Appendix G

Construction, Mitigation, and Reclamation Plan

NORTH PLAINS CONNECTOR

A Grid United Project

DRAFT
CONSTRUCTION, MITIGATION, AND RECLAMATION PLAN

Prepared by:

North Plains Connector LLC

GRID UNITED

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NORTH PLAINS CONNECTOR LLC
NORTH PLAINS CONNECTOR PROJECT
DRAFT CONSTRUCTION, MITIGATION, AND RECLAMATION PLAN

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ACRONYMS AND ABBREVIATIONS

AC	alternating current
AIMP	Agricultural Impact Mitigation Plan
APLIC	Avian Power Line Interaction Committee
ATV	all-terrain vehicle
BLM	Bureau of Land Management
BMP	best management practice
CMRP	Construction, Mitigation, and Reclamation Plan
DC	direct current
EHV	extra high voltage
EI	Environmental Inspector
FSH	Forest Service Handbook
Grid United	Grid United LLC
HVDC	high-voltage direct current
HVDC Transmission Line	new 525-kV HVDC electric transmission line
INS	invasive and noxious species
kV	kilovolt
MBTA	Migratory Bird Treaty Act
MDEQ	Montana Department of Environmental Quality
MISO	Midcontinent Independent System Operator
Morton County Converter Station	new AC/DC converter station in Morton County, North Dakota
Morton County Switchyard	new switchyard in Morton County, North Dakota
Morton Transmission Line	new 345-kV EHV AC transmission line in Morton County, North Dakota
NDDEQ	North Dakota Department of Environmental Quality
NERC	North American Electric Reliability Corporation
North Plains	North Plains Connector LLC
OHWM	Ordinary High Water Mark
Oliver Transmission Line	new 345-kV EHV AC transmission line in Morton and Oliver counties, North Dakota
Oliver County Substation	new Oliver County Substation, North Dakota constructed by a third party
OPGW	optical ground wire
Plan	Construction, Mitigation, and Reclamation Plan
Project	North Plains Connector Project
Project workspace	specific workspaces used to perform construction activities
Rosebud County Converter Station	new AC/DC converter station in Rosebud County, Montana

Rosebud Transmission Line	Four new single circuit 500-kV EHV AC electrical transmission lines in Rosebud County, Montana
SPP	Southwest Power Pool
SWPPP	Stormwater Pollution Prevention Plan
USACE	U.S. Army Corps of Engineers
USDA ARS	U.S. Department of Agriculture – Agricultural Research Station
USDA-NRCS	U.S. Department of Agriculture-Natural Resources Conservation Service
USFS	U.S. Forest Service
USFWS	U.S. Fish and Wildlife Service
WECC	Western Electricity Coordinating Council

1.0 INTRODUCTION

North Plains Connector LLC (North Plains), a Delaware limited liability company formed pursuant to Section 18-201 of the Delaware Limited Liability Company Act, has prepared this Construction, Mitigation, and Reclamation Plan (CMRP or Plan) for the North Plains Connector Project (Project), a proposed interregional electric connector line. North Plains, an affiliate of Grid United LLC (Grid United), is a Houston, Texas-based company developing next generation energy infrastructure to power the future. Grid United is focused on the infrastructure needed to make the United States power grid more modern, efficient, reliable, and secure.

As proposed, the Project will extend from a location near Colstrip, Montana to two separate end points in North Dakota—one near the town of Center and the other near St. Anthony. The Project is a bidirectional line to move electricity east or west between the Eastern and Western Interconnections (also referred to as the eastern and western grids) in response to the growing need to move power across long distances to improve the reliability and resiliency of the grid. The Eastern and Western Interconnections are the two largest electrical grids in North America. Specifically, the Project will connect the Western Electricity Coordinating Council (WECC) electrical power markets in the western grid with the Midcontinent Independent System Operator (MISO) and Southwest Power Pool (SPP) of the eastern grid. The Project will sell capacity without preference towards a particular generation technology. Portions of the Project or capacity rights may be owned by electric utilities, cooperatives, government entities, corporate energy providers, or independent generators in the WECC, MISO, or SPP regional power systems.

1.1 PLAN PURPOSE

North Plains developed this CMRP to describe the construction procedures and mitigation that North Plains will implement during construction to reduce potential impacts related to the Project. The CMRP also describes the restoration and reclamation process that North Plains will implement when construction is complete.

The Plan is based on industry best management practices (BMPs), North American Electric Reliability Corporation (NERC) requirements, and federal, state, and local authorizations applicable to the Project. North Plains will attempt to consolidate the mitigation measures required for this Project in the CMRP and associated plans to the extent practicable both to facilitate review by the agencies and to facilitate compliance. However, where permits, grants, licenses, or easements conflict with this Plan, the requirements in the permits, grants, licenses, or easements will take precedent over this Plan to the extent they do not violate any other permit conditions.

Attachment A includes stipulations that North Plains will implement on lands crossed by the Project that are owned and managed by federal agencies, including the Bureau of Land Management (BLM), U.S. Forest Service (USFS), and U.S. Department of Agriculture, Agriculture Research Service (USDA ARS).

2.0 OTHER PROJECT-SPECIFIC PLANS

Based on the evaluation of resources crossed by the Project, past Project experience, and agency coordination, North Plains has prepared or is currently preparing the following Project-specific mitigation plans to be incorporated as attachments to this CMRP.

- Agricultural Impact Mitigation Plan (AIMP) (see Attachment B): The Project crosses agricultural land use areas, including rangeland that is managed for livestock. This includes the USDA ARS Fort Keogh site. The AIMP includes avoidance, minimization, and mitigation measures to address potential damage to drain tile/lines, interference with irrigation system, segregation of topsoil, soil decompaction, fence repair, livestock management, stone removal, and special mitigation where crossing or adjacent to specialty practices such as organic farms or apiaries.

- Avian Protection Plan (in preparation): North Plains will develop an Avian Protection Plan in coordination with Project operators that will describe the measures that North Plains will implement to mitigate the risk of bird collisions with power lines. North Plains will develop this Avian Protection Plan in accordance with the Avian Power Line Interaction Committee's (APLIC's) Suggested Practices for Avian Protection on Power Lines (2006), APLIC's Reducing Avian Collisions with Power Lines (2012), and APLIC's and U.S. Fish and Wildlife Service's (USFWS) Avian Protection Plan Guidelines (2005). The Avian Protection Plan will be provided prior to Project construction.

- Blasting Plan (see Attachment C): The Project is located in an area of shallow bedrock and North Plains may need to perform blasting to facilitate the excavation of foundations for transmission pole and facility infrastructure. The Blasting Plan outlines the standard procedures that North Plains will implement during blasting, including safety precautions and notification procedures.

- Fire Prevention and Suppression Plan (see Attachment D): The Fire Prevention and Suppression Plan describes the safety measures that North Plains will implement during construction activities to prevent fires, and the emergency procedures North Plains will implement in the event of a fire, including notifications.

- Hazardous Materials and Waste Management Plan (see Attachment E): The Hazardous Materials and Waste Management Plan describes the procedures that will be implemented during construction to outline proper handling, storage, and disposal of all solid and hazardous materials and wastes that are used or generated as a result of the Project.

- Invasive and Noxious Species (INS) Management Plan (see Attachment F): The INS Management Plan includes both the Montana Noxious Weed and Aquatic Invasive Species Management Plan and North Dakota Noxious Weed Management Plan. These plans describe the applicable laws and invasive and noxious species management requirements specified by federal, state and local agencies. Additionally, these plans describe the measures that North Plains will implement to manage the spread of these species during construction.

- Migratory Bird Treaty Act (MBTA) Compliance Plan (see Attachment G): The MBTA Compliance Plan will document the measures North Plains has implemented or will implement to avoid, minimize, and mitigate potential impacts on migratory birds, including bald and golden eagles, consistent with the MBTA and the Bald and Golden Eagle Protection Act.

- Paleontological Resources Management and Mitigation Plan (see Attachment H): The Paleontological Resources Management and Mitigation Plan outlines the procedures to be followed upon an unanticipated discovery of paleontological resources, including the notification procedures for findings on federal and state lands.

- Plan for the Unanticipated Discovery of Contaminated Materials (see Attachment I): The Plan for the Unanticipated Discovery of Contaminated Materials presents key procedures for managing contaminated material encountered during Project work. This Plan applies to material contaminated as a result of historical activities or events that occurred prior to the Project commencing.

- Post-Review Discovery Plan for Cultural Resources and Human Remains (in preparation): The Post-Review Discovery Plan for Cultural Resources and Human Remains outlines the procedures that North Plains will follow upon an unanticipated discovery of an archaeological or historic resource or human remains. This includes the notification procedures for findings on federal and state lands and stop work procedures.

- Montana Greater Sage Grouse Mitigation Plan (in preparation): North Plains will develop the Sage Grouse Mitigation Plan to ensure compliance with the requirements of Executive Order 12-2015, the Montana Greater Sage Grouse Stewardship Act of 2015, and to support state permitting in Montana.

- Spill Prevention and Response Plan (see Attachment J): The Spill Prevention and Response Plan describes the methods used to prevent, control, and respond to

spills of hazardous substances that may affect surface waters. The Spill Prevention and Response Plan also discusses the proper storage and handling of hazardous substances.

- Traffic and Transportation Management Plan (see Attachment K): The Traffic and Transportation Management Plan describes the strategies that will be implemented during Project construction to minimize or prevent impacts to traffic and transportation corridors resulting from construction-related activities.

2.1 CONSTRAINTS MAPPING

Prior to construction, North Plains will prepare constraints maps for the Project that will identify sensitive environmental features such as wetlands, waterbodies, and associated buffer zones. North Plains will include notations on the constraints map to direct the personnel to the appropriate environmental plans/or permit conditions that stipulate the activities, restrictions, and/or BMPs to be employed at each environmental feature.

3.0 LANDOWNER COORDINATION

North Plains will work cooperatively with landowners before, during, and after the construction process regarding easements, rights-of-way, structure locations, restoration, and maintenance. This coordination and cooperation are in recognition of the fact that, in most locations under private ownership, North Plains will have an easement for the Project right-of-way. North Plains does not own the property in fee simple and, in large part, the landowners' use of their property, including the right-of-way, will continue after the Project is constructed and operational.

For example, land that is in cultivated agricultural production will likely return to cultivation; similarly, pastureland temporarily disturbed during construction will be reclaimed with grasses and forbs similar to the rest of the parcel for grazing. In this way, a transmission line right-of-way is distinct from vegetation management for other types of energy infrastructure wherein the project operator owns the associated property. Therefore, restoration efforts target reclamation to pre-existing conditions and use, where practicable, and consistent with safe and reliable transmission line operation.

