hereby authorize, _____ to act in my behalf as my agent in the processing of this this nationwide permit pre-construction notification and to furnish, upon request, supplemental information in support of this nationwide permit pre-construction notification.

_____ _____

SIGNATURE OF APPLICANT DATE

NAME, LOCATION, AND DESCRIPTION OF PROJECT OR ACTIVITY

12. PROJECT NAME or TITLE (*see instructions*)

NAME, LOCATION, AND DESCRIPTION OF PROJECT OR ACTIVITY	
13. NAME OF WATERBODY, IF KNOWN (*if applicable*)	14. PROPOSED ACTIVITY STREET ADDRESS (*if applicable*)
15. LOCATION OF PROPOSED ACTIVITY (*see instructions*) Latitude °N Longitude °W	City: State: Zip:

16. OTHER LOCATION DESCRIPTIONS, IF KNOWN (*see instructions*)

State Tax Parcel ID | Municipality

Section | Township | Range

17. DIRECTIONS TO THE SITE.

18. IDENTIFY THE SPECIFIC NATIONWIDE PERMIT(S) YOU PROPOSE TO USE:

19. DESCRIPTION OF PROPOSED NATIONWIDE PERMIT ACTIVITY (*see instructions*)

20. DESCRIPTION OF PROPOSED MITIGATION MEASURES (*see instructions*)

21. PURPOSE OF NATIONWIDE PERMIT ACTIVITY (*Describe the reason or purpose of the project, see instructions*)

22. Quantity of Wetlands, Streams, or Other Types of Waters Directly Affected by Proposed Nationwide Permit Activity (*see instructions*)

Acres | Linear Feet | Cubic Yards Dredged or Discharged

Each PCN must include a delineation of wetlands, other special aquatic sites, and other waters, such as lakes and ponds, and perennial, intermittent, and ephemeral streams, on the project site.

23. List any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project on any related activity (*see instructions*)

24. If the proposed activity will result in the loss of greater than 1/10-acre of wetlands and requires pre-construction notification, explain how the compensatory mitigation requirement in paragraph (c) of general condition 23 will be satisfied, or explain why the adverse environmental effects are no more than minimal and why compensatory mitigation should not be required for the proposed activity.

25. Is Any Portion of the Nationwide Permit Activity Already Complete? ☐ Yes ☐ No If Yes, describe the completed work:

26. List the name(s) of any species listed as endangered or threatened under the Endangered Species Act that might be affected by the proposed NWP activity or utilize the designated critical habitat that might be affected by the proposed NWP activity. (*see instructions*)

27. List any historic properties that have the potential to be affected by the proposed NWP activity or include a vicinity map indicating the location of the historic property or properties. (*see instructions*)

28. For a proposed NWP activity that will occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, identify the Wild and Scenic River or the "study river":

29. If the proposed NWP activity also requires permission from the Corps pursuant to 33 U.S.C. 408 because it will alter or temporarily or permanently occupy or use a U.S. Army Corps of Engineers federally authorized civil works project, have you submitted a written request for section 408 permission from the Corps district having jurisdiction over that project? ☐ Yes ☐ No

If "yes", please provide the date your request was submitted to the Corps District:

30. If the terms of the NWP(s) you want to use require additional information to be included in the PCN, please include that information in this space or provide it on an additional sheet of paper marked Block 30. (*see instructions*)

31. Pre-construction notification is hereby made for one or more nationwide permit(s) to authorize the work described in this notification. I certify that this information in this pre-construction notification is complete and accurate. I further certify that I possess the authority to undertake the work described herein or am acting as the duly authorized agent of the applicant.

SIGNATURE OF APPLICANT	DATE	SIGNATURE OF AGENT	DATE

The Pre-Construction Notification must be signed by the person who desires to undertake the proposed activity (applicant) and, if the statement in block 11 has been filled out and signed, the authorized agent.

18 U.S.C. Section 1001 provides that: Whoever, in any manner within the jurisdiction of any department or agency of the United States knowingly and willfully falsifies, conceals, or covers up any trick, scheme, or disguises a material fact or makes any false, fictitious or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false, fictitious or fraudulent statements or entry, shall be fined not more than $10,000 or imprisoned not more than five years or both.

Instructions for Preparing a

Department of the Army

Nationwide Permit (NWP) Pre-Construction Notification (PCN)

Blocks 1 through 4. To be completed by the Corps of Engineers.

Block 5. Applicant' Name. Enter the name and the e-mail address of the responsible party or parties. If the responsible party is an agency, company, corporation, or other organization, indicate the name of the organization and responsible officer and title. If more than one party is associated with the preconstruction notification, please attach a sheet of paper with the necessary information marked Block 5.

Block 6. Address of Applicant. Please provide the full address of the party or parties responsible for the PCN. If more space is needed, attach an extra sheet of paper marked Block 6.

Block 7. Applicant Telephone Number(s). Please provide the telephone number where you can usually be reached during normal business hours.

Blocks 8 through 11. To be completed, if you choose to have an agent.

Block 8. Authorized Agent's Name and Title. Indicate name of individual or agency, designated by you, to represent you in this process. An agent can be an attorney, builder, contractor, engineer, consultant, or any other person or organization. Note: An agent is not required.

Blocks 9 and 10. Agent's Address and Telephone Number. Please provide the complete mailing address of the agent, along with the telephone number where he / she can be reached during normal business hours.

Block 11. Statement of Authorization. To be completed by the applicant, if an agent is to be employed.

Block 12. Proposed Nationwide Permit Activity Name or Title. Please provide a name identifying the proposed NWP activity, e.g., Windward Marina, Rolling Hills Subdivision, or Smith Commercial Center.

Block 13. Name of Waterbody. Please provide the name (if it has a name) of any stream, lake, marsh, or other waterway to be directly impacted by the NWP activity. If it is a minor (no name) stream, identify the waterbody the minor stream enters.

Block 14. Proposed Activity Street Address. If the proposed NWP activity is located at a site having a street address (not a box number), please enter it in Block 14.

Block 15. Location of Proposed Activity. Enter the latitude and longitude of where the proposed NWP activity is located. Indicate whether the project location provided is the center of the project or whether the project location is provided as the latitude and longitude for each of the "corners" of the project area requiring evaluation. If there are multiple sites, please list the latitude and longitude of each site (center or corners) on a separate sheet of paper and mark as Block 15.

Block 16. Other Location Descriptions. If available, provide the Tax Parcel Identification number of the site, Section, Township, and Range of the site (if known), and / or local Municipality where the site is located.

Block 17. Directions to the Site. Provide directions to the site from a known location or landmark. Include highway and street numbers as well as names. Also provide distances from known locations and any other information that would assist in locating the site. You may also provide a description of the location of the proposed NWP activity, such as lot numbers, tract numbers, or you may choose to locate the proposed NWP activity site from a known point (such as the right descending bank of Smith Creek, one mile downstream from the Highway 14 bridge). If a large river or stream, include the river mile of the proposed NWP activity site if known. If there are multiple locations, please indicate directions to each location on a separate sheet of paper and mark as Block 17.

Block 18. Identify the Specific Nationwide Permit(s) You Propose to Use. List the number(s) of the Nationwide Permit(s) you want to use to authorize the proposed activity (e.g., NWP 29).

Block 19. Description of the Proposed Nationwide Permit Activity. Describe the proposed NWP activity,including the direct and indirect adverse environmental effects the activity would cause. The description of the proposed activity should be sufficiently detailed to allow the district engineer to determine that the adverse environmental effects of the activity will be no more than minimal. Identify the materials to be used in construction, as well as the methods by which the work is to be done.

Provide sketches when necessary to show that the proposed NWP activity complies with the terms of the applicable NWP(s). Sketches usually clarify the activity and result in a quicker decision. Sketches should contain sufficient detail to provide an illustrative description of the proposed NWP activity (e.g.,a conceptual plan), but do not need to be detailed engineering plans.

The written descriptions and illustrations are an important part of the application. Please describe, in detail, what you wish to do. If more space is needed, attach an extra sheet of paper marked Block 19.

Block 20. Description of Proposed Mitigation Measures. Describe any proposed mitigation measures intended to reduce the adverse environmental effects caused by the proposed NWP activity. The description of any proposed mitigation measures should be sufficiently detailed to allow the district engineer to determine that the adverse environmental effects of the activity will be no more than minimal and to determine the need for compensatory mitigation or additional mitigation measures.

Block 21. Purpose of Nationwide Permit Activity. Describe the purpose and need for the proposed NWP activity. What will it be used for and why? Also include a brief description of any related activities associated with the proposed project. Provide the approximate dates you plan to begin and complete all work.

Block 22. Quantity of Wetlands, Streams, or Other Types of Waters Directly Affected by the Proposed Nationwide Permit Activity. For discharges of dredged or fill material into waters of the United States, provide the amount of wetlands, streams, or other types of waters filled, flooded, excavated, or drained by the proposed NWP activity. For structures or work in navigable waters of the United States subject to Section 10 of the Rivers and Harbors Act of 1899, provide the amount of navigable waters filled, dredged, occupied by one or more structures (e.g., aids to navigation, mooring buoys) by the proposed NWP activity.

For multiple NWPs, or for separate and distant crossings of waters of the United States authorized by NWPs 12 or 14, attach an extra sheet of paper marked Block 21 to provide the quantities of wetlands, streams, or other types of waters filled, flooded, excavated, or drained (or dredged or occupied by structures, if in waters subject to Section 10 of the Rivers and Harbors Act of 1899) for each NWP. For NWPs 12 and 14, include the amount of wetlands, streams, or other types of waters filled, flooded, excavated, or drained for each separate and distance crossing of waters or wetlands. If more space is needed, attach an extra sheet of paper marked Block 21.