3.1 LANDOWNER NOTIFICATIONS

North Plains will notify landowners prior to vegetation clearing activities, as required by applicable permit conditions or in the land rights agreement with the landowner.

3.2 LANDOWNER COMPENSATION

North Plains' agreements with landowners will address restoration and/or compensation obligations regarding damages to private property caused by construction, operation, maintenance, and repairs of the Project.

4.0 LAND REQUIREMENTS

Operation of the Project will require easements for an operational right-of-way that extends the length of each transmission line segment. However, construction activities will not occur over the entire operational right-of-way. North Plains has designed both permanent and temporary construction workspaces and access roads to avoid or minimize overlap with areas of steep

terrain and culturally and environmentally sensitive areas, to the extent practicable. The combined permanent and temporary construction workspaces and access roads are collectively referred to as the Project workspace. Construction activities will be limited to the authorized Project workspace.

4.1 CONSTRUCTION SCHEDULE

North Plains anticipates the total construction timeframe for the Project to be approximately three to four years. North Plains anticipates that transmission line construction activities will occur concurrently with construction activities at the converter station and switchyard locations. Construction is anticipated to occur year-round, weather permitting, except for areas that have applicable timing restrictions to protect sensitive species and as subject to permit conditions. Delays due to weather, material delivery, and natural resource time of year restrictions may extend the construction timeline. Further, the start of construction will be dependent upon receipt of required permits and authorizations.

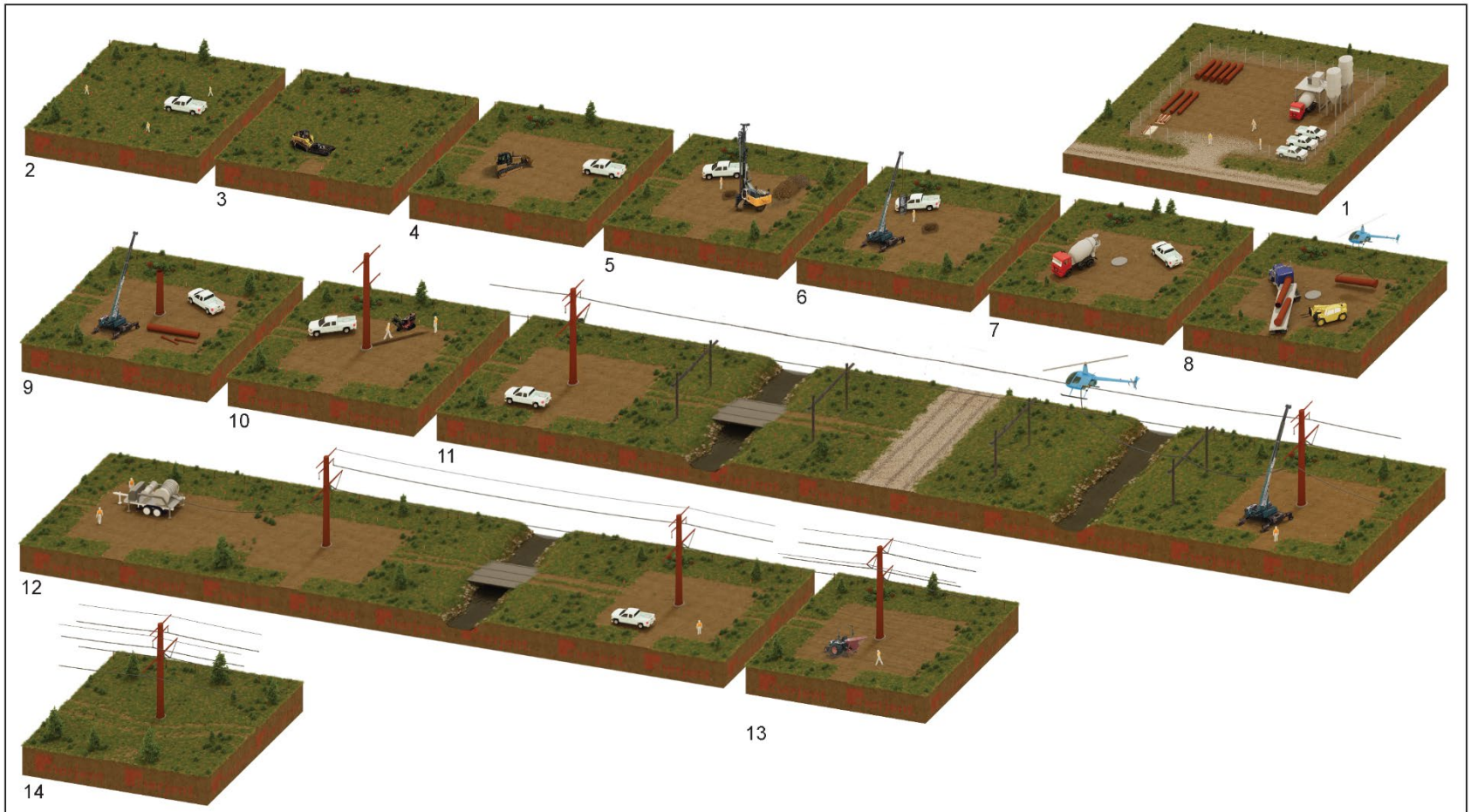
Project construction will typically occur during a 6-day work week, Monday through Saturday. A typical construction workday will consist of at least 10 hours, occurring mostly during daytime hours, between 7:00 a.m. and 7:00 p.m. in the summertime. However, weather conditions, site conditions, emergencies, or other circumstances may necessitate extended work outside of typical workday hours, including work at night and on Sundays and holidays.

5.0 CONSTRUCTION PROCEDURES AND BEST MANAGEMENT PRACTICES

Construction of an overhead transmission line requires several sequential activities in a coordinated manner within the Project workspace. Figure 5.0-1 and this section describe the major construction activities listed below and approximate construction sequence.

- Mobilization and preparation of contractor laydown yards and helicopter fly yards
- Surveying and staking
- Development of access roads and overland travel
- Vegetation clearing
- Installation of erosion and sediment control BMPs
- Foundation installation
- Structure setting
- Installation of ground rods or counterpoise
- Installation of conductors and optical ground wire (OPGW)
- Wire stringing and clipping
- Site cleanup and reclamation

Some construction techniques are a form of mitigation designed to reduce potential impacts to resources. This section describes these construction techniques, in addition to the BMPs that North Plains will implement during the execution of construction activities to further avoid, minimize, or mitigate resource impacts.



NORTH PLAINS CONNECTOR
A Grid United Project

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Figure 5.0-1
Typical Construction Sequence
North Plains Connector Project

1. Material yard and/or concrete batch plant
2. Survey and staking
3. Workspace clearing and access road construction
4. Grading and/or site preparation
5. Foundation hole drilling
6. Foundation cage installation
7. Concrete foundation poured
8. Material delivery to site
9. Tower structure assembly
10. Grounding system and guy wire installation
11. Conductor and optical ground wire stringing
12. Tensioning
13. Site cleanup and restoration
14. Operation and maintenance

5.1 CONTRACTOR LAYDOWN YARDS AND HELICOPTER FLY YARDS

As the first step in the construction process, North Plains will mobilize staff and equipment to prepare contractor laydown yards. The contractor laydown yards will house temporary trailer(s) and portable concrete batch plants, include space for helicopter fly yards, and serve as a delivery and staging area for construction materials. Contractor laydown yards will stage materials, such as storage containers, portable toilets, dumpsters, construction mats, tools, and equipment.

North Plains will prepare the contractor laydown yards by, where necessary:

- installing erosion and sediment control BMPs described in Section 5.7;
- grading and leveling uneven surfaces, as described in Section 5.8;
- stripping and stockpiling of topsoil, as described in Section 5.8.1;
- installing gravel or rock tracking pads near entry/exit points, as described in Section 5.3;
- installing culvert(s) as described in Section 5.3.1; and
- installing power, security measures, and fencing.

North Plains will typically complete this work using standard construction equipment such as backhoes, skid steers, bulldozers and dump trucks.

Fill materials that may be used to construct and maintain the contractor yards and helicopter fly yards during construction of the Project may include aggregate materials such as gravel, sand, and clay. North Plains may use materials obtained on-site from grading or excavation activities for reincorporation as foundation base. Where suitable materials are not available on-site or approved, North Plains will purchase these materials locally, where possible. Fill materials will not contain unsuitable material (e.g., trash, debris, asphalt) and will be free of toxic pollutants in toxic amounts. Topsoil will not be used as fill.

Depending on landowner preferences and subject to applicable regulatory approvals, North Plains may leave contractor laydown yards in place or return the yards to prior conditions following completion of construction activities, as described in Section 6.

North Plains will use portable concrete batch plants at contractor laydown yards to dispense concrete for use in structure foundations. Equipment typically required at a batch plant site includes gas- or diesel-powered generators, concrete trucks, front-end loaders, skid loaders, dump trucks, transport trucks and trailers, water tanks, concrete storage tanks, scales, and job site trailers. North Plains may also need to use commercial ready-mix concrete instead of installing a concrete batch plant when access by commercial transport trucks to structure construction sites is not feasible.

North Plains may use helicopters to facilitate structure setting and/or wire pulling/tensioning of the lines. Therefore, North Plains may require land rights for temporary helicopter fly yards. North Plains will preferably site helicopter fly yards adjacent to the contractor laydown yards. North Plains will prepare the helicopter fly yards in the same way as a contractor laydown yard, including grading or leveling of uneven surfaces ; stripping and stockpiling of topsoil; installing gravel or

rock tracking pads near entry and exit points; and installing culvert(s), power, and fencing as needed.

5.2 SURVEYING AND STAKING

North Plains will confine all construction equipment and vehicles to the Project workspace described in Section 4. North Plains will flag or stake the boundaries of the Project workspace in a manner that visually identifies the boundaries of the Project workspace and keeps construction activities within the authorized Project workspace. In addition, North Plains will install signs, flagging, or construction fencing for the following environmental features along the Project workspace and access roads so they can be easily identified by Project personnel and managed as described in the applicable permit applications.

- Wetland boundaries and waterbody access crossing locations.
- Drainages/drain tiles as identified by counties and landowners.
- Hiking and hunter walking trails, snowmobile, and all-terrain vehicle (ATV) trails, winter access roads, and other recreational areas as required by permit conditions.
- Buffer zones for environmentally sensitive features, including archaeological and historic sites, rare plants or ecological communities, and other sensitive wildlife species and/or habitats per agency consultations. Signs will not disclose the specific location and/or species or feature type where laws require resource protection.