Block 23. Identify Any Other Nationwide Permit(s), Regional General Permit(s), or Individual Permit(s) Used to Authorize Any Part of Proposed Activity or Any Related Activity. List any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity. For linear projects, list other separate and distant crossings of waters and wetlands authorized by NWPs 12 or 14 that do not require PCNs. If more space is needed, attach an extra sheet of paper marked Block 22.

Block 24. Compensatory Mitigation Statement for Losses of Greater Than 1/10-Acre of Wetlands When Pre-Construction Notification is Required. Paragraph (c) of NWP general condition 23 requires compensatory mitigation at a minimum one-for-one replacement ratio will be required for all wetland losses that exceed 1/10-acre and require pre-construction notification, unless the district engineer determines in writing that either some other form of mitigation is more environmentally appropriate or the adverse environmental effects of the proposed NWP activity are no more than minimal without compensatory mitigation, and provides an activity-specific waiver of this requirement. Describe the proposed compensatory mitigation for wetland losses greater than 1/10 acre, or provide an explanation of why the district engineer should not require wetland compensatory mitigation for the proposed NWP activity. If more space is needed, attach an extra sheet of paper marked Block 23.

Block 25. Is Any Portion of the Nationwide Permit Activity Already Complete? Describe any work that has already been completed for the NWP activity.

Block 26. List the Name(s) of Any Species Listed As Endangered or Threatened under the Endangered Species Act that Might be Affected by the Nationwide Permit Activity. If you are not a federal agency, and if any listed species or designated critical habitat might be affected or is in the vicinity of the proposed NWP activity, or if the proposed NWP activity is located in designated critical habitat, list the name(s) of those endangered or threatened species that might be affected by the proposed NWP activity or utilize the designated critical habitat that might be affected by the proposed NWP activity. If you are a Federal agency, and the proposed NWP activity requires a PCN, you must provide documentation demonstrating compliance with Section 7 of the Endangered Species Act.

Block 27. List Any Historic Properties that Have the Potential to be Affected by the Nationwide Permit Activity. If you are not a federal agency, and if any historic properties have the potential to be affected by the proposed NWP activity, list the name(s) of those historic properties that have the potential to be affected by the proposed NWP activity. If you are a Federal agency, and the proposed NWP activity requires a PCN, you must provide documentation demonstrating compliance with Section 106 of the National Historic Preservation Act.

Block 28. List the Wild and Scenic River or Congressionally Designated Study River if the Nationwide Permit Activity Would Occur in such a River. If the proposed NWP activity will occur in a river in the National Wild and Scenic River System or in a river officially designated by Congress as a "study river" under the Wild and Scenic Rivers Act, provide the name of the river. For a list of Wild and Scenic Rivers and study rivers, please visit http://www.rivers.gov/

Block 29. Nationwide Permit Activities that also Require Permission from the Corps Under 33 U.S.C. 408. If the proposed NWP activity also requires permission from the Corps under 33 U.S.C. 408 because it will temporarily or permanently alter, occupy, or use a Corps federal authorized civil works project, indicate whether you have submitted a written request for section 408 permission from the Corps district having jurisdiction over that project.

Block 30. Other Information Required For Nationwide Permit Pre-Construction Notifications. The terms of some of the Nationwide Permits include additional information requirements for preconstruction notifications:

* NWP 3, Maintenance –information regarding the original design capacities and configurations of the outfalls, intakes, small impoundments, and canals.
* NWP 31, Maintenance of Existing Flood Control Facilities –a description of the maintenance baseline and the dredged material disposal site.
* NWP 33, Temporary Construction, Access, and Dewatering –a restoration plan showing how all temporary fills and structures will be removed and the area restored to pre-project conditions.
* NWP 44, Mining Activities –if reclamation is required by other statutes, then a copy of the final reclamation plan must be submitted with the pre-construction notification.
* NWP 45, Repair of Uplands Damaged by Discrete Events –documentation, such as a recent topographic survey or photographs, to justify the extent of the proposed restoration.
* NWP 48, Commercial Shellfish Aquaculture Activities –(1) a map showing the boundaries of the project area, with latitude and longitude coordinates for each corner of the project area; (2) the name(s) of the species that will be cultivated during the period this NWP is in effect; (3) whether canopy predator nets will be used; (4) whether suspended cultivation techniques will be used; and (5) general water depths in the project area (a detailed survey is not required).
* NWP 49, Coal Remining Activities –a document describing how the overall mining plan will result in a net increase in aquatic resource functions to the district engineer and receive written authorization prior to commencing the activity.
* NWP 50, Underground Coal Mining Activities –if reclamation is required by other statutes, then a copy of the reclamation plan must be submitted with the pre-construction notification.

If more space is needed, attach an extra sheet of paper marked Block 29.

Blocks 31 and 32. For bank stabilization activities, we are collecting information on the use of living shorelines in coastal waters and lakes to inform future NWP rulemaking efforts. If the PCN is for a proposed NWP 13 activity, and it is located in coastal waters or a lake, please check the appropriate box in block 31 to indicate whether you considered the use of a living shoreline to protect your property from erosion. If the PCN is for a proposed NWP 13 activity, and it is located in coastal waters or a lake, please check the appropriate box in block 32 to indicate whether there are contractors in your area that construct living shorelines.

Block 33. Signature of Applicant or Agent. The PCN must be signed by the person proposing to undertake the NWP activity, and if applicable, the authorized party (agent) that prepared the PCN. The signature of the person proposing to undertake the NWP activity shall be an affirmation that the party submitting the PCN possesses the requisite property rights to undertake the NWP activity (including compliance with special conditions, mitigation, etc.).

DELINEATION OF WETLANDS, OTHER SPECIAL AQUATIC SITES, AND OTHER WATERS

Each PCN must include a delineation of wetlands, other special aquatic sites, and other waters, such as lakes and ponds, and perennial, intermittent, and ephemeral streams, on the project site. Wetland delineations must be prepared in accordance with the current wetland delineation manual and regional supplement published by the Corps. The permittee may ask the Corps to delineate the special aquatic sites and other waters on the project site, but there may be a delay if the Corps does the delineation, especially if the project site is large or contains many wetlands, other special aquatic sites, and other waters. The 45 day PCN review period will not start until the delineation is submitted or has been completed by the Corps.

DRAWINGS AND ILLUSTRATIONS

General Information.

Three types of illustrations are needed to properly depict the work to be undertaken. These illustrations or drawings are identified as a Vicinity Map, a Plan View or a Typical Cross-Section Map. Identify each illustration with a figure or attachment number. For linear projects (e.g. roads, subsurface utility lines, etc.) gradient drawings should also be included. Please submit one original, or good quality copy, of all drawings on 8½x11 inch plain white paper (electronic media may be substituted). Use the fewest number of sheets necessary for your drawings or illustrations. Each illustration should identify the project, the applicant, and the type of illustration (vicinity map, plan view, or cross-section). While illustrations need not be professional (many small, private project illustrations are prepared by hand), they should be clear, accurate, and contain all necessary information.

ADDITIONAL INFORMATION AND REQUIREMENTS

For proposed NWP activities that involve discharges into waters of the United States, water quality certification from the State, Tribe, or EPA must be obtained or waived (see NWP general condition 25). Some States, Tribes, or EPA have issued water quality certification for one or more NWPs. Please check the appropriate Corps district web site to see if water quality certification has already been issued for the NWP(s) you wish to use. For proposed NWP activities in coastal states, state Coastal Zone Management Act consistency concurrence must be obtained, or a presumption of concurrence must occur (see NWP general condition 26). Some States have issued Coastal Zone Management Act consistency concurrences for one or more NWPs. Please check the appropriate Corps district web site to see if Coastal Zone Management Act consistency concurrence has already been issued for the NWP(s) you wish to use.

US Army Corps of Engineers • Omaha District

Nationwide Permit 12: Utility Line Activities (2021)

Activities required for the construction, maintenance, repair, and removal of oil and natural gas pipelines and associated facilities in waters of the United States, provided the activity does not result in the loss of greater than 1/2-acre of waters of the United States for each single and complete project.

Oil or natural gas pipelines: This NWP authorizes discharges of dredged or fill material into waters of the United States and structures or work in navigable waters for crossings of those waters associated with the construction, maintenance, or repair of oil and natural gas pipelines. There must be no change in pre-construction contours of waters of the United States. An "oil or natural gas pipeline" is defined as any pipe or pipeline for the transportation of any form of oil or natural gas, including products derived from oil or natural gas, such as gasoline, jet fuel, diesel fuel. heating oil, petrochemical feedstocks, waxes, lubricating oils, and asphalt.

Material resulting from trench excavation may be temporarily sidecast into waters of the United States for no more than three months, provided the material is not placed in such a manner that it is dispersed by currents or other forces. The district engineer may extend the period of temporary side casting for no more than a total of 180 days, where appropriate. In wetlands, the top 6 to 12 inches of the trench should normally be backfilled with topsoil from the trench. The trench cannot be constructed or backfilled in such a manner as to drain waters of the United States (*e.g.*, backfilling with extensive gravel layers, creating a french drain effect). Any exposed slopes and stream banks must be stabilized immediately upon completion of the utility line crossing of each waterbody.

Oil or natural gas pipeline substations: This NWP authorizes the construction, maintenance, or expansion of substation facilities (*e.g.*, oil or natural gas or gaseous fuel custody transfer stations, boosting stations, compression stations, metering stations, pressure regulating stations) associated with an oil or natural gas pipeline in non-tidal waters of the United States, provided the activity, in combination with all other activities included in one single and complete project, does not result in the loss of greater than 1/2-acre of waters of the United States. This NWP does not authorize discharges of dredged or fill material into non-tidal wetlands adjacent to tidal waters of the United States to construct, maintain, or expand substation facilities.

Foundations for above-ground oil or natural gas pipelines: This NWP authorizes the construction or maintenance of foundations for above-ground oil or natural gas pipelines in all waters of the United States, provided the foundations are the minimum size necessary.

Access roads: This NWP authorizes the construction of access roads for the construction and maintenance of oil or natural gas pipelines, in non-tidal waters of the United States, provided the activity, in combination with all other activities included in one single and complete project, does not cause the loss of greater than 1/2-acre of

non-tidal waters of the United States. This NWP does not authorize discharges of dredged or fill material into non-tidal wetlands adjacent to tidal waters for access roads. Access roads must be the minimum width necessary (see Note 2, below). Access roads must be constructed so that the length of the road minimizes any adverse effects on waters of the United States and must be as near as possible to pre-construction contours and elevations (*e.g.*, at grade corduroy roads or geotextile/gravel roads). Access roads constructed above pre-construction contours and elevations in waters of the United States must be properly bridged or culverted to maintain surface flows.

This NWP may authorize oil or natural gas pipelines in or affecting navigable waters of the United States even if there is no associated discharge of dredged or fill material (see 33 CFR part 322). Oil or natural gas pipelines routed in, over, or under section 10 waters without a discharge of dredged or fill material may require a section 10 permit.

This NWP authorizes, to the extent that Department of the Army authorization is required, temporary structures, fills, and work necessary for the remediation of inadvertent returns of drilling fluids to waters of the United States through sub-soil fissures or fractures that might occur during horizontal directional drilling activities conducted for the purpose of installing or replacing oil or natural gas pipelines. These remediation activities must be done as soon as practicable, to restore the affected waterbody. District engineers may add special conditions to this NWP to require a remediation plan for addressing inadvertent returns of drilling fluids to waters of the United States during horizontal directional drilling activities conducted for the purpose of installing or replacing oil or natural gas pipelines.

This NWP also authorizes temporary structures, fills, and work, including the use of temporary mats, necessary to conduct the oil or natural gas pipeline activity. Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable, when temporary structures, work, and discharges of dredged or fill material, including cofferdams, are necessary for construction activities, access fills, or dewatering of construction sites. Temporary fills must consist of materials, and be placed in a manner, that will not be eroded by expected high flows. After construction, temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The areas affected by temporary fills must be revegetated, as appropriate.

Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity if: (1) A section 10 permit is required; (2) the discharge will result in the loss of greater than 1/10-acre of waters of the United States; or (3) the proposed oil or natural gas pipeline activity is associated with an overall project that is greater than 250 miles in length and the project purpose is to install new pipeline (vs. conduct repair or maintenance activities) along the majority of the distance of the overall project length. If the proposed oil or gas pipeline is greater than 250 miles in length, the pre-construction notification must include the locations and proposed impacts (in acres or other appropriate unit of measure) for all crossings of waters of the United States that require DA authorization, including those crossings authorized by an

NWP would not otherwise require pre-construction notification. (See general condition 32.) (Authorities: Sections 10 and 404)

Note 1: Where the oil or natural gas pipeline is constructed, installed, or maintained in navigable waters of the United States (*i.e.*, section 10 waters) within the coastal United States, the Great Lakes, and United States territories, a copy of the NWP verification will be sent by the Corps to the National Oceanic and Atmospheric Administration (NOAA), National Ocean Service (NOS), for charting the oil or natural gas pipeline to protect navigation.

Note 2: For oil or natural gas pipeline activities crossing a single waterbody more than one time at separate and distant locations, or multiple waterbodies at separate and distant locations, each crossing is considered a single and complete project for purposes of NWP authorization. Oil or natural gas pipeline activities must comply with 33 CFR 330.6(d).

Note 3: Access roads used for both construction and maintenance may be authorized, provided they meet the terms and conditions of this NWP. Access roads used solely for construction of the oil or natural gas pipeline must be removed upon completion of the work, in accordance with the requirements for temporary fills.

Note 4: Pipes or pipelines used to transport gaseous, liquid, liquescent, or slurry substances over navigable waters of the United States are considered to be bridges and may require a permit from the U.S. Coast Guard pursuant to the General Bridge Act of 1946. However, any discharges of dredged or fill material into waters of the United States associated with such oil or natural gas pipelines will require a section 404 permit (see NWP 15).

Note 5: This NWP authorizes oil or natural gas pipeline maintenance and repair activities that do not qualify for the Clean Water Act section 404(f) exemption for maintenance of currently serviceable fills or fill structures.

Note 6: For NWP 12 activities that require pre-construction notification, the PCN must include any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity, including other separate and distant crossings that require Department of the Army authorization but do not require pre-construction notification (see paragraph (b)(4) of general condition 32). The district engineer will evaluate the PCN in accordance with Section D, "District Engineer's Decision." The district engineer may require mitigation to ensure that the authorized activity results in no more than minimal individual and cumulative adverse environmental effects (see general condition 23).

General Conditions

1. Navigation.

(a) No activity may cause more than a minimal adverse effect on navigation.

(b) Any safety lights and signals prescribed by the U.S. Coast Guard, through regulations or otherwise, must be installed and maintained at the permittee's expense on authorized facilities in navigable waters of the United States.

(c) The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his or her authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.

2. Aquatic Life Movements.

No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water. All permanent and temporary crossings of waterbodies shall be suitably culverted, bridged, or otherwise designed and constructed to maintain low flows to sustain the movement of those aquatic species. If a bottomless culvert cannot be used, then the crossing should be designed and constructed to minimize adverse effects to aquatic life movements.

3. Spawning Areas.

Activities in spawning areas during spawning seasons must be avoided to the maximum extent practicable. Activities that result in the physical destruction (*e.g.,* through excavation, fill, or downstream smothering by substantial turbidity) of an important spawning area are not authorized.

4. Migratory Bird Breeding Areas.

Activities in waters of the United States that serve as breeding areas for migratory birds must be avoided to the maximum extent practicable.

5. Shellfish Beds.

No activity may occur in areas of concentrated shellfish populations, unless the activity is directly related to a shellfish harvesting activity authorized by NWPs 4 and 48, or is a shellfish seeding or habitat restoration activity authorized by NWP 27.

6. Suitable Material.

No activity may use unsuitable material (*e.g.,* trash, debris, car bodies, asphalt, etc.). Material used for construction or discharged must be free from toxic pollutants in toxic amounts (see section 307 of the Clean Water Act).

7. Water Supply Intakes.

No activity may occur in the proximity of a public water supply intake, except where the activity is for the repair or improvement of public water supply intake structures or adjacent bank stabilization.

8. Adverse Effects From Impoundments.

If the activity creates an impoundment of water, adverse effects to the aquatic system due to accelerating the passage of water, and/or restricting its flow must be minimized to the maximum extent practicable.

9. Management of Water Flows.

To the maximum extent practicable, the pre-construction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization, storm water management activities, and temporary and permanent road crossings, except as provided below. The activity must be constructed to withstand expected high flows. The activity must not restrict or impede the passage of normal or high flows, unless the primary purpose of the activity is to impound water or manage high flows. The activity may alter the pre-construction course, condition, capacity, and location of open waters if it benefits the aquatic environment (*e.g.*, stream restoration or relocation activities).

10. Fills Within 100-Year Floodplains.

The activity must comply with applicable FEMA-approved state or local floodplain management requirements.

11. Equipment.

Heavy equipment working in wetlands or mudflats must be placed on mats, or other measures must be taken to minimize soil disturbance.

12. Soil Erosion and Sediment Controls.

Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, must be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform work within waters of the United States during periods of low-flow or no-flow, or during low tides.

13. Removal of Temporary Structures and Fills.

Temporary structures must be removed, to the maximum extent practicable, after their use has been discontinued. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The affected areas must be revegetated, as appropriate.

14. Proper Maintenance.

Any authorized structure or fill shall be properly maintained, including maintenance to ensure public safety and compliance with applicable NWP general conditions, as well as any activity-specific conditions added by the district engineer to an NWP authorization.

15. Single and Complete Project.

The activity must be a single and complete project. The same NWP cannot be used more than once for the same single and complete project.

16. Wild and Scenic Rivers.

(a) No NWP activity may occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, unless the appropriate Federal agency with direct management responsibility for such river, has determined in writing that the proposed activity will not adversely affect the Wild and Scenic River designation or study status.

(b) If a proposed NWP activity will occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, the permittee must submit a pre-construction notification (see general condition 32). The district engineer will coordinate the PCN with the Federal agency with direct management responsibility for that river. Permittees shall not begin the NWP activity until notified by the district engineer that the Federal agency with direct management responsibility for that river has determined in writing that the proposed NWP activity will not adversely affect the Wild and Scenic River designation or study status.

(c) Information on Wild and Scenic Rivers may be obtained from the appropriate Federal land management agency responsible for the designated Wild and Scenic River or study river (*e.g.,* National Park Service, U.S. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service). Information on these rivers is also available at: *http://www.rivers.gov/*.

17. Tribal Rights.

No activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.

18. Endangered Species.

(a) No activity is authorized under any NWP which is likely to directly or indirectly jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will directly or indirectly destroy or adversely modify designated critical habitat or critical habitat proposed for such designation. No activity is authorized under any NWP which "may affect" a listed species or critical habitat, unless ESA section 7 consultation addressing the consequences of the proposed activity on listed species or

critical habitat has been completed. See 50 CFR 402.02 for the definition of "effects of the action" for the purposes of ESA section 7 consultation, as well as 50 CFR 402.17, which provides further explanation under ESA section 7 regarding "activities that are reasonably certain to occur" and "consequences caused by the proposed action."

(b) Federal agencies should follow their own procedures for complying with the requirements of the ESA (see 33 CFR 330.4(f)(1)). If pre-construction notification is required for the proposed activity, the Federal permittee must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will verify that the appropriate documentation has been submitted. If the appropriate documentation has not been submitted, additional ESA section 7 consultation may be necessary for the activity and the respective federal agency would be responsible for fulfilling its obligation under section 7 of the ESA.