North Plains will contact the state One Call systems in both Montana and North Dakota to locate, identify, and flag existing underground utilities to prevent accidental damage during construction. Generally, these activities are completed by a two-person crew travelling by foot, ATV, or pick-up truck.

5.3 ACCESS ROADS

North Plains will use existing roads, develop new temporary and permanent access roads, and use overland travel to access the Project.

North Plains will maintain existing roads without improvement, improve existing roads, or build new roads as needed and approved through applicable permits and agreements. Maintenance activities may include tree trimming, back-blading, and placement of fill where needed on the existing road grade and as agreed upon with the road authority. North Plains may add soil or gravel fill to maintain or improve existing roads or to develop permanent access roads, if needed.

Wetland and waterbody crossings are discussed in greater detail in Sections 5.3.1 and 5.3.2.

Fill materials that may be used to construct and maintain access roads during construction of the Project may include aggregate materials such as gravel, sand, and clay. North Plains may use materials obtained on-site from grading or excavation activities for reincorporation as road base along access roads. Where suitable materials are not available on-site or approved for use, North Plains will purchase these materials locally, where possible. Fill materials will not contain unsuitable material (e.g., trash, debris, asphalt) and will be free of toxic pollutants in toxic amounts. Topsoil will not be used as fill.

North Plains will minimize vehicle tracking of soil from construction sites by implementing BMPs such as installing rock access pads or construction mats, reducing equipment/vehicle access to the construction workspace where practicable, and using off-right-of-way parking or equivalent practices. North Plains will install rock or construction mat access pads in accordance with state or local road authority specifications. If such BMPs are not adequately preventing sediment from being tracked onto paved public roads, North Plains will conduct street sweeping or other equivalent means of collecting sediment in accordance with the Storm Water Construction General Permits administered by the Montana Department of Environmental Quality (MDEQ) and the North Dakota Department of Environmental Quality (NDDEQ) (provided in Attachment L).

The Project may require snow removal to allow safe access to the Project workspace. North Plains will manage snow within the Project workspace with equipment such as a grader, snowplow, or bulldozer and then stockpile the snow along the edge of the Project workspace. North Plains will install snowblower attachments on compatible equipment to minimize scraping off underlying soil or gravel during snow removal. North Plains will confine equipment to the Project workspace and will not push or blow snow onto environmentally sensitive features outside of the Project workspace.

After construction, North Plains will return temporary access roads and overland travel lanes to their pre-construction condition unless the road authority, landowner, or land-managing agency requests that the improvements be left in place or they are required for Project operation and the following conditions are met:

- the access road does not cross wetland features, and
- North Plains did not install new temporary crossing techniques such as bridges and culverts at waterbody features crossed by the road.

North Plains will perform restoration of improved and temporary access roads and overland travel lanes as described in Section 6.

During operations, North Plains will maintain permanent access roads to facilities and to facilitate maintenance of the transmission line segments throughout Project operation. Access roads may consist of dirt, gravel, asphalt, concrete, or another hard surface. Also, once reclaimed, the areas previously occupied by temporary access roads may be used for overland travel during operation.

North Plains will design access roads in accordance with federal, state, and local requirements and design standards established by land-managing agencies. North Plains will obtain the applicable permits or authorizations for access roads located on public lands.

Surface cross drains, such as drivable dips, waterbars, rolls in profile, open slotted culverts, metal bars or rubber water diverters will be incorporated into the design of roads, as appropriate based on site-specific conditions and the duration of road use. The intent of cross drains is to collect and discharge water from the road in a manner that minimizes impacts to the watershed and maintains the integrity of the road (Copstead et al., 1998). Additional erosion and sediment control BMPs, described in Section 5.7, will also be installed during the construction and use of access roads, as appropriate.

5.3.1 Waterbody Crossings

Generally, the bridges and culverts associated with existing roads will be sufficient to allow the passage of construction equipment and vehicles. However, in some cases, the Project may require improvements to existing infrastructure, such as:

- air bridges or construction mats over existing infrastructure;
- extension of culverts to widen the travel lane; and
- additional in-stream supports.

Where there is a potential for stormwater runoff or rain events to transport sediment downstream from equipment crossing a waterbody, North Plains may install the following infrastructure at road approaches to Project workspace and across waterbodies, upon approval by the applicable agencies and as appropriate for site-specific conditions:

- Clear span bridges: Typically used to cross narrow waterbodies from top of bank to top of bank with stable banks. No direct excavation of the waterbody bed or in-stream supports is required. The bridge deck is often composed of construction mats, but other material may be used. See typical design provided in Attachment M.

- Non-clear span bridges: Typically used to cross wider waterbodies, or where additional stabilization is required to ensure the bridge installation allows for the safe passage of construction equipment and vehicles. Installation of infrastructure or supports within the ordinary high water mark (OHWM) are required. The bridge deck is often composed of construction mats, but other material may be used. See typical design provided in Attachment M.

- Culverts/flumes: Cylinder or box-shaped structures placed in the waterbody channel within the OHWM to allow water flow. The size, number, and shape of the culvert is dependent on the waterbody and the watershed. See Culvert Detail in the Typical included in Attachment M.

- Low-Water Crossing Types: Low water crossings are deployed when the stream channel depth is shallow relative to the width of the channel. This method may be applied when channels have evidence of low velocity or no flow. For low water crossings, the rock surface is coarse to resist movement of the ford. Low water crossings are typically topped with finer gravel to accommodate vehicle traffic. See Rock Low Water Crossing Types design provided in Attachment M.

- Rockfill fords: Appropriate in debris prone headwater channels. Class V to VII riprap is keyed into the channel banks, and then Class III riprap is placed on top of the porous rock as a cap. See Rockfill Ford (without pipe) detail provided in Attachment M.

- Vented rockfill fords: Appropriate in steep topography or incised highly channelized streams where the channel depth is greater than the stream width, particularly in headwater areas. This design type is used especially to retro-fit undersized culverts or prevent stream diversion. A culvert, referred to as the vent, is placed on the stream bottom. Porous rock, typically measuring 15 to 27 inches, is then placed on top of the culvert. Class III rip rap is placed on top of the porous rock

as a cap. See Vented Rockfill Ford with Pipes detail provided in Attachment M.

- Permanent culverts/bridges: North Plains will design permanent culverts or bridges in accordance with federal, state, and local requirements, and land-managing agency specifications. The design of permanent culverts or bridges will be dependent on site-specific conditions.

As required by the U.S. Army Corps of Engineers (USACE) Nationwide Permit 57 for Utility Line and Telecommunications Activities (2021) (provided in Attachment L), permanent and temporary crossings of waterbodies will be suitably culverted, bridged, or otherwise designed and constructed to maintain low flows to sustain the movement of aquatic species. If a bottomless culvert cannot be used, then the crossing will be designed and constructed to minimize adverse effects to aquatic life movements. Further, waterbody crossings will be constructed to withstand expected high flows and designed to not restrict or impede the passage of normal or high flows. North Plains will also seek and comply with the design specifications required by state permits, and by the BLM, USFS, and USDA ARS for waterbody crossings on federal lands.

North Plains will maintain equipment bridges and culverts in good working order, and in accordance with the applicable permits and authorizations. North Plains will remove debris or vegetation that becomes lodged on the bridge support and will dispose of the removed material in an upland area downstream of the bridge location, in accordance with permits. North Plains will maintain bridges to minimize soil from entering the waterbody. North Plains will remove soil that accumulates on the bridge decking in accordance with regulations and permit conditions.

Temporary waterbody crossings may be removed during final cleanup or, if access is needed, crossings will be removed during restoration activities after final cleanup and permanent seeding. Equipment bridge decking will be removed in a manner to facilitate collecting sediment and debris by geotextile fabric secured below decking during bridge construction. Subsequently, geotextile fabric will be removed to minimize debris from entering the waterbody.

North Plains will restore bridges and culverts that are present prior to construction to meet or exceed pre-construction conditions.

Once temporary crossings are removed, North Plains will evaluate the need for stabilization and conduct additional seeding and/or implement erosion and sediment control BMPs where vegetation and soils have been disturbed. North Plains will follow the restoration procedures described in Section 6.

5.3.2 Wetland Crossings

To minimize rutting, North Plains will traverse wetlands occurring within the Project workspace using either low ground pressure equipment or by installing construction mats in saturated or inundated wetlands to minimize impacts. Construction mats or rock on top of geotextile fabric may be used for roads within wetlands. North Plains may also use construction mats in other locations where unstable soils occur. Most matted travel lanes will be 16 feet wide (see Matted Wetland Crossing Detail on the typical provided in Attachment M). Matted travel lanes are typically a single layer; however, there may be cases in saturated soils where North Plains must place more than one layer of mats to provide a stable working surface. North Plains may use multiple mat configurations in inundated areas depending upon the depth of inundation and will install mats to maintain surface flow. North Plains may use the following types of construction mats:

- Composite Mats: Composite mats are built out of high-density polyethylene material. Mats are typically 4 inches thick and 8 feet wide by 14 feet in length. Mats are interlocking, have a treaded traction surface, and are flexible and extremely durable. These mats are also typically lighter in weight than traditional timber mats. Heavy duty mats support construction equipment of all types, sizes, and weights, with load-bearing capabilities up to 600 pounds per square inch. Light duty mats are also available.

- Timber Mats: Timber mats are available in a variety of sizes and are constructed of hardwood materials that are bolted together. Timber mats are suitable for all vehicle types present on the Project workspace, have high durability under traffic, and are easily installed and removed using typical construction equipment. Timber mats are suitable for use in all soil conditions for all transmission line construction activities.

- Laminated Mats: Laminated mats are available in a variety of sizes and are constructed of laminated wood materials. Laminated mats are suitable for all vehicle types but are limited in their weight bearing capacity. They have high durability and are easily installed and removed using typical construction equipment. Laminated mats are suitable for use in most soil conditions but are not suitable for use in extremely saturated conditions. Laminated mats can be used on access roads, at drill pads, and for storage and staging of equipment.

Vegetation clearing crews will typically bring mats with the mechanized equipment and “leap frog” the mats forward as clearing progresses across wetland features.

During frozen conditions, North Plains may use ice roads along temporary access roads and overland travel lanes through wetland features. North Plains may begin the development of ice roads as soon as weather conditions allow. North Plains will use low ground pressure equipment, such as snowcats and amphibious all-terrain vehicles, such as Argos, to push and pack existing ice and snow together to provide the foundation for the ice roads. As the snowpack builds up and hardens, North Plains will use larger and heavier equipment to progressively increase the thickness and density of the snowpack. In some cases, North Plains may add water to the surface to help build snowpack from the top. If there is insufficient snowpack to safely support construction activities, North Plains may install construction mats in addition to snowpack. Ice bridges will not be used to cross waterbody features; North Plains will use the appropriate bridge type described in Section 5.3.1 to cross waterbody features.