(c) Non-federal permittees must submit a pre-construction notification to the district engineer if any listed species (or species proposed for listing) or designated critical habitat (or critical habitat proposed such designation) might be affected or is in the vicinity of the activity, or if the activity is located in designated critical habitat or critical habitat proposed for such designation, and shall not begin work on the activity until notified by the district engineer that the requirements of the ESA have been satisfied and that the activity is authorized. For activities that might affect Federally-listed endangered or threatened species (or species proposed for listing) or designated critical habitat (or critical habitat proposed for such designation), the pre-construction notification must include the name(s) of the endangered or threatened species (or species proposed for listing) that might be affected by the proposed activity or that utilize the designated critical habitat (or critical habitat proposed for such designation) that might be affected by the proposed activity. The district engineer will determine whether the proposed activity "may affect" or will have "no effect" to listed species and designated critical habitat and will notify the non-Federal applicant of the Corps' determination within 45 days of receipt of a complete pre-construction notification. For activities where the non-Federal applicant has identified listed species (or species proposed for listing) or designated critical habitat (or critical habitat proposed for such designation) that might be affected or is in the vicinity of the activity, and has so notified the Corps, the applicant shall not begin work until the Corps has provided notification that the proposed activity will have "no effect" on listed species (or species proposed for listing or designated critical habitat (or critical habitat proposed for such designation), or until ESA section 7 consultation or conference has been completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps.

(d) As a result of formal or informal consultation or conference with the FWS or NMFS the district engineer may add species-specific permit conditions to the NWPs.

(e) Authorization of an activity by an NWP does not authorize the "take" of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (*e.g.*, an ESA Section 10 Permit, a Biological Opinion with

"incidental take" provisions, etc.) from the FWS or the NMFS, the Endangered Species Act prohibits any person subject to the jurisdiction of the United States to take a listed species, where "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. The word "harm" in the definition of "take" means an act which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering.

(f) If the non-federal permittee has a valid ESA section 10(a)(1)(B) incidental take permit with an approved Habitat Conservation Plan for a project or a group of projects that includes the proposed NWP activity, the non-federal applicant should provide a copy of that ESA section 10(a)(1)(B) permit with the PCN required by paragraph (c) of this general condition. The district engineer will coordinate with the agency that issued the ESA section 10(a)(1)(B) permit to determine whether the proposed NWP activity and the associated incidental take were considered in the internal ESA section 7 consultation conducted for the ESA section 10(a)(1)(B) permit. If that coordination results in concurrence from the agency that the proposed NWP activity and the associated incidental take were considered in the internal ESA section 7 consultation for the ESA section 10(a)(1)(B) permit, the district engineer does not need to conduct a separate ESA section 7 consultation for the proposed NWP activity. The district engineer will notify the non-federal applicant within 45 days of receipt of a complete pre-construction notification whether the ESA section 10(a)(1)(B) permit covers the proposed NWP activity or whether additional ESA section 7 consultation is required.

(g) Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the FWS and NMFS or their world wide web pages at *http://www.fws.gov/* or *http://www.fws.gov/ipac/* and *http://www.nmfs.noaa.gov/pr/species/esa/* respectively.

19. Migratory Birds and Bald and Golden Eagles.

The permittee is responsible for ensuring that an action authorized by an NWP complies with the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act. The permittee is responsible for contacting the appropriate local office of the U.S. Fish and Wildlife Service to determine what measures, if any, are necessary or appropriate to reduce adverse effects to migratory birds or eagles, including whether "incidental take" permits are necessary and available under the Migratory Bird Treaty Act or Bald and Golden Eagle Protection Act for a particular activity.

20. Historic Properties.

(a) No activity is authorized under any NWP which may have the potential to cause effects to properties listed, or eligible for listing, in the National Register of Historic Places until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been satisfied.

(b) Federal permittees should follow their own procedures for complying with the requirements of section 106 of the National Historic Preservation Act (see 33 CFR 330.4(g)(1)). If pre-construction notification is required for the proposed NWP activity, the Federal permittee must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will verify that the appropriate documentation has been submitted. If the appropriate documentation is not submitted, then additional consultation under section 106 may be necessary. The respective federal agency is responsible for fulfilling its obligation to comply with section 106.

(c) Non-federal permittees must submit a pre-construction notification to the district engineer if the NWP activity might have the potential to cause effects to any historic properties listed on, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places, including previously unidentified properties. For such activities, the pre-construction notification must state which historic properties might have the potential to be affected by the proposed NWP activity or include a vicinity map indicating the location of the historic properties or the potential for the presence of historic properties. Assistance regarding information on the location of, or potential for, the presence of historic properties can be sought from the State Historic Preservation Officer, Tribal Historic Preservation Officer, or designated tribal representative, as appropriate, and the National Register of Historic Places (see 33 CFR 330.4(g)). When reviewing pre-construction notifications, district engineers will comply with the current procedures for addressing the requirements of section 106 of the National Historic Preservation Act. The district engineer shall make a reasonable and good faith effort to carry out appropriate identification efforts commensurate with potential impacts, which may include background research, consultation, oral history interviews, sample field investigation, and/or field survey. Based on the information submitted in the PCN and these identification efforts, the district engineer shall determine whether the proposed NWP activity has the potential to cause effects on the historic properties. Section 106 consultation is not required when the district engineer determines that the activity does not have the potential to cause effects on historic properties (see 36 CFR 800.3(a)). Section 106 consultation is required when the district engineer determines that the activity has the potential to cause effects on historic properties. The district engineer will conduct consultation with consulting parties identified under 36 CFR 800.2(c) when he or she makes any of the following effect determinations for the purposes of section 106 of the NHPA: No historic properties affected, no adverse effect, or adverse effect.

(d) Where the non-Federal applicant has identified historic properties on which the proposed NWP activity might have the potential to cause effects and has so notified the Corps, the non-Federal applicant shall not begin the activity until notified by the district engineer either that the activity has no potential to cause effects to historic properties or that NHPA section 106 consultation has been completed. For non-federal permittees, the district engineer will notify the prospective permittee within 45 days of receipt of a complete pre-construction notification whether NHPA section 106 consultation is required. If NHPA section 106 consultation is required, the district engineer will notify

the non-Federal applicant that he or she cannot begin the activity until section 106 consultation is completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps.

(e) Prospective permittees should be aware that section 110k of the NHPA (54 U.S.C. 306113) prevents the Corps from granting a permit or other assistance to an applicant who, with intent to avoid the requirements of section 106 of the NHPA, has intentionally significantly adversely affected a historic property to which the permit would relate, or having legal power to prevent it, allowed such significant adverse effect to occur, unless the Corps, after consultation with the Advisory Council on Historic Preservation (ACHP), determines that circumstances justify granting such assistance despite the adverse effect created or permitted by the applicant. If circumstances justify granting the assistance, the Corps is required to notify the ACHP and provide documentation specifying the circumstances, the degree of damage to the integrity of any historic properties affected, and proposed mitigation. This documentation must include any views obtained from the applicant, SHPO/THPO, appropriate Indian tribes if the undertaking occurs on or affects historic properties on tribal lands or affects properties of interest to those tribes, and other parties known to have a legitimate interest in the impacts to the permitted activity on historic properties.

21. Discovery of Previously Unknown Remains and Artifacts.

Permittees that discover any previously unknown historic, cultural or archeological remains and artifacts while accomplishing the activity authorized by an NWP, they must immediately notify the district engineer of what they have found, and to the maximum extent practicable, avoid construction activities that may affect the remains and artifacts until the required coordination has been completed. The district engineer will initiate the Federal, Tribal, and state coordination required to determine if the items or remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

22. Designated Critical Resource Waters.

Critical resource waters include, NOAA-managed marine sanctuaries and marine monuments, and National Estuarine Research Reserves. The district engineer may designate, after notice and opportunity for public comment, additional waters officially designated by a state as having particular environmental or ecological significance, such as outstanding national resource waters or state natural heritage sites. The district engineer may also designate additional critical resource waters after notice and opportunity for public comment.

(a) Discharges of dredged or fill material into waters of the United States are not authorized by NWPs 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, 44, 49, 50, 51, 52, 57 and 58 for any activity within, or directly affecting, critical resource waters, including wetlands adjacent to such waters.

(b) For NWPs 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, 38, and 54, notification is required in accordance with general condition 32, for any activity

proposed by permittees in the designated critical resource waters including wetlands adjacent to those waters. The district engineer may authorize activities under these NWPs only after she or he determines that the impacts to the critical resource waters will be no more than minimal.

23. Mitigation.

The district engineer will consider the following factors when determining appropriate and practicable mitigation necessary to ensure that the individual and cumulative adverse environmental effects are no more than minimal:

(a) The activity must be designed and constructed to avoid and minimize adverse effects, both temporary and permanent, to waters of the United States to the maximum extent practicable at the project site (*i.e.*, on site).

(b) Mitigation in all its forms (avoiding, minimizing, rectifying, reducing, or compensating for resource losses) will be required to the extent necessary to ensure that the individual and cumulative adverse environmental effects are no more than minimal.

(c) Compensatory mitigation at a minimum one-for-one ratio will be required for all wetland losses that exceed 1/10-acre and require pre-construction notification, unless the district engineer determines in writing that either some other form of mitigation would be more environmentally appropriate or the adverse environmental effects of the proposed activity are no more than minimal, and provides an activity-specific waiver of this requirement. For wetland losses of 1/10-acre or less that require pre-construction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in only minimal adverse environmental effects.

(d) Compensatory mitigation at a minimum one-for-one ratio will be required for all losses of stream bed that exceed 3/100-acre and require pre-construction notification, unless the district engineer determines in writing that either some other form of mitigation would be more environmentally appropriate or the adverse environmental effects of the proposed activity are no more than minimal, and provides an activity-specific waiver of this requirement. This compensatory mitigation requirement may be satisfied through the restoration or enhancement of riparian areas next to streams in accordance with paragraph (e) of this general condition. For losses of stream bed of 3/100-acre or less that require pre-construction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in only minimal adverse environmental effects. Compensatory mitigation for losses of streams should be provided, if practicable, through stream rehabilitation, enhancement, or preservation, since streams are difficult-to-replace resources (see 33 CFR 332.3(e)(3)).

(e) Compensatory mitigation plans for NWP activities in or near streams or other open waters will normally include a requirement for the restoration or enhancement,

maintenance, and legal protection (*e.g.,* conservation easements) of riparian areas next to open waters. In some cases, the restoration or maintenance/protection of riparian areas may be the only compensatory mitigation required. If restoring riparian areas involves planting vegetation, only native species should be planted. The width of the required riparian area will address documented water quality or aquatic habitat loss concerns. Normally, the riparian area will be 25 to 50 feet wide on each side of the stream, but the district engineer may require slightly wider riparian areas to address documented water quality or habitat loss concerns. If it is not possible to restore or maintain/protect a riparian area on both sides of a stream, or if the waterbody is a lake or coastal waters, then restoring or maintaining/protecting a riparian area along a single bank or shoreline may be sufficient. Where both wetlands and open waters exist on the project site, the district engineer will determine the appropriate compensatory mitigation (*e.g.,* riparian areas and/or wetlands compensation) based on what is best for the aquatic environment on a watershed basis. In cases where riparian areas are determined to be the most appropriate form of minimization or compensatory mitigation, the district engineer may waive or reduce the requirement to provide wetland compensatory mitigation for wetland losses.

(f) Compensatory mitigation projects provided to offset losses of aquatic resources must comply with the applicable provisions of 33 CFR part 332.

(1) The prospective permittee is responsible for proposing an appropriate compensatory mitigation option if compensatory mitigation is necessary to ensure that the activity results in no more than minimal adverse environmental effects. For the NWPs, the preferred mechanism for providing compensatory mitigation is mitigation bank credits or in-lieu fee program credits (see 33 CFR 332.3(b)(2) and (3)). However, if an appropriate number and type of mitigation bank or in-lieu credits are not available at the time the PCN is submitted to the district engineer, the district engineer may approve the use of permittee-responsible mitigation.

(2) The amount of compensatory mitigation required by the district engineer must be sufficient to ensure that the authorized activity results in no more than minimal individual and cumulative adverse environmental effects (see 33 CFR 330.1(e)(3)). (See also 33 CFR 332.3(f).)

(3) Since the likelihood of success is greater and the impacts to potentially valuable uplands are reduced, aquatic resource restoration should be the first compensatory mitigation option considered for permittee-responsible mitigation.

(4) If permittee-responsible mitigation is the proposed option, the prospective permittee is responsible for submitting a mitigation plan. A conceptual or detailed mitigation plan may be used by the district engineer to make the decision on the NWP verification request, but a final mitigation plan that addresses the applicable requirements of 33 CFR 332.4(c)(2) through (14) must be approved by the district engineer before the permittee begins work in waters of the United States, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory

mitigation (see 33 CFR 332.3(k)(3)). If permittee-responsible mitigation is the proposed option, and the proposed compensatory mitigation site is located on land in which another federal agency holds an easement, the district engineer will coordinate with that federal agency to determine if proposed compensatory mitigation project is compatible with the terms of the easement.

(5) If mitigation bank or in-lieu fee program credits are the proposed option, the mitigation plan needs to address only the baseline conditions at the impact site and the number of credits to be provided (see 33 CFR 332.4(c)(1)(ii)).

(6) Compensatory mitigation requirements (*e.g.*, resource type and amount to be provided as compensatory mitigation, site protection, ecological performance standards, monitoring requirements) may be addressed through conditions added to the NWP authorization, instead of components of a compensatory mitigation plan (see 33 CFR 332.4(c)(1)(ii)).

(g) Compensatory mitigation will not be used to increase the acreage losses allowed by the acreage limits of the NWPs. For example, if an NWP has an acreage limit of 1/2-acre, it cannot be used to authorize any NWP activity resulting in the loss of greater than 1/2-acre of waters of the United States, even if compensatory mitigation is provided that replaces or restores some of the lost waters. However, compensatory mitigation can and should be used, as necessary, to ensure that an NWP activity already meeting the established acreage limits also satisfies the no more than minimal impact requirement for the NWPs.

(h) Permittees may propose the use of mitigation banks, in-lieu fee programs, or permittee-responsible mitigation. When developing a compensatory mitigation proposal, the permittee must consider appropriate and practicable options consistent with the framework at 33 CFR 332.3(b). For activities resulting in the loss of marine or estuarine resources, permittee-responsible mitigation may be environmentally preferable if there are no mitigation banks or in-lieu fee programs in the area that have marine or estuarine credits available for sale or transfer to the permittee. For permittee-responsible mitigation, the special conditions of the NWP verification must clearly indicate the party or parties responsible for the implementation and performance of the compensatory mitigation project, and, if required, its long-term management.

(i) Where certain functions and services of waters of the United States are permanently adversely affected by a regulated activity, such as discharges of dredged or fill material into waters of the United States that will convert a forested or scrub-shrub wetland to a herbaceous wetland in a permanently maintained utility line right-of-way, mitigation may be required to reduce the adverse environmental effects of the activity to the no more than minimal level.

24. Safety of Impoundment Structures.

To ensure that all impoundment structures are safely designed, the district engineer may require non-Federal applicants to demonstrate that the structures comply with

established state or federal, dam safety criteria or have been designed by qualified persons. The district engineer may also require documentation that the design has been independently reviewed by similarly qualified persons, and appropriate modifications made to ensure safety.

25. Water Quality.

(a) Where the certifying authority (state, authorized tribe, or EPA, as appropriate) has not previously certified compliance of an NWP with CWA section 401, a CWA section 401 water quality certification for the proposed discharge must be obtained or waived (see 33 CFR 330.4(c)). If the permittee cannot comply with all of the conditions of a water quality certification previously issued by certifying authority for the issuance of the NWP, then the permittee must obtain a water quality certification or waiver for the proposed discharge in order for the activity to be authorized by an NWP.

(b) If the NWP activity requires pre-construction notification and the certifying authority has not previously certified compliance of an NWP with CWA section 401, the proposed discharge is not authorized by an NWP until water quality certification is obtained or waived. If the certifying authority issues a water quality certification for the proposed discharge, the permittee must submit a copy of the certification to the district engineer. The discharge is not authorized by an NWP until the district engineer has notified the permittee that the water quality certification requirement has been satisfied by the issuance of a water quality certification or a waiver.

(c) The district engineer or certifying authority may require additional water quality management measures to ensure that the authorized activity does not result in more than minimal degradation of water quality.

26. Coastal Zone Management.

In coastal states where an NWP has not previously received a state coastal zone management consistency concurrence, an individual state coastal zone management consistency concurrence must be obtained, or a presumption of concurrence must occur (see 33 CFR 330.4(d)). If the permittee cannot comply with all of the conditions of a coastal zone management consistency concurrence previously issued by the state, then the permittee must obtain an individual coastal zone management consistency concurrence or presumption of concurrence in order for the activity to be authorized by an NWP. The district engineer or a state may require additional measures to ensure that the authorized activity is consistent with state coastal zone management requirements.

27. Regional and Case-By-Case Conditions.

The activity must comply with any regional conditions that may have been added by the Division Engineer (see 33 CFR 330.4(e)) and with any case specific conditions added by the Corps or by the state, Indian Tribe, or U.S. EPA in its CWA section 401 Water Quality Certification, or by the state in its Coastal Zone Management Act consistency determination.

28. Use of Multiple Nationwide Permits.

The use of more than one NWP for a single and complete project is authorized, subject to the following restrictions:

(a) If only one of the NWPs used to authorize the single and complete project has a specified acreage limit, the acreage loss of waters of the United States cannot exceed the acreage limit of the NWP with the highest specified acreage limit. For example, if a road crossing over tidal waters is constructed under NWP 14, with associated bank stabilization authorized by NWP 13, the maximum acreage loss of waters of the United States for the total project cannot exceed 1/3-acre.

(b) If one or more of the NWPs used to authorize the single and complete project has specified acreage limits, the acreage loss of waters of the United States authorized by those NWPs cannot exceed their respective specified acreage limits. For example, if a commercial development is constructed under NWP 39, and the single and complete project includes the filling of an upland ditch authorized by NWP 46, the maximum acreage loss of waters of the United States for the commercial development under NWP 39 cannot exceed 1/2-acre, and the total acreage loss of waters of United States due to the NWP 39 and 46 activities cannot exceed 1 acre.

29. Transfer of Nationwide Permit Verifications.

If the permittee sells the property associated with a nationwide permit verification, the permittee may transfer the nationwide permit verification to the new owner by submitting a letter to the appropriate Corps district office to validate the transfer. A copy of the nationwide permit verification must be attached to the letter, and the letter must contain the following statement and signature:

"When the structures or work authorized by this nationwide permit are still in existence at the time the property is transferred, the terms and conditions of this nationwide permit, including any special conditions, will continue to be binding on the new owner(s) of the property. To validate the transfer of this nationwide permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below."

(Transferee)

(Date)

30. Compliance Certification.

Each permittee who receives an NWP verification letter from the Corps must provide a signed certification documenting completion of the authorized activity and implementation of any required compensatory mitigation. The success of any required permittee-responsible mitigation, including the achievement of ecological performance standards, will be addressed separately by the district engineer. The Corps will provide the permittee the certification document with the NWP verification letter. The certification document will include:

(a) A statement that the authorized activity was done in accordance with the NWP authorization, including any general, regional, or activity-specific conditions;

(b) A statement that the implementation of any required compensatory mitigation was completed in accordance with the permit conditions. If credits from a mitigation bank or in-lieu fee program are used to satisfy the compensatory mitigation requirements, the certification must include the documentation required by 33 CFR 332.3(l)(3) to confirm that the permittee secured the appropriate number and resource type of credits; and

(c) The signature of the permittee certifying the completion of the activity and mitigation.