North Plains may remove construction mats during final cleanup or, if access is needed, matting will be removed during restoration activities after final cleanup and permanent seeding. Once mats are removed, North Plains will follow the restoration procedures described in Section 6.

5.4 VEGETATION CLEARING

To facilitate construction equipment access and provide for safe clearances between vegetation and the transmission line during operations, North Plains will clear trees and tall vegetation from the right-of-way. North Plains may also clear vegetation, as needed, from the Project workspace including new and improved access roads. North Plains will typically perform clearing with mechanical equipment such as mechanized mowers, sky trips, process harvesters, feller bunchers, or brush cutters. In areas where clearing with large equipment is not feasible, North Plains may clear with hand tools such as chain saws.

North Plains will conduct timber removal operations using cut-off-type saw equipment. North Plains will undertake felling in a manner that minimizes shatter, breakage, and disturbance outside of the Project workspace, to the extent feasible. North Plains will use skid loaders or alternate equipment to transport logs to stacking sites. North Plains will remove "leaners," which are felled trees that inadvertently fall into adjacent undisturbed vegetation. North Plains will recover trees and slash that fall outside the Project workspace. North Plains will dispose of this recovered material in accordance with landowner or land-managing agency requirements. North Plains will typically limb and top logs before removal from the Project workspace. North Plains will orient any required log decks to best facilitate loading by picker trucks.

North Plains will manage all merchantable timber in accordance with landowner agreements and applicable permits and licenses. North Plains will stack vegetation materials that a landowner has requested to keep outside the right-of-way in upland areas. North Plains will stack vegetation materials that a landowner does not wish to keep inside the right-of-way in upland areas for further processing and disposition. North Plains will remove vegetation materials generated during Project activities that a landowner does not wish to keep from their property. North Plains will dispose of these unwanted vegetation materials by offering the materials to other landowners, offering the materials for sale, placing the materials in a composting site, or disposing of the materials at a mill or other North Plains approved location.

Unless otherwise agreed upon between North Plains and the applicable landowner or land-managing agency, North Plains will dispose of non-merchantable timber and slash by mowing, cutting, chipping, mulching, and leaving in upland areas; hauling off-site to an approved location; or using in stabilizing erodible slopes or construction entrances. In non-agricultural, non-wetland areas, North Plains may uniformly broadcast chips, mulch, or mechanically cut woody debris across the Project workspace in a manner that avoids inhibiting revegetation. North Plains may also incorporate this material into the topsoil layer during grading activities, with landowner approval. North Plains will not dispose of chips, mulch, or mechanically cut woody debris in waterbodies or wetlands, including agricultural wetlands.

During construction, North Plains will cut vegetation within the right-of-way and Project workspace at or slightly above the ground surface. To minimize soil impacts and erosion potential, North Plains will not typically grub stumps or roots; however, North Plains may need to remove stumps in some locations within the Project workspace to facilitate the movement of construction equipment, where excavation will occur, or when reasonably requested by the landowner.

During construction, North Plains may allow the burning of non-merchantable wood in accordance with all state and local regulations where North Plains has acquired the applicable permits and approvals from applicable agencies and landowners. Burning will not be allowed in wetlands or agricultural lands. Burning within 100 feet of a wetland or waterway will be prohibited without site-specific approval in advance from North Plains and in accordance with applicable permits and approvals. Refer to the Fire Prevention and Suppression Plan (see Attachment D) for additional information regarding the standard controls that North Plains will implement to minimize the risk of construction induced fires.

5.5 FIRE MANAGEMENT

North Plains will comply with all applicable federal, state, county, and local fire regulations pertaining to the prevention of uncontrolled fires. The Fire Prevention and Suppression Plan (see Attachment D) describes the measures that North Plains will implement throughout construction

activities to reduce the potential for fires, the emergency procedures to be implemented in the event of a fire, including agency notifications, and procedures for restoration of a burned area.

5.6 FUGITIVE DUST CONTROL

Construction of the Project may temporarily increase fugitive dust particularly in areas with erosion-prone soils where vegetation clearing and surface disturbance by heavy equipment occurs. Precipitation, or lack thereof, and wind are also factors that may contribute to fugitive dust in the Project area. The following construction activities have the potential to generate fugitive dust emissions:

- vehicle and equipment movement on paved and unpaved surfaces;
- track-outs onto roads;
- use of parking, staging, and storage areas;
- vegetation removal;
- clearing, grading, and excavation;
- topsoil stripping;
- topsoil/spoil storage;
- blasting;
- cleanup; and
- bulk/pile material loading, unloading, and hauling.

North Plains will obtain and use water under the appropriate state water use permitting system, as needed, as an approved dust control method during construction. Dust control measures may be applied on unpaved roads, material stockpiles, and other surfaces which can create airborne dust, as necessary. Chemical additives such as surfactants may be used for dust suppression. North Plains will not use used oil for dust abatement.

If the Project requires blasting, North Plains may use matting in rock blasting operations to minimize and control dust, discussed in greater detail in Section 5.8.3. As discussed in Section 5.3, North Plains will access the Project from public roadways, permitted new temporary and permanent access roads, and overland travel routes. North Plains will implement reduced speed limits on unpaved access roads and will also minimize tracking of sediment onto public roadways. If soil is tracked onto a paved roadway, North Plains will remove accumulated material from the road.

North Plains will minimize wind and water erosion, surface disturbance, and construction activities in highly erodible soils, and will cover material stockpiles and equipment transporting dust-producing materials. In areas of steep terrain with high potential for erosion, North Plains will conduct vegetation clearing and grading in a manner to minimize dust impacts. North Plains will implement soil stabilization and reclamation practices to reduce erosion following ground-disturbing activities, as discussed in Sections 5.7 and 6.

North Plains will notify all grading and excavation contractors of Project segments that cross erionite testing radii zones established by the NDDEQ or locations of known occurrence so that the contractor can implement the necessary measures to protect their employees. In addition, North Plains will use suppressants to reduce dust, particularly when working within erionite testing radii and known locations.

5.7 TEMPORARY EROSION AND SEDIMENT CONTROL BMPS

Ground disturbance activities may not occur across the entire Project workspace. North Plains will limit ground disturbance activities to the areas around pole structures, along access roads, within temporary construction workspaces where needed, where clearing of trees and tall vegetation is needed, and at the new facilities. North Plains will prepare a Stormwater Pollution Prevention Plan (SWPPP) in accordance with the Storm Water Construction General Permits administered by the MDEQ and the NDDEQ. As required by the Storm Water Construction General Permits, the SWPPP will describe the timing for installation of erosion prevention and sediment control BMPs, include the location and type of temporary and permanent erosion and sediment control BMPs, and the procedures used to establish additional temporary BMPs as necessary for the site conditions during construction. The SWPPP will identify surface waters and existing wetlands that will receive stormwater from the construction site during or after construction, and will also identify state and impaired waters, as designated by the agencies. The SWPPP will also include a description of permanent stormwater treatment systems required at the permanent facilities or permanent access roads by the Storm Water Construction General Permits.

Erosion and sediment control BMPs include but are not limited to sediment barriers such as silt fence, sediment traps and basins, check dams, and fiber rolls; compost socks; brush/sandbag barriers; and slope breakers such as earthen berms. The equipment used during installation of erosion and sediment control BMPs typically includes ATVs and trucks for crew transportation, as well as skid loaders, tractors, backhoes, hydro-seeders, and other light-duty equipment. North Plains will consult the Montana Department of Transportation Erosion and Sediment Control Best Management Practices Manual (Montana Department of Transportation, 2016) and the North Dakota Department of Transportation Erosion and Sediment Control Construction on-line resources (North Dakota Department of Transportation, 2024) during the development of the SWPPP and during field implementation of appropriate erosion and sediment control BMPs, based on site-specific conditions.

North Plains will maintain erosion and sediment control BMPs as required in the Project construction documents and as required by all applicable permits and plans, including the SWPPP, and as required by land-managing agencies. North Plains will perform stormwater inspections of erosion and sediment control BMPs as required by the Storm Water Construction General Permits. North Plains will repair, replace, or supplement non-functional erosion and sediment control BMPs with functional materials within 24 hours after discovery, or as otherwise specified in Project permits.

North Plains will install temporary erosion and sediment control BMPs prior to ground disturbing activities such as grading and excavation at the base of sloped approaches to streams, wetlands, water conveyances such as ditches and swales, and roads. North Plains will install temporary erosion and sediment control BMPs at the edge of the Project workspace as needed, and in other areas to slow water leaving the site and prevent siltation of waterbodies and wetlands downslope or outside of the Project workspace such as swales and side slopes. North Plains will place temporary erosion and sediment control BMPs across the entire Project workspace at the base of slopes greater than three percent and at site-specific locations identified in the SWPPP until the area is revegetated and there is no potential scouring of, or sediment transport to surface waters, including wetlands. North Plains will provide adequate room between the base of the slope and the sediment barrier to accommodate ponding of water and sediment deposition, or

evaluate the site-specific condition to modify BMPs. North Plains will maintain temporary erosion and sediment control BMPs until final stabilization or permanent cover is established.[1]

North Plains may remove temporary erosion and sediment control BMPs installed across the travel lane during active daytime construction; however, North Plains will properly reinstall erosion and sediment control BMPs after equipment passage, or after construction crews complete activities in the area for the day. As necessary, North Plains will repair or replace erosion and sediment control BMPs prior to inclement weather. North Plains will be responsible for monitoring weather conditions and adjusting resources as needed to address pending and existing weather conditions.

5.7.1 Erosion Prevention

During construction, North Plains may suspend certain activities in wet soil conditions based on consideration of the following factors:

- extent of surface ponding;
- potential for rutting, defined as the creation of linear depressions made by tire tracks of machinery that results in the mixing of topsoil and subsoil;
- extent and location of potential rutting and compaction and determining whether traffic can be rerouted around the wet area; and
- type of equipment and nature of the construction operations proposed for that day.

North Plains will monitor weather forecasts to determine if significant rainfall is anticipated during construction. North Plains will plan work evaluating the forecast for the potential for wet conditions and prepare for and implement mitigation measures in the event of wet weather conditions and potential for excessive waterflow. North Plains will implement such corrective measures should conditions subsequently worsen. North Plains will cease work in the applicable area until North Plains determines that site conditions are such that work may continue in conformance with Project permits and regulatory authorizations.