The completed certification document must be submitted to the district engineer within 30 days of completion of the authorized activity or the implementation of any required compensatory mitigation, whichever occurs later.

31. Activities Affecting Structures or Works Built by the United States.

If an NWP activity also requires review by, or permission from, the Corps pursuant to 33 U.S.C. 408 because it will alter or temporarily or permanently occupy or use a U.S. Army Corps of Engineers (USACE) federally authorized Civil Works project (a "USACE project"), the prospective permittee must submit a pre-construction notification. See paragraph (b)(10) of general condition 32. An activity that requires section 408 permission and/or review is not authorized by an NWP until the appropriate Corps office issues the section 408 permission or completes its review to alter, occupy, or use the USACE project, and the district engineer issues a written NWP verification.

32. Pre-Construction Notification.

(a) *Timing.* Where required by the terms of the NWP, the prospective permittee must notify the district engineer by submitting a pre-construction notification (PCN) as early as possible. The district engineer must determine if the PCN is complete within 30 calendar days of the date of receipt and, if the PCN is determined to be incomplete, notify the prospective permittee within that 30 day period to request the additional information necessary to make the PCN complete. The request must specify the information needed to make the PCN complete. As a general rule, district engineers will request additional information necessary to make the PCN complete only once. However, if the prospective permittee does not provide all of the requested information, then the district engineer will notify the prospective permittee that the PCN is still incomplete and the PCN review process will not commence until all of the requested information has been received by the district engineer. The prospective permittee shall not begin the activity until either:

(1) He or she is notified in writing by the district engineer that the activity may proceed under the NWP with any special conditions imposed by the district or division engineer; or

(2) 45 calendar days have passed from the district engineer's receipt of the complete PCN and the prospective permittee has not received written notice from the district or division engineer. However, if the permittee was required to notify the Corps pursuant to general condition 18 that listed species or critical habitat might be affected or are in the vicinity of the activity, or to notify the Corps pursuant to general condition 20 that the activity might have the potential to cause effects to historic properties, the permittee cannot begin the activity until receiving written notification from the Corps that there is "no effect" on listed species or "no potential to cause effects" on historic properties, or that any consultation required under Section 7 of the Endangered Species Act (see 33 CFR 330.4(f)) and/or section 106 of the National Historic Preservation Act (see 33 CFR 330.4(g)) has been completed. If the proposed activity requires a written waiver to exceed specified limits of an NWP, the permittee may not begin the activity until the district engineer issues the waiver. If the district or division engineer notifies the permittee in writing that an individual permit is required within 45 calendar days of receipt of a complete PCN, the permittee cannot begin the activity until an individual permit has been obtained. Subsequently, the permittee's right to proceed under the NWP may be modified, suspended, or revoked only in accordance with the procedure set forth in 33 CFR 330.5(d)(2).

(b) *Contents of Pre-Construction Notification:* The PCN must be in writing and include the following information:

(1) Name, address and telephone numbers of the prospective permittee;

(2) Location of the proposed activity;

(3) Identify the specific NWP or NWP(s) the prospective permittee wants to use to authorize the proposed activity;

(4) (i) A description of the proposed activity; the activity's purpose; direct and indirect adverse environmental effects the activity would cause, including the anticipated amount of loss of wetlands, other special aquatic sites, and other waters expected to result from the NWP activity, in acres, linear feet, or other appropriate unit of measure; a description of any proposed mitigation measures intended to reduce the adverse environmental effects caused by the proposed activity; and any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity, including other separate and distant crossings for linear projects that require Department of the Army authorization but do not require pre-construction notification. The description of the proposed activity and any proposed mitigation measures should be sufficiently detailed to allow the district engineer to determine that the adverse environmental effects of the activity will be no more than minimal and to determine the need for compensatory mitigation or other mitigation measures.

(ii) For linear projects where one or more single and complete crossings require pre-construction notification, the PCN must include the quantity of anticipated losses of wetlands, other special aquatic sites, and other waters for each single and complete

crossing of those wetlands, other special aquatic sites, and other waters (including those single and complete crossings authorized by an NWP but do not require PCNs). This information will be used by the district engineer to evaluate the cumulative adverse environmental effects of the proposed linear project, and does not change those non-PCN NWP activities into NWP PCNs.

(iii) Sketches should be provided when necessary to show that the activity complies with the terms of the NWP. (Sketches usually clarify the activity and when provided results in a quicker decision. Sketches should contain sufficient detail to provide an illustrative description of the proposed activity (*e.g.*, a conceptual plan), but do not need to be detailed engineering plans);

(5) The PCN must include a delineation of wetlands, other special aquatic sites, and other waters, such as lakes and ponds, and perennial and intermittent streams, on the project site. Wetland delineations must be prepared in accordance with the current method required by the Corps. The permittee may ask the Corps to delineate the special aquatic sites and other waters on the project site, but there may be a delay if the Corps does the delineation, especially if the project site is large or contains many wetlands, other special aquatic sites, and other waters. Furthermore, the 45-day period will not start until the delineation has been submitted to or completed by the Corps, as appropriate;

(6) If the proposed activity will result in the loss of greater than 1/10-acre of wetlands or 3/100-acre of stream bed and a PCN is required, the prospective permittee must submit a statement describing how the mitigation requirement will be satisfied, or explaining why the adverse environmental effects are no more than minimal and why compensatory mitigation should not be required. As an alternative, the prospective permittee may submit a conceptual or detailed mitigation plan.

(7) For non-federal permittees, if any listed species (or species proposed for listing) or designated critical habitat (or critical habitat proposed for such designation) might be affected or is in the vicinity of the activity, or if the activity is located in designated critical habitat (or critical habitat proposed for such designation), the PCN must include the name(s) of those endangered or threatened species (or species proposed for listing) that might be affected by the proposed activity or utilize the designated critical habitat (or critical habitat proposed for such designation) that might be affected by the proposed activity. For NWP activities that require pre-construction notification, Federal permittees must provide documentation demonstrating compliance with the Endangered Species Act;

(8) For non-federal permittees, if the NWP activity might have the potential to cause effects to a historic property listed on, determined to be eligible for listing on, or potentially eligible for listing on, the National Register of Historic Places, the PCN must state which historic property might have the potential to be affected by the proposed activity or include a vicinity map indicating the location of the historic property. For NWP activities that require pre-construction notification, Federal permittees must provide

documentation demonstrating compliance with section 106 of the National Historic Preservation Act;

(9) For an activity that will occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, the PCN must identify the Wild and Scenic River or the "study river" (see general condition 16); and

(10) For an NWP activity that requires permission from, or review by, the Corps pursuant to 33 U.S.C. 408 because it will alter or temporarily or permanently occupy or use a U.S. Army Corps of Engineers federally authorized civil works project, the pre-construction notification must include a statement confirming that the project proponent has submitted a written request for section 408 permission from, or review by, the Corps office having jurisdiction over that USACE project.

(c) *Form of Pre-Construction Notification:* The nationwide permit pre-construction notification form (Form ENG 6082) should be used for NWP PCNs. A letter containing the required information may also be used. Applicants may provide electronic files of PCNs and supporting materials if the district engineer has established tools and procedures for electronic submittals.

(d) *Agency Coordination:* (1) The district engineer will consider any comments from Federal and state agencies concerning the proposed activity's compliance with the terms and conditions of the NWPs and the need for mitigation to reduce the activity's adverse environmental effects so that they are no more than minimal.

(2) Agency coordination is required for: (i) All NWP activities that require pre-construction notification and result in the loss of greater than 1/2-acre of waters of the United States; (ii) NWP 13 activities in excess of 500 linear feet, fills greater than one cubic yard per running foot, or involve discharges of dredged or fill material into special aquatic sites; and (iii) NWP 54 activities in excess of 500 linear feet, or that extend into the waterbody more than 30 feet from the mean low water line in tidal waters or the ordinary high water mark in the Great Lakes.

(3) When agency coordination is required, the district engineer will immediately provide (*e.g.,* via email, facsimile transmission, overnight mail, or other expeditious manner) a copy of the complete PCN to the appropriate Federal or state offices (FWS, state natural resource or water quality agency, EPA, and, if appropriate, the NMFS). With the exception of NWP 37, these agencies will have 10 calendar days from the date the material is transmitted to notify the district engineer via telephone, facsimile transmission, or email that they intend to provide substantive, site-specific comments. The comments must explain why the agency believes the adverse environmental effects will be more than minimal. If so contacted by an agency, the district engineer will wait an additional 15 calendar days before making a decision on the pre-construction notification. The district engineer will fully consider agency comments received within the specified time frame concerning the proposed activity's compliance with the terms

and conditions of the NWPs, including the need for mitigation to ensure that the net adverse environmental effects of the proposed activity are no more than minimal. The district engineer will provide no response to the resource agency, except as provided below. The district engineer will indicate in the administrative record associated with each pre-construction notification that the resource agencies' concerns were considered. For NWP 37, the emergency watershed protection and rehabilitation activity may proceed immediately in cases where there is an unacceptable hazard to life or a significant loss of property or economic hardship will occur. The district engineer will consider any comments received to decide whether the NWP 37 authorization should be modified, suspended, or revoked in accordance with the procedures at 33 CFR 330.5.

(4) In cases of where the prospective permittee is not a Federal agency, the district engineer will provide a response to NMFS within 30 calendar days of receipt of any Essential Fish Habitat conservation recommendations, as required by section 305(b)(4)(B) of the Magnuson-Stevens Fishery Conservation and Management Act.

(5) Applicants are encouraged to provide the Corps with either electronic files or multiple copies of pre-construction notifications to expedite agency coordination.

District Engineer's Decision

1. In reviewing the PCN for the proposed activity, the district engineer will determine whether the activity authorized by the NWP will result in more than minimal individual or cumulative adverse environmental effects or may be contrary to the public interest. If a project proponent requests authorization by a specific NWP, the district engineer should issue the NWP verification for that activity if it meets the terms and conditions of that NWP, unless he or she determines, after considering mitigation, that the proposed activity will result in more than minimal individual and cumulative adverse effects on the aquatic environment and other aspects of the public interest and exercises discretionary authority to require an individual permit for the proposed activity. For a linear project, this determination will include an evaluation of the single and complete crossings of waters of the United States that require PCNs to determine whether they individually satisfy the terms and conditions of the NWP(s), as well as the cumulative effects caused by all of the crossings of waters of the United States authorized by an NWP. If an applicant requests a waiver of an applicable limit, as provided for in NWPs 13, 36, or 54, the district engineer will only grant the waiver upon a written determination that the NWP activity will result in only minimal individual and cumulative adverse environmental effects.

2. When making minimal adverse environmental effects determinations the district engineer will consider the direct and indirect effects caused by the NWP activity. He or she will also consider the cumulative adverse environmental effects caused by activities authorized by an NWP and whether those cumulative adverse environmental effects are no more than minimal. The district engineer will also consider site specific factors, such as the environmental setting in the vicinity of the NWP activity, the type of resource that

will be affected by the NWP activity, the functions provided by the aquatic resources that will be affected by the NWP activity, the degree or magnitude to which the aquatic resources perform those functions, the extent that aquatic resource functions will be lost as a result of the NWP activity (*e.g.,* partial or complete loss), the duration of the adverse effects (temporary or permanent), the importance of the aquatic resource functions to the region (*e.g.,* watershed or ecoregion), and mitigation required by the district engineer. If an appropriate functional or condition assessment method is available and practicable to use, that assessment method may be used by the district engineer to assist in the minimal adverse environmental effects determination. The district engineer may add case-specific special conditions to the NWP authorization to address site-specific environmental concerns.

3. If the proposed activity requires a PCN and will result in a loss of greater than 1/10-acre of wetlands or 3/100-acre of stream bed, the prospective permittee should submit a mitigation proposal with the PCN. Applicants may also propose compensatory mitigation for NWP activities with smaller impacts, or for impacts to other types of waters. The district engineer will consider any proposed compensatory mitigation or other mitigation measures the applicant has included in the proposal in determining whether the net adverse environmental effects of the proposed activity are no more than minimal. The compensatory mitigation proposal may be either conceptual or detailed. If the district engineer determines that the activity complies with the terms and conditions of the NWP and that the adverse environmental effects are no more than minimal, after considering mitigation, the district engineer will notify the permittee and include any activity-specific conditions in the NWP verification the district engineer deems necessary. Conditions for compensatory mitigation requirements must comply with the appropriate provisions at 33 CFR 332.3(k). The district engineer must approve the final mitigation plan before the permittee commences work in waters of the United States, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation. If the prospective permittee elects to submit a compensatory mitigation plan with the PCN, the district engineer will expeditiously review the proposed compensatory mitigation plan. The district engineer must review the proposed compensatory mitigation plan within 45 calendar days of receiving a complete PCN and determine whether the proposed mitigation would ensure that the NWP activity results in no more than minimal adverse environmental effects. If the net adverse environmental effects of the NWP activity (after consideration of the mitigation proposal) are determined by the district engineer to be no more than minimal, the district engineer will provide a timely written response to the applicant. The response will state that the NWP activity can proceed under the terms and conditions of the NWP, including any activity-specific conditions added to the NWP authorization by the district engineer.

4. If the district engineer determines that the adverse environmental effects of the proposed activity are more than minimal, then the district engineer will notify the applicant either: (a) That the activity does not qualify for authorization under the NWP and instruct the applicant on the procedures to seek authorization under an individual permit; (b) that the activity is authorized under the NWP subject to the applicant's

submission of a mitigation plan that would reduce the adverse environmental effects so that they are no more than minimal; or (c) that the activity is authorized under the NWP with specific modifications or conditions. Where the district engineer determines that mitigation is required to ensure no more than minimal adverse environmental effects, the activity will be authorized within the 45-day PCN period (unless additional time is required to comply with general conditions 18, 20, and/or 31), with activity-specific conditions that state the mitigation requirements. The authorization will include the necessary conceptual or detailed mitigation plan or a requirement that the applicant submit a mitigation plan that would reduce the adverse environmental effects so that they are no more than minimal. When compensatory mitigation is required, no work in waters of the United States may occur until the district engineer has approved a specific mitigation plan or has determined that prior approval of a final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation.

Further Information

1. District engineers have authority to determine if an activity complies with the terms and conditions of an NWP.

2. NWPs do not obviate the need to obtain other federal, state, or local permits, approvals, or authorizations required by law.

3. NWPs do not grant any property rights or exclusive privileges.

4. NWPs do not authorize any injury to the property or rights of others.

5. NWPs do not authorize interference with any existing or proposed Federal project (see general condition 31).

US Army Corps of Engineers
Omaha District

Regional Conditions
Omaha District
State of North Dakota

The following Nationwide permit (NWP) regional conditions will be used in the State of North Dakota for NWP 12, 21, 29, 39, 40, 42, 43, 44, 48, 50, 51, 52, 55, 56, 57, and 58. Regional conditions are placed on NWPs to ensure projects result in no more than minimal adverse impacts to the aquatic environment to address local resources concerns.

A. PRECONSTRUCTION NOTIFICATION REQUIREMENTS APPLICABLE TO ALL NWPS FOR LIMITED REVOCATION OF NWPS

For all NWPs, permittees must notify the Corps in accordance with General Condition 32 Preconstruction Notification (PCN) requirements for regulated activities located within or comprised of the following:

1. **Wetlands Classified as Peatlands:**
   For purposes of this condition, peatlands are permanently or seasonally waterlogged areas with a surface accumulation of peat (organic matter) 30 centimeters (12-inches) or more thick. Under cool, anaerobic, and acidic conditions, the rate of organic matter accumulation exceeds organic decay. Any peat-covered areas, including fens, bogs, and muskegs, are all peatlands.

   a. Reserved
   b. All NWPs listed above are revoked for use in peatlands.

2. **Waters Adjacent to Natural Springs:**
   PCN required for any regulated activity located within 100 feet of the water source in natural spring areas. For purposes of this condition, a spring source is defined as any location where there is flow emanating from a distinct point at any time during the growing season. Springs do not include seeps and other groundwater discharge areas where there is no distinct point source. Springs do not include drain tile outlets.

3. **Bank Stabilization Activities:**
   PCN required for any regulated activity that involves bank stabilization impacting an area greater than 1/10 of an acre below the Ordinary High Water Mark or includes features that extend out from the existing bank line greater than 25% of the bankfull channel width.

4. **Specific Waterways:**
   PCN required for any regulated activity occurring in or under the Missouri River, including Lake Sakakawea and Lake Oahe. In addition, a PCN is required for any activity occurring in an off channel area (e.g. marinas and bays) of any of these waterways.

B. PRECONSTRUCTION NOTIFICATION REQUIREMENTS APPLICABLE TO SPECIFIC NWP.

5. Reserved

C. BEST MANAGEMENT PRACTICES

Best Management Practices

In addition to Regional Conditions 1 through 5, additional required best management practices apply to NWPs within the Omaha District. These follow and are available at: https://www.nwo.usace.army.mil/Missions/Regulatory-Program/Nation-Wide-Permit-Information/

US Army Corps of Engineers
Omaha District

2021 Nationwide Permits
Regional Conditions
Omaha District
Required Best Management Practices

The following Nationwide Permit (NWP) regional condition best management practices are required for Montana, Nebraska, North Dakota, South Dakota, and Wyoming in the Omaha District for NWP 12, 21, 29, 39, 40, 42, 43, 44, 48, 50, 51, 52, 55, 56, 57, and 58. Regional conditions are placed on Nationwide Permits to ensure projects result in no more than minimal adverse impacts to the aquatic environment and to address local resources concerns.

A. REQUIRED BEST MANAGEMENT PRACTICE APPLICABLE TO MONTANA, NEBRASKA, NORTH DAKOTA, SOUTH DAKOTA, AND WYOMING

1. **Suitable Material**
   Permittees are reminded of General Condition No. 6 which prohibits use of unsuitable material. A list of materials prohibited or restricted as fill material in waters of the United States can be found at:
   http://www.nwo.usace.army.mil/Media/FactSheets/FactSheetArticleView/tabid/2034/Article/12320/prohibited-restricted-materials.aspx

B. NORTH DAKOTA REQUIRED BEST MANAGEMENT PRACTICES

2. **Minimum Culvert Width:**
   For all NWPs in jurisdictional streams, the culvert opening width of a stream crossing shall not be less than the mean bank to bank width as measured from the Ordinary High Water Mark in the affected stream reach. In stabile stream channels, the Ordinary High Water Mark is often found at the point where over-bank flow begins during a flood event. In incised stream channels that do not frequently access a floodplain or upper terrace, the Ordinary High Water Mark is generally located within the entrenched channel. The Ordinary High Water Mark may be identified by observing indicators such as a distinct change in slope, a change in vegetation characteristics, or a change in sediment characteristics, see 33 CFR 328.3(e).

3. **Culvert Countersink Depth:**
   For all NWPs in jurisdictional streams and a stable stream bed, culvert stream crossings shall be installed with the culvert invert set below the natural stream channel flow line according to the table below. This regional condition does not apply in instances where lowing of the culvert invert would allow a headcut to migrate upstream of the project into an unaffected stream reach or the result in lowering the elevation of the stream reach.

Culvert Type	Drainage Area	Minimum Distance Culvert Invert Shall Be Lowered Below Stream Flow Line
All culvert types	<100 acres	Not required
Pipe diameter <8.0 ft	100 to 640 acres	0.5 ft
Pipe diameter <8.0 ft	>640 acres	1.0 ft
Pipe diameter >8.0 ft	All drainage sizes	20% of pipe diameter
Box culvert	All drainage sizes	1.0 ft

a. The stream flow line shall be defined as the longitudinal average of the low flow stream channel.

b. The slope of the culvert should be parallel to the slope of the stream flow line.

c. The culvert invert depression depth shall be measured at the culvert for culverts installed at a slope less than the slope of the stream flow line.