5.7.2 Temporary Stabilization

North Plains will initiate temporary stabilization[2] of all exposed areas, including spoil piles, to limit soil erosion when construction crews have permanently or temporarily ceased construction activity on any portion of the site and will not resume activity for a period exceeding 14 calendar days. North Plains will complete stabilization no later than 14 calendar days after construction

[1] General Permit MTR100000, Montana Department of Environmental Quality, defines “final stabilization” as all soil-disturbing activities at the site have been completed, and a vegetative cover has been established with a density of at least 70 percent of the pre-disturbance levels, or equivalent permanent, physical erosion reduction methods have been employed. Final stabilization using vegetation must be accomplished using seeding mixtures or forbs, grasses and shrubs that are adapted to the conditions of the site. Establishment of vegetative cover capable of providing erosion control equivalent to pre-existing conditions at the site will be considered final stabilization. North Dakota Pollutant Discharge Elimination System General Permit for Storm Water Discharges Associated with Construction Activity NDR11-0000 defines “permanent cover” as the exposed ground surface has been covered by appropriate material such as grass, gravel, asphalt, and concrete or other material that prevents erosion from occurring.

[2] Temporary stabilization means a condition where exposed soils or disturbed areas are provided a temporary vegetative and/or non-vegetative protective cover to prevent erosion and sediment loss. Temporary stabilization may include temporary seeding, geotextiles, mulches, and other techniques to reduce or eliminate erosion until either final stabilization can be achieved or until further construction activities take place to re-disturb this area.

crews temporarily ceased the construction activity. This timeframe may be reduced in areas where the Project discharges to an agency-designated special or impaired water.

5.7.3 Mulch

North Plains will stabilize exposed ground surfaces within the periods described in Section 5.7.2. In most cases, North Plains will use mulch such as certified weed-free straw, wood fiber hydromulch, or a functional equivalent on disturbed areas, except for actively cultivated land and wetlands, as required by the applicable permits and authorizations, and as approved by the landowner or land-managing agency. North Plains may use other stabilization methods, such as staked sod, erosion control blanket, mats, or other material that prevents erosion from occurring based on site-specific conditions. Mulch will not be used in wetlands.

North Plains will uniformly distribute mulch by a mechanical mulch blower or by hand in areas not accessible to the mulch blower. North Plains will size strands of mulch to allow proper anchoring. North Plains will anchor or crimp mulch using a mulch-anchoring tool or disc set in the straight position to minimize loss by wind and water, as site conditions allow. In areas not accessible to a mulch-anchoring tool or too steep for safe operation, North Plains may anchor the mulch by liquid tackifiers. North Plains will follow the liquid tackifier manufacturer's recommended method and rate of application.

North Plains may use hydromulch and liquid tackifier in place of certified weed-free straw mulch. North Plains may use hydromulch on steep slopes to prevent erosion until final stabilization or permanent cover has been established.

5.7.4 Temporary Slope Breakers

North Plains will install temporary slope breakers to minimize concentrated or sheet flow runoff in disturbed areas with exposed soils. North Plains may construct temporary slope breakers using earthen subsoil material, silt fence, certified weed-free straw bales, or may use rocked trenches in non-agricultural land. On highly erodible slopes, North Plains will use slope breakers in the form of earthen berms whenever possible.

North Plains will construct temporary slope breakers according to the following specifications as applicable depending on site conditions:

- promptly intercept surface water before the volume of water and velocity increase enough to generate erosion;
- facilitate drainage toward natural dips, rocky ground, or vegetation to intercept sediment;
- height of the slope breaker will be a minimum of 4 inches and could be higher depending on site conditions;
- be at an approximately 20-degree angle to the slope and channel water to the downhill side;
- avoid directing sediment into drainages;
- certified weed-free straw bales used as slope breakers will be trenched in and

staked to not allow spacing between bales or allow flow underneath the bales;

- the outfall of temporary slope breakers will be directed off the Project workspace into an appropriate energy-dissipating sediment control device, such as filter socks, silt fence, straw bales, rock aprons, or sumps, to prevent the discharge of sediments, and the area will be inspected to ensure stabilization;

- proper slope breaker outfalls will be established where topsoil segregation or grading has created a barrier at the edge of the Project workspace;

- J-hook sediment traps will be installed at the perimeter of the erosion control zones on the downslope side of the Project workspace; and

- gaps will be created through spoil piles where necessary to allow proper out-letting of temporary berms.

5.8 GRADING, EXCAVATION AND FOUNDATION INSTALLATION

5.8.1 Grading And Topsoil Segregation

Prior to foundation installation, North Plains will establish a structure pad around the structure location to ensure a level and safe working area. In areas with uneven terrain, North Plains may need to grade the area around the foundation. North Plains will typically not perform grading in wetland areas. Where grading is required, North Plains will strip the topsoil layer and potentially part of the subsoil layer and will separate the topsoil and subsoil in storage piles within the Project workspace. North Plains will leave gaps between the spoil piles and will install erosion and sediment control BMPs where stockpiled topsoil and subsoil piles intersect with water conveyances, such as ditches or swales, to maintain natural drainage. North Plains will maintain separation in the form of a gap or a physical barrier, such as a thick layer of mulch or silt fence between the topsoil and subsoil piles to prevent mixing.

North Plains will segregate up to 12 inches of topsoil, unless otherwise dictated by applicable permits or regulations or requested by the landowner in areas of deep topsoil. Under no circumstances will North Plains use topsoil to fill a low area or backfill structure holes. If required due to excessively windy conditions, North Plains will tackify topsoil using either water or a suitable tackifier such as liquid mulch binder, as discussed in Section 5.7.3. North Plains will not use topsoil to construct ramps at road or waterbody crossings.

5.8.2 Excavation

The Project will require excavation for the drilled concrete pier foundations associated with the pole structures and foundations associated with the permanent facilities. To construct a cast-in-place foundation, North Plains will first make a vertical hole using power drilling equipment, such as truck- or track-mounted augers. In rocky areas, North Plains may excavate the foundation holes by blasting or by installing special rock anchor or micro-pile type foundations. North Plains will cover augured structure holes if construction crews are unable to fill the hole in the same day. North Plains will not place excess spoils from augured structure holes in wetlands, waterbodies, drainages that lead to waterbodies, or other environmentally sensitive areas. North Plains will either reincorporate excess rocks and gravel in the immediate vicinity of the excavation on the right-of-way or will remove excess rock and gravel for disposal as approved by the applicable owner..

5.8.3 Blasting

If North Plains encounter hard rock during grading or excavation for structure foundations, North Plains may need to perform blasting using explosives to loosen or fracture the rock to reach the required depth. Blasting will occur in accordance with the Blasting Plan in Attachment C. North Plains will require construction crews and the blasting supervisor to be thoroughly familiar with and comply with the rules and regulations of Occupational Safety and Health Administration and all federal, state, county, and local regulations governing blasting operations.

5.8.4 Foundation Installation

Once the hole is excavated as described in Section 5.8.2, North Plains will place structure bases into the excavated hole or, if soils are unstable, into a culvert, and the area around the pole will be backfilled with clean granular fill or concrete. For structures requiring a reinforced concrete foundation, North Plains will excavate the required hole and will place a rebar cage and anchor bolts into the excavation. Typically, North Plains will assemble the cages at the nearest staging area and deliver the cages to the structure site via flatbed truck. North Plains will then fill the excavation with concrete to a point where the rebar cage and anchor bolts are covered, leaving a typical one to two-foot reveal of the foundation above grade with exposed threaded anchor bolts. North Plains will then allow the complete foundation to cure. Typical equipment for this phase of construction includes dump trucks, drill rigs, cranes, vacuum trucks, concrete mixers, and tanker trucks.

North Plains will follow the BMPs described in Section 5.8.5 regarding concrete work, and in Section 5.8.6 regarding construction dewatering.

5.8.5 Concrete Work

North Plains will mix concrete for the pole structure and facility foundations typically off-site at the contractor laydown yards and will transport the concrete to the Project workspace. North Plains may perform some limited mixing outside of the Project workspace. North Plains will not perform washing of equipment used for mixing, pouring, or casting within 100 feet of any wetland or other environmentally sensitive feature. North Plains will collect and retain all concrete washout water and solids in leak proof containment. North Plains will limit wash water disposal to a defined area or to an area designated for concrete washout within the Project workspace, which will be identified on SWPPP maps. The area(s) will be sufficient to contain the wash water and residual cement and will include equipment capable of reclaiming wash water during washout. North Plains will conduct concrete washout activities in compliance with Project permits and authorizations.

5.8.6 Construction Dewatering and Discharge

In areas with high water tables, or where water is needed to stabilize the hole during drilling, it may be necessary to dewater the excavation. North Plains will typically use portable pumps to dewater the excavation; North Plains will base the number and size of pumps employed on the volume of water to be removed.

Prior to initiating dewatering activities, North Plains will approve the water discharge plan to ensure that erosion and sediment control BMPs are installed in such a way as to minimize the potential for water containing sediment from reaching a wetland or waterbody. North Plains will locate dewatering structures to avoid sensitive resources that may be affected by the discharges.

North Plains will not directly discharge water from construction dewatering into surface waters. North Plains will conduct all dewatering activities in accordance with the applicable permits, including the MDEQ General Permit for Construction Dewatering (GP MTG070000) and NDDEQ Temporary Discharge Permit (GP NDG0700000) (see Attachment L) and applicable water quality standards. Where required by permits, North Plains will conduct water quality sampling during construction dewatering activities.

Typically, North Plains will direct water to a well-vegetated upland area through a geotextile filter bag. North Plains will size geotextile bags for the discharge flow and suspended sediment particle size. Where the dewatering discharge point cannot be in an upland area due to site conditions and/or distance, North Plains will direct the discharge into a straw bale dewatering structure designed based on the maximum water discharge rate (see Appendix M). North Plains will use a straw bale dewatering structure in conjunction with a geotextile filter bag to provide additional filtration near sensitive resource areas.

If the Project requires construction dewatering during frozen conditions, North Plains will take measures to protect pumps from freezing to avoid disruptions in dewatering and potential spills or leaks of lubricants or fuel. These measures may include placing pumps inside portable shelters with heaters. North Plains will install structures early in the construction process before frozen ground conditions exist, where feasible, and will mark the locations of the filter bags placed outside of the Project workspace with lathe or a similar method to assist crews in relocating the filter bag for proper disposal. North Plains will remove dewatering structures as soon as practicable after completion of dewatering to remove the structure and filter bags before they are frozen.

Construction dewatering and discharging activities will follow applicable regulations and permit requirements to maintain compliance with Montana and North Dakota water quality standards.

5.9 ASSEMBLY AND ERECTION OF STRUCTURES

North Plains will transport monopole structures to each structure work area in sections by truck or helicopter, depending on topography and access. At the structure site, North Plains will place each pole section on wood blocking. First, North Plains will use a large crane to hoist the bottom pole section onto the structure foundation and mount the anchor bolts. Next, North Plains will lift the middle section(s) into place, using guide brackets to align the section. North Plains will then ensure proper alignment and secure the fitting. Finally, North Plains will guide and secure the top section into place to complete the structure.

Lattice tower assembly is similar to monopole structure assembly. North Plains will transport bundles of steel members and associated hardware and wood to each structure site by truck. Next, North Plains will lay out wood blocking, open the structure steel bundles, and place the structure steel bundles on the wood blocking for assembly. Typically, North Plains will assemble the leg extensions for the structures first using a small crane. Similar to monopole assembly, North Plains will then assemble subsections and hoist the subsections into place with a large crane. North Plains will fasten the subsections together to form a complete structure. A follow-up crew then tightens the bolts in the joints.

North Plains may use helicopters to erect structures. The use of helicopters for structure erection is typically limited to areas that are difficult to access, either due to a lack of roads, rough terrain, or both. North Plains will consider several site- and region-specific factors when deciding whether to use helicopters, including access to structure locations, presence of sensitive resources,

permitting restrictions, landowner needs and preferences, construction schedule, weight of structural components, time of year, elevation, availability of heavy lift helicopters, weather, and construction economics.

North Plains will transport the structure sections and associated hardware including insulators, hardware, blocking, and stringing sheaves to the helicopter fly yard by truck, where North Plains will assemble sections of each structure and stage the sections for transport to the right-of-way. Once staged for transport, North Plains will attach structure sections by cables from the helicopter to the top of the structure section and will airlift the structure section to the structure location. Upon arrival, North Plains will place the section directly onto the foundation or stack on top of the previously erected structure section.

North Plains will plan and communicate the assembly and erection activities to landowners and land-managing agencies in advance of structure construction activities to provide a safe work area. North Plains will implement good housekeeping practices to contain and remove construction related waste and debris during these activities in accordance with Section 5.12.

5.10 INSTALLATION OF CONDUCTORS AND WIRE PULLING AND TENSIONING

North Plains will erect temporary guard structures at road and railroad crossing locations where necessary to protect the public during stringing activities. The erection and dismantling of these temporary guard structures may require short-term traffic diversions. Traffic impacts resulting from wire-stringing may include short-term traffic diversions, traffic congestion, and brief road closures. North Plains proposes mitigation to address these impacts in the Traffic and Transportation Management Plan (see Attachment K).

North Plains will deliver insulators, hardware, and stringing sheaves to each structure site. North Plains will rig the structures with insulator strings and stringing sheaves at each conductor, dedicated metallic returns conductor, and OPGW position. For safety and efficiency reasons, North Plains will typically perform wire stringing and tensioning activities during daylight hours and typically schedule these activities at roadway crossings, coinciding with periods of minimal road traffic and minimizing traffic disruptions.

North Plains will pull or string pilot lines from structure to structure by either a helicopter or land-operated equipment, then thread the pilot line through the stringing sheaves at each structure. North Plains will use a helicopter to pull the pilot lines at roadway crossings to minimize or avoid impacts to road traffic.

Following pilot lines, North Plains will attach a stronger, larger-diameter line to conductors to pull them onto structures. North Plains will repeat this process until the conductor and OPGW are pulled through the sheaves. Stringing will use powered pulling equipment at one end and powered braking or tensioning equipment at the other end of a conductor segment. The tensioner, in concert with the puller, will maintain tension on the wires while they are fastened to the structures. Once each type of wire has been pulled in, North Plains will adjust the tension and sag, remove the stringing sheaves, and permanently attach the conductors to the insulators.

At tangent structures, North Plains will attach conductors to insulators using clamps, and at dead-end structures, North Plains will cut the conductors and attach the conductors to the insulator assemblies by “dead-ending” the conductors either with a compression fitting or an implosive-type fitting. Before proceeding with the implosive-type fitting, North Plains will follow notification procedures identified in the Blasting Plan (see Attachment C).

North Plains will plan and communicate the installation of conductors and wire pulling and tensioning activities to landowners and land-managing agencies in advance to provide a safe work area, avoid disruptions to adjacent activities, and to avoid environmental damage or the creation of nuisance conditions. North Plains will implement good housekeeping practices to contain and remove construction related waste and debris during these activities.

Following stringing and tensioning, North Plains will remove guard structures and reclaim the area as described in Section 6.

5.11 FACILITY CONSTRUCTION

North Plains will implement safety precautions during converter station and switchyard modifications and construction to protect human health. North Plains will set up barriers between energized facilities and the active workspace, restrict untrained personnel from entering the Project site, and meet equipment clearance requirements. When construction commences at the facilities, North Plains will remove the existing fence around the expansion area, grade the expansion, and replace the fence prior to further work at the site.

5.11.1 Converter Station Construction

North Plains will begin construction of the converter stations by surveying and staking the site as described in Section 5.2. North Plains will conduct soil borings at the approximate location of large structures and equipment and obtain soil resistivity measurements to confirm site characteristics.

Next, North Plains will perform site preparation work, including vegetation clearing, previously discussed in Section 5.4, and soil grading to establish a clear and flat working surface, discussed further in Section 5.8. North Plains will also construct permanent and temporary access roads, previously discussed in Section 5.3.

North Plains will compact the area for the structure foundation to the densities required for foundations to support buildings and structures. North Plains will use three types of foundations, as described below.

- Spread footings are placed by: excavating the foundation area; placing forms, reinforced steel, and anchor bolts; and, pouring concrete into the forms. After the foundation has been poured, the forms are removed, and the surface of the foundation is finished.

- Drilled pier foundations are placed in a hole made by a track- or truck-mounted auger. Reinforced steel and anchor bolts are placed into the hole using a track- or truck-mounted crane. The portion of the foundation above ground is formed. The portion below ground uses the undisturbed earth of the augured hole or a prefabricated cylinder as the form. After the concrete foundation has been poured, the form is removed, the excavation is backfilled, and the surface of the foundation finished.

- Slab-on-grade construction is like spread footing construction, except that a spread footing is a circular, square, or rectangular slab that is provided to support an individual column. Many spread footings may be needed to support a single large structure or building. A slab-on-grade foundation is a concrete slab that is poured at ground level and is used as the foundation of the entire building. Slab-on-grade

foundations are typically used for smaller structures and prefabricated buildings.

Concurrent with or following foundation installation, North Plains will install oil containment structures, as required to prevent oil from transformers, reactors, circuit breakers, and other oil-containing equipment from seeping into the ground in the event of a rupture or leak. Then, North Plains will install underground electrical raceways and copper ground grid, followed by steel structure and area lighting. North Plains will then erect the converter valve hall and ancillary buildings, along with various high-voltage apparatus typical of a converter station. The installation of high-voltage transformers will require special, high-capacity cranes and specially trained crews for the unloading, setting into place, and final assembly of the transformers. North Plains will place a crushed rock surface on the ground to create a stable, all-weather working surface with high resistivity, which increases allowable step and touch voltages, reducing risk of shocks to humans near the grounding system during an earth fault.

Fill materials that may be used to construct and maintain the converter stations may include aggregate materials such as gravel, sand, and clay. North Plains may use materials obtained on-site from grading or excavation activities for reincorporation as road base along access roads. Where suitable materials are not available on-site or approved for use, North Plains will purchase these materials locally, where possible. Fill materials will not contain unsuitable material (e.g., trash, debris, asphalt) and will be free of toxic pollutants in toxic amounts. Topsoil will not be used as fill.

North Plains will install a security fence around the portion of the site that will enclose the converter stations. North Plains will install locked gates at appropriate locations along the security fence for authorized access.

After North Plains has installed the equipment, North Plains will test the converter stations' systems. North Plains will then complete electrical energization of the facility. North Plains will time the energization of the facility to take place with the completion of construction of the transmission line and other Project facilities. After construction is completed, North Plains will remove and dispose of debris and unused materials from the site and will restore disturbed areas within the temporary workspace as described in Sections 5.12 and 6.

5.11.2 Switchyard

The switchyard construction will follow similar construction procedures as described for the converter stations, including performance of soil borings, followed by clearing, grading, and site preparation. Subsequently, the foundations, electrical raceways, interconnection apparatus, lighting, crushed rock, and a security fence will be installed. Once construction is completed, debris and unused materials will be removed and disposed of from the site and disturbed areas within the temporary workspace will be restored as described in Sections 5.12 and 6.

Fill materials that may be used to construct and maintain the switchyard may include aggregate materials such as gravel, sand, and clay. Materials obtained on-site from grading or excavation activities may be reincorporated as foundation base. Where suitable materials are not available on-site, or approved for use, these materials will be purchased locally, where possible. Fill materials will not contain unsuitable material (e.g., trash, debris, asphalt) and will be free of toxic pollutants in toxic amounts. Topsoil will not be used as fill.

5.12 CLEANUP AND ROUGH/FINAL GRADING

North Plains will dispose of all waste materials, including litter generated by construction crews, daily. Initial cleanup and rough grading activities may take place simultaneously. North Plains will perform cleanup immediately following construction when weather or seasonal conditions allow. Cleanup will involve the following:

- North Plains will remove construction debris, including litter generated by construction crews, and large woody debris.
- North Plains will either reincorporate excess rocks and gravel in the immediate vicinity of the excavation on the right-of-way, or remove excess rock and gravel for disposal as approved by the applicable owner.
- North Plains will install warning signs in locations in compliance with applicable regulations.
- North Plains will replace all temporary gates installed during construction with permanent gates, unless otherwise requested by the landowner.
- North Plains will repair or replace fences or other infrastructure removed or damaged during construction as agreed upon with the landowner or land-managing agency.

Rough grading includes restoring disturbed subsoil to as near as practicable to pre-construction conditions to provide proper drainage and decompacting subsoil, where applicable, as discussed in Section 6.2. Final grading consists of returning the topsoil to the location from which it was stripped and final contouring to near as practicable to pre-construction conditions. This includes repairing any rutting observed within the Project workspace. North Plains will either reincorporate excess subsoil in the immediate vicinity of the excavation on the right-of-way or remove and dispose of any remaining excess subsoil from excavations at an approved off-site location as needed to restore the site to pre-construction conditions to the extent practicable, and as requested by the landowner or land-managing agency.