4. **Spawning Areas:**
Spawning areas and seasons can be accessed on the North Dakota Game and Fish Department's website at: http://gf.nd.gov/gnf/conservation/docs/spawning-restriction-exclusions.pdf

5. **Intake Structures:**
a. Intake screens with a maximum mesh opening of ¼-inch must be provided, inspected annually, and maintained. Wire, Johnson-like, screens must have a maximum distance between wires of 1/8-inch. Water velocity at the intake screen shall not exceed ½-fot per second.

b. Pumping plant sound levels will not exceed 75 dB at 50 feet.

c. Intakes located in Lake Sakakawea, above river mile 1519, and on the Yellowstone River, are subject to the following conditions:

i. The intakes shall be floating.

ii. At the beginning of the pumping season, the intake shall be placed over water with a minimum depth of 20 feet.

iii. If the 20-foot depth is not attainable, then the intake shall be located over the deepest water available.

iv. If the water depth falls below six feet, the intake shall be moved to deeper water or the maximum intake velocity shall be limited to ¼-foot per second.

d. Intakes located in Lake Sakakawea, below river mile 1519, and the Missouri River below Garrison Dam are subject to the following conditions:

i. The intakes shall be submerged.

ii. At the beginning of the pumping season, the intake will be placed at least 20 vertical feet below the existing water level.

iii. The intake shall be elevated 2 to 4 feet off the bottom of the river or reservoir bed.

iv. If the 20-foot depth is not attainable, then the intake velocity shall be limited to ¼-foot per second with intake placed at the maximum practicable attainable depth.

e. Intakes and associated Utility lines that are proposed to cross sandbars in areas designated as piping plover critical habitat are prohibited.

f. Any temporary open trench associated with utility lines are to be closed within 30 days of excavation. This time limit may be extended by notifying the North Dakota Regulatory Office and receiving a written response that the extension is acceptable.

6. **Boat Docks:**

To ensure that the work or structure shall not cause unreasonable obstruction to the free navigation of the navigable waters, the following conditions are required:

a. No boat dock shall be located on a sandbar or barren sand feature. The farthest point riverward of a dock shall not exceed a total length of 30 feet from the Ordinary High Water Mark. Information Note: Issuance of this permit does not supersede authorization required by the North Dakota State Engineer's Office.

b. Any boat dock shall be anchored to the top of the high bank.

c. Any boat dock located within an excavated bay or marina that is off the main river channel may be anchored to the bay or marina bottom with spuds.

d. Section 10 Waters located in the State of North Dakota area:
i. Bois de Sioux River

ii. James River Missouri River

iii. Red River of the North

iv. Upper Des Lacs Lake

v. Yellowstone River

US Army Corps of Engineers
Omaha District

2021 Nationwide Permits
Regional Conditions
State of North Dakota
Section 401 Water Quality Certification

The following Nationwide permit (NWP) regional conditions pertaining to Section 401 Water Quality Certification (WQC) will be used in the State of North Dakota for NWP 12, 21, 29, 39, 40, 42, 43, 44, 48, 50, 51, 52, 55, 56, 57, and 58.

The Environmental Protection Agency is responsible for providing WQC for activities that occur on Indian Lands in the State of North Dakota.

The North Dakota Department of Environmental Quality is responsible for providing WQC for Section 404 activities that occur in the State of North Dakota, excluding Indian Lands.

WQC by NWP follows:

- **NWP 12 – Oil or Natural Gas Pipeline Activities**
  -EPA denied for all activities.
  -NDDEQ denied for activities affecting Class I, IA, II and III rivers and streams, and classified lakes listed in Appendixes I and II of the State Water Quality Standards and certified for activities affecting all other waters in the State.

- **NWP 21 – Surface Coal Mining Activities**
  -EPA denied for all activities.
  -NDDEQ certified for all activities.

- **NWP 29 – Residential Developments**
  -EPA denied for all activities.
  -NDDEQ certified with the condition that the project will not result in a stream bank loss exceeding 300 linear feet in Class I, IA, II and III rivers and streams. Projects that cannot meet the condition will require an individual certification.

- **NWP 39 – Commercial and Institutional Developments**
  -EPA denied WQC for all activities.
  -NDDEQ certified with the condition that the project will not result in a stream bank loss or relocation of 150 linear feet of any river or stream. Projects that cannot meet the condition will require an individual certification.

- **NWP 40 – Agricultural Activities**
  -EPA denied WQC for all activities.
  -NDDEQ certified with the condition that the project will not result in a stream bank loss or relocation of 150 linear feet of any river or stream. Projects that cannot meet the condition will require an individual certification.

- **NWP 42 – Recreational Facilities**
  -EPA denied WQC for all activities.

-NDDEQ certified with the condition that the project will not result in a stream bank loss or relocation of 150 linear feet of any river or stream. Projects that cannot meet the condition will require an individual certification.

- **NWP 43 – Stormwater Management Facilities**
  -EPA denied WQC for all activities.
  -NDDEQ certified for all activities.

- **NWP 44 – Mining Activities**
  -EPA denied WQC for all activities.
  -NDDEQ certified for all activities.

- **NWP 48 – Commercial Shellfish Mariculture Activities**
  -EPA waived WQC for all activities.
  -NDDEQ certified for all activities.

- **NWP 50 – Underground Coal Mining Activities**
  -EPA denied WQC for all activities.
  -NDDEQ certified for all activities.

- **NWP 51 – Land-Based Renewable Energy Generation Facilities**
  -EPA denied for all activities.
  -NDDEQ certified for all activities.

- **NWP 52 – Water-Based Renewable Energy Generation Pilot Projects**
  -EPA denied WQC for all activities.
  -NDDEQ certified with the condition that a copy of the PCN is provided to NDDEQ for projects in, over or under Class I, IA, II and III rivers and streams, and classified lakes for compliance purposes.

- **NWP 55 – Seaweed Mariculture Activities**
  -EPA denied WQC for all activities.
  -NDDEQ N/A

- **NWP 56 – Finfish Mariculture Activities**
  -EPA denied WQC for all activities.
  -NDDEQ N/A

- **NWP 57 – Electric Utility Line and Telecommunications Activities**
  -EPA denied for all activities.
  -NDDEQ certified for all activities.

- **NWP 58 – Utility Line Activities for Water and Other Substances**
  -EPA denied WQC for all activities.
  -NDDEQ certified with the condition that the lines do not carry oil and gas production water, produced water, or brine water. Pipelines that carry oil or gas production water,

produced water, or brine water, collectively called saltwater pipelines, in, over or under Class I, IA, II and III rivers and streams, and classified lakes require individual certification with conditions based on the specific waterbody, location on the water, type of construction, and safety controls applied prior, during, or after construction.

WBI ENERGY WAHPETON EXPANSION PROJECT

United States Army Corp of Engineers (USACE) Pre-Permit Meeting

March 24, 2022

Attendees

USACE: Jason Renschler – Project Manager

WBI Energy: Jill Linn – Environmental Manager

ERM staff – WBI Energy's Environmental Consultant: Levia Shoutis, Wade Hammer, Becky Moores, Lauren Rosenkranz

Presentation of Project and Impacts (Powerpoint slide deck)

- ERM provided an overview of the project route, purpose, and schedule.
- ERM described the Federal Energy Regulatory Commission's (FERC) status as the lead federal agency and indicated that it has been approved to use the FERC's pre-filing process in September 2021.
- ERM provided an overview of the project schedule and indicated that WBI Energy filed draft environmental resource reports with FERC in March 2022, and plans to file its FERC application in May 2022.
- ERM presented the proposed temporary and permanent impacts. ERM confirmed that the only permanent impacts are associated with the conversion of two forested wetlands along the right-of-way, totaling less than 0.1 acre.

Discussion of USACE Review

- Mr. Renschler confirmed that he understood that FERC (as the lead agency) will be the lead for the US Fish and Wildlife Service (USFWS) consultation under Section 7, and Section 106 consultation with SHPO
- Mr. Renschler stated that a Section 404 of the Clean Water Act (CWA) review would trigger a Section 401 Water Quality Certification review. ERM described the previous communication with Peter Wax at ND DEQ who agreed that based on the current proposed impacts, all impacts would be certified under the Section 401 Certification associated with Nationwide Permit 12.
- Mr. Renschler stated that compensatory mitigation of impacted areas is not likely to be required (given that proposed permanent/wetland conversion impacts are <0.1 acre), but that WBI Energy should work with the North Dakota Game and Fish (NDGF) to analyze any required mitigation requirements (i.e. for forested wetlands).
- Section 408: ERM explained that they had requested USACE Civil Works review regarding compliance with Section 408 from Michelle Prosser.

Discussion of Construction Methods and Project Description

- ERM provided an overview of pipeline construction and restoration processes, road crossing methods, and the proposed workspace.
- Using aerial photography, the discussion then focused in on the two areas where the proposed workspace will require less than 0.1 acre of cumulative conversion of forested wetland to herbaceous wetland. WBI Energy will adhere to the FERC Plan and FERC Procedures limitations on the amount of clearing to occur at these sites.
- WBI Energy will include a Wetland Delineation Report as an appendix to the submittal of a PCN for this project. Delineation maps and figures will be included in this report for Mr. Renschler's review.
- Mr. Renschler agreed that the USACE will not need to coordinate with FERC on the USFWS Section 7 and SHPO Section 106 consultation, but will need final documentation from FERC as part of PCN review.

Action Items

- Mr. Renschler will continue to serve as the main point of contact for this Project moving forward.
- For future communication with Michelle Prosser regarding Section 408 review, ERM will include Mr. Renschler.
- Communication with USACE on this project should include reference to project "NWO-BIS- 2021-1653".