For temporary access roads that are not to be left in place per landowner agreement or permits and authorizations, North Plains will grade the road area to pre-construction conditions to the extent practicable. North Plains will then prepare the seedbed and install or repair erosion control measures as described in Section 6.

North Plains will remove construction mats and temporary bridges once restoration activities have been completed and access to the Project workspace is no longer required.

6.0 RESTORATION

As previously described, North Plains will limit the areas of ground disturbance mainly to structure locations and along access roads. North Plains will cut tall vegetation along the full width of the right-of-way; however, herbaceous vegetation and root stock will typically remain in place. Restoration activities may include the following activities:

- North Plains will inspect, maintain, repair, and replace temporary erosion and sediment control BMPs until permanent cover is achieved as discussed in

Section 5.7.

- North Plains will conduct decompaction in areas where temporary access roads were developed and where grading occurred, as needed.
- North Plains will install permanent erosion and sediment control measures where needed.
- North Plains will apply temporary seed mix to minimize erosion potential to the extent practicable.
- North Plains will conduct permanent seeding in non-agricultural areas disturbed by construction activities.
- North Plains will remove construction mats and temporary bridges/culvert after restoration activities are complete.

North Plains will comply with the restoration conditions stipulated in the permits and authorizations issued by the land-managing agencies for the portions of the Project that cross public lands.

6.1 ROCK REMOVAL

North Plains will remove rocks exposed due to construction activity from the Project workspace prior to and after topsoil replacement. This effort will result in an equivalent quantity, size, and distribution of rocks to that found on adjacent lands, as determined by North Plains. North Plains will haul rocks removed from the construction area to a licensed disposal facility or will dispose of the rocks on the landowner's premises away from environmentally sensitive features with prior approval from the landowner or land-managing agency.

6.2 DECOMPACTION

In areas where grading has occurred particularly along upland temporary access roads, North Plains may decompact soils. North Plains will decompact the subsoil after rough grading and before topsoil replacement, in actively cultivated areas to relieve soil compaction and promote root penetration. North Plains will decompact soils on public lands as requested by the land-managing agency.

North Plains will rip or chisel compacted cultivated cropland and pasture a minimum of three passes up to 12 inches deep unless specifically requested otherwise by the landowner and in compliance with permits and federal and state laws. Soil conditions must be dry enough to shatter the compacted soil between the points of a subsoiler or chisel plow to lower the bulk density of soil and reduce compaction. Soil at the compacted depth must not be wet and plastic at the time of tilling, otherwise it will not reduce compaction. If subsequent construction and cleanup activities result in further compaction, North Plains will complete the measures described above a second time to alleviate the soil compaction.

If there is any dispute between the landowner and North Plains as to what areas need to be ripped or chiseled, or the depth at which compacted areas should be ripped or chiseled, North Plains will consult with the U.S. Department of Agriculture-Natural Resources Conservation Service (USDA-NRCS).

North Plains will test the decompacted Project workspace at regular intervals for compaction in agricultural lands. North Plains will use penetrometers or other appropriate devices and will conduct tests on the same soil type under similar moisture conditions in undisturbed areas immediately adjacent to the construction area to approximate pre-construction conditions.

If mechanical relief of compaction is deemed unsatisfactory by the landowner, North Plains will consider plowing under organic matter including wood chips and manure, planting a green crop such as alfalfa to decrease soil bulk density and improve soil structure, or other measures in consultation with the USDA-NRCS.

North Plains will replace topsoil to pre-existing depths once ripping and discing of subsoil is complete. After topsoil replacement, North Plains will till the soil with a disc or rolling harrow, drag harrow, Harley rake, field cultivator, chisel plow, or equivalent to break up large clods and to prepare the soil surface. Suitable conditions generally include a firm soil surface that is not too loose or too compacted. North Plains will prepare the soil to accommodate the seeding equipment and method to be used.

Some short-term decreases in agricultural productivity are possible in areas where ground disturbance has occurred, particularly access roads. North Plains will make reasonable efforts to restore agricultural productivity of the Project workspace and will address any related compensation obligations through agreements with landowners.

6.3 PERMANENT EROSION AND SEDIMENT CONTROL BMPS

During final grading, North Plains will stabilize slopes in areas other than cropland with erosion and sediment control BMPs. With exception for actively cultivated areas, North Plains will install permanent berms (i.e., diversion dikes or slope breakers) on slopes where ground disturbance has occurred, or where otherwise deemed necessary.

Measures for the construction of permanent berms will include the following as applicable depending on site conditions:

- North Plains will construct permanent berms to facilitate drainage toward natural dips, rocky ground, or vegetation to intercept sediment.
- North Plains will construct permanent berms to a minimum height of 4 inches or higher depending on site conditions.
- North Plains will construct permanent berms to be at an approximate 20-degree angle to the slope and channel water to the downhill side.
- North Plains will construct permanent berms to avoid directing sediment into drainages.
- North Plains will construct permanent berms of compacted earth, stone, or functional equivalent in conformance with the required regulatory authorizations and all applicable regulations governing this activity.
- North Plains will divert berm outfalls into an appropriate energy-dissipating sediment control device, such as filter socks, silt fence, or straw bales, until permanent cover or final stabilization is established to prevent discharge of

sediment (see Section 5.7). North Plains will extend berms slightly beyond the edge of the Project workspace if possible; however, only with the appropriate sediment capturing device. North Plains will inspect outfalls to ensure stabilization.

- North Plains will inspect and repair permanent berms as deemed necessary by North Plains to maintain function and prevent erosion.

Erosion and sediment control techniques for access roads will be built into the design, as further described in Section 5.3.

6.3.1 Erosion Control Blankets

North Plains will prepare the soil surface and install the erosion control blanket to ensure it is stable and the blanket makes uniform contact with the soil of the slope face or stream bank with no bridging of rills, gullies, or other low areas. North Plains will install the appropriate class of erosion control blanket in accordance with manufacturer recommendations and specifications on steep slopes that drain to surface waters, and at other locations based on site-specific conditions. North Plains will install erosion control blankets so they are generally parallel with the direction of the slope and will anchor erosion control blankets in accordance with manufacturer recommendations. North Plains will use erosion control blankets made of biodegradable, natural fiber such as straw or coir.

6.3.2 Project Seed Specifications

North Plains will purchase seeds that follow the seed and label specifications established by the Montana and North Dakota Departments of Agriculture. The Montana and North Dakota Departments of Agriculture require certificates of seed analysis for all seed mixes to manage the introduction of noxious weeds. North Plains will confirm seeds have been tested in accordance with state law(s) and within six months prior to purchase. Commercial seed will be either certified or registered seed. Seed mixture containers will be tagged in accordance with state law(s) and available for inspection. North Plains will collect seed tags during seeding activities. North Plains will review the tags prior to installation to confirm the seed mix complies with regulations and that the appropriate seed mix is applied in the correct location. Seeding will follow cleanup as closely as possible. North Plains will base seeding rates on Pure Live Seed.

If used, North Plains will treat legume seed with an inoculant specific to the species to enhance vigor and health of the plants and thereby increase nitrogen available in the soil for other plants. Inoculant will be applied in accordance with the manufacturer's recommended rate of inoculant appropriate for the seeding method, such as broadcasting, drilling, or hydroseeding.

North Plains will apply amendments, such as fertilizer and soil pH modifier materials, based on landowner agreements, except in wetlands. North Plains will consult with the local soil conservation authority and land-managing agency or landowner on the type and application of soil amendments recommended to establish the desired vegetative cover at that location. This may include soil testing.

North Plains will incorporate soil amendments into the normal plow layer as soon as possible after application.

North Plains will comply with the Project seed specifications stipulated by the land-managing agency on public lands.

6.4 SEEDING METHODS

North Plains will apply seed uniformly at specified rates by broadcasting, hydroseeding, or drill seeding. North Plains will ensure the seeding equipment is appropriate for the seed mix and is capable of dispensing native seeds without plugging or unevenly distributing the seed. To minimize ground disturbance along the entire corridor, North Plains will clear forested areas, but will leave roots and stumps in place. Within areas of cleared forest, it may not be practical to access large areas of ground with seeding and seedbed preparation equipment. In these areas, North Plains may require smaller vehicles to perform tasks such as preparing seedbeds with small rakes and surface packing after seeding. North Plains will suspend seeding activities if conditions are such that equipment will cause rutting of the surface in the designated seeding areas.

North Plains may use broadcast seeding at disturbed areas with exposed soil. North Plains will perform broadcast seeding at the rate specified in the mixture tabulation. North Plains will uniformly distribute seed by a mechanical hand-operated seeder or, in small seeding areas, by hand. Following seeding, North Plains will rake the surface with a cultipacker, harrow, or hand rake and firm the soil bed as appropriate to site conditions.

North Plains may use hydroseeding at disturbed upland areas where there is exposed soil. North Plains will not apply hydroseed in wetland locations. North Plains will perform hydroseeding at rate specified in the mixture tabulation. North Plains will apply seed in a broadcast, hydromulch slurry to clearly see any gaps in application and ensure uniform coverage of the seeding area. North Plains will ensure the hydroseeder provides for continuous agitation of slurry and a uniform flow of slurry. North Plains will pre-approve all hydromulch products.

North Plains may use seed drilling in areas where North Plains has removed stumps and have prepared a seed bed. Seeding equipment will be able to accommodate and uniformly distribute different sizes of seed at the required depth. Feeding mechanisms will be able to evenly distribute different seed types at the rates specified. North Plains will suitably firm the seedbed soil immediately following seed drilling.

North Plains will comply with the seeding requirements stipulated by the land-managing agency on public lands.

6.5 TEMPORARY REVEGETATION

North Plains may use temporary cover or seeding as a quick means to minimize soil erosion and reduce the potential for the establishment of noxious weeds. Temporary seed mixes are considered a cover crop and are made up of annual grasses, have rapid germination, and provide quick ground cover. These seed mixes are not intended to provide multi-year cover. Unless specifically requested by landowners or regulatory agencies, North Plains will not establish temporary vegetation on cultivated land or in inundated areas. North Plains will develop the temporary seed mixes to be used on this Project in coordination with the USDA-NRCS and the affected land-managing agencies. Seed mixes required by state and federal land management agencies are provided in Attachment N.

North Plains will establish temporary erosion and sediment control BMPs as described in Section 5.7 until permanent cover or final stabilization has been established.

6.6 PERMANENT REVEGETATION

North Plains will establish permanent vegetation in areas of exposed soils, such as graded areas, within the Project workspace and along temporary access roads that are to be restored to pre-construction conditions, except in actively cultivated areas and inundated wetlands. North Plains will select permanent seed mixes to augment revegetation via natural recruitment from native seed stock in the topsoil and not to change the natural species composition.

North Plains will develop the permanent seed mixes to be used on this Project in coordination with the USDA-NRCS and state and federal land managing agencies. North Plains will consult with the landowner regarding the desired seed mixes to be used on their property. Seed mixes requested by state and federal land management agencies are provided in Attachment N. North Plains will utilize a native prairie seed mix when seeding in areas of native prairie/unbroken grasslands, unless a different seed mix is required by the landowner, subject to regulatory approval.

The seed mixes authorized for use on federal land-management agency lands and on North Dakota Department of Land Trust lands are included in Attachment N.

North Plains will coordinate with the USFWS and state wildlife agencies to identify appropriate seed mixes on private lands near sensitive resources such as suitable habitat for federal- or state-listed species, subject to regulatory approval.

Native seed mixes can take two to three years to fully germinate depending on soil, site, weather conditions and the time of year that the seeds were installed. During the first year, native plants will typically grow to only about 1 to 3 inches tall. By the second year, some native grasses, sedges, and flowers may reach mature height, and some may flower, alongside many first-year native seedlings as well. Many of the native plants will mature and start flowering by the third year. Depending on the seed mix, other plants will not appear or mature for several years.

6.6.1 Permanent Seeding of Upland Areas

The Project primarily occurs within managed rangeland and agricultural areas. North Plains does not intend to seed actively cultivated areas; however, North Plains will seed with temporary cover crops or other mixes at the landowner request. In landscaped or lawn areas, North Plains will use turf grass seed mixes requested by the landowner. North Plains may reseed roadside areas with seed mixes that most closely resemble the current vegetation community, unless otherwise agreed upon with the landowner and/or road authorities, subject to regulatory approval.

6.6.2 Permanent Seeding of Wetland Areas

The Project will cross wetlands consisting of forested, scrub-shrub, and emergent wetland types. North Plains will use low ground pressure vehicles or construction mats in these wetlands for vegetation clearing and access; however, North Plains plans to span these wetlands to avoid structure placement within the wetlands to the extent practicable. Therefore, North Plains will avoid grading within these wetland communities, unless grading is required to restore inadvertent disturbance to a wetland during placement or removal of construction mats across the wetland. North Plans will continue to manage woody vegetation within these wetlands as further discussed in Section 8.

In wetlands, the preferred method for revegetation of disturbed areas is reliance on revegetation by resident plant communities. However, supplemental seeding may be beneficial at some locations to improve cover of bare soils and increase diversity. North Plains will use a wetland seed mix on exposed soils that most closely corresponds to the native vegetation community identified during North Plains wetland surveys conducted in accordance with USACE delineation protocols. North Plains will not apply fertilizer, lime, or mulch in wetlands.

6.6.3 Permanent Seeding of Waterbody Banks

The Project will cross waterbodies located in the Project workspace using the techniques described in Section 5.3.1. However, North Plains plans to span these waterbodies to avoid structure placement within bed or banks. Therefore, disturbance to waterbodies should be limited to the installation and removal of bridges, culverts, or fords. North Plans will continue to manage tall-growing woody vegetation within riparian areas as further discussed in Section 8.

North Plains will reestablish stream bank vegetation using a riparian seed mix that most closely corresponds to the native vegetation community to seed areas of exposed soils. North Plains will install temporary and permanent erosion and sediment control BMPs such as erosion control blankets until permanent cover or final stabilization is achieved, previously discussed in Sections 5.7.2 and 6.3.

6.6.4 Timing

North Plains will seed as soon as possible following final grading and seed bed preparation when the environmental conditions are appropriate. Table 6.6.4-1 provides the USDA-NRCS recommendations for the timing of native plant seed mixes based on species type and season (USDA-NRCS 2021 and 2025)..

TABLE 6.6.4-1

Time of Seeding

Species Type and Season of Planting	North Dakota (South Region)	Montana (Rangeland)
COOL SEASON SPECIES		
Spring [c]	Prior to May 10	Prior to May 15
Late Summer [a]	August 10 to September 15	May 15-August 1 [d]
Late Fall (dormant) [b,c]	See footnote [b]	See footnote [e]
WARM SEASON SPECIES		
Spring	May 10 to June 25	Prior to August 1 [d]
WARM/COOL SEASON MIX		
Spring	April 20 to June 1	Prior to August 1 [d]

[a] If legumes are part of a mixture, seed by August 25. For winter survival, it is essential that alfalfa plants reach the 6-leaf stage prior to fall dormancy. Alfalfa requires 6-8 weeks regrowth after emergence to develop the 6-leaf stage.

[b] Seeding may occur once soil temperatures drop to 40 degrees Fahrenheit for a minimum of 5 consecutive days (usually after November 1) based upon North Dakota Weather Network or actual field measurements at a depth of 2 inches.

[c] Pollinator plantings consisting of forbs only (no grasses) will be seeded during the spring or dormant seeding windows. Pollinator plantings consisting of forbs and grass mixtures will be seeded during the appropriate seeding widng fo the grass component of the mixture.

[d] Warm season species establish better in spring seedlings that fall season. Only when there is a minimum of two feet of moist soil; soil must also be moist to within two inches of the surface. Seeding must be completed before August 1.

[e] After October 15 or when the soil temperature at two inches below the soil surface remains at 40 degrees Fahrenheit or less for ten days or more. Seed before soil freezes.

Sources: USDA-NRCS, 2021; USDA-NRCS, 2025.

7.0 ENVIRONMENTAL COMPLIANCE

During construction, North Plains will employ Environmental Inspectors (EIs) responsible for ensuring compliance with environmental plans; permit and authorization conditions; and company commitments during Project activities. The EIs will report directly to a North Plains representative who has overall responsibility for successful implementation of all environmental permits and plans during construction. If required by permits and authorizations, North Plains will also employ Compliance Monitors who will report directly to the applicable agency.

During construction, the EIs will be on-site daily while construction activities are occurring. The EIs will be responsible for collecting the information required by the federal, state, and local permits and authorizations. North Plains' Environmental Project Manager will use this information to develop reports required by permits and authorizations. The EIs specific duties will include:

- attending daily construction meetings to discuss compliance issues with North Plains' Construction Team;
- managing and updating for environmental task punch list restoration tracking spreadsheets;
- serving as the point of contact for agency and Tribal authority staff who visit the construction site;
- recommending changes to EI staffing to maintain appropriate levels of environmental oversight necessary to ensure compliance with all environmental plans and regulatory permits and authorizations;
- immediately communicating any non-compliance or potential non-compliance to North Plains' Environmental Project Manager;
- verifying compliance with the conditions of environmental regulatory authorizations, environmental plans, and environmental requirements in landowner easement agreements. These requirements include, but are not limited to:
    - verifying that the limits of authorized construction work areas and locations of access roads are properly marked before the initiation of construction activities;
    - verifying the location of signs and highly visible flagging marking the boundaries of sensitive resource areas, such as wetlands, waterbodies, threatened and endangered species' habitat, or areas with special requirements along the construction work area;
    - verifying that the location of dewatering structures will not direct water into known cultural resources sites or locations of sensitive species or resources;
    - verifying that authorized dewatering and discharge activities are following state water quality standards, are not adversely impacting water chemistry

in accordance with permits, and that there are no unauthorized deposition of silt and/or sediment into a wetland or waterbodies;

- verifying that subsoil and topsoil are tested, as deemed necessary, in agricultural and residential areas to measure compaction and determine the need for corrective action;
- advising North Plains when conditions such as wet weather make it advisable to restrict construction activities to avoid rutting;
- verifying that the contours and topsoil are restored to their pre-construction conditions where grading activities have occurred;
- using the SWPPP and depicting BMP locations and techniques to verify that temporary and permanent erosion prevention and sediment control BMPs are installed in the proper locations to prevent sediment flow into wetland, waterbodies, sensitive areas, and onto roads;
- inspecting temporary erosion and sediment control BMPs to ensure compliance with the SWPPP and water quality standards;
- verifying that non-functional erosion and sediment control BMPs are repaired, replaced, or supplemented in accordance with permit requirements;
- identifying areas that will be given special attention to ensure stabilization and restoration after the construction phase, such as steeply sloped areas and waterbody crossings; and
- verifying that timing restrictions such as seasonal prohibitions as stipulated in permits are followed.

- identifying, documenting, and overseeing corrective actions, as necessary, to ensure compliance with regulatory permits and certifications; and
- documenting daily observations.

After construction activities are complete, North Plains' EIs will continue to inspect the Project workspace in accordance with the Montana and North Dakota Storm Water Construction General Permits. EIs will inspect areas where seeding and sediment and erosion control BMPs have been implemented and will follow up with reseeding measures where vegetative cover by the specified seed mix, or revegetation by the local, native seed source, is inadequate to provide final stabilization. EIs will inspect the Project right-of-way until final stabilization or permanent cover, as defined by the applicable Storm Water Construction General Permit, is achieved (see Section 5.7).

8.0 OPERATION AND MAINTENANCE

North Plains' primary goal is to construct the Project and then operate and maintain the Project and its right-of-way in a manner that ensures a safe and reliable transmission line. Clearing and managing vegetation is crucial for the Project's reliability and safety and to prevent

vegetation-related outages. The NERC established the reliability standard FAC-003-4 to prevent vegetation-related outages from occurring on electrical transmission systems operating at 200 kV or higher (NERC, 2016). The HVDC Transmission Line, Rosebud Transmission Line, Oliver Transmission Line, and Morton Transmission Line will be subject to FAC-003-4. The standard requires transmission line operators to implement a documented vegetation management program with an established Minimum Vegetation Clearing Distance[3] to prevent flashover between conductors and vegetation. North Plains will implement a vegetation management program and will comply with the Minimum Vegetation Clearing Distance.

8.1 ROUTINE INSPECTIONS

North Plains will conduct routine and preventative maintenance activities to identify and repair any deficiencies recorded by the inspector during routine monitoring and inspections. Routine and preventative maintenance activities can typically be performed in a short timeframe and do not result in ground disturbance. Examples of routine maintenance activities that will occur during the life of the Project are listed below:

- Fast Aerial Patrol: This inspection is planned to occur annually and includes a single day flyover of the transmission line with primary focus on gross defects.

- Climbing Inspection: This inspection technique is planned to occur approximately every three years at varying locations. This will include personnel climbing the pole structures with a primary focus on structure components and secondary focus on wire systems and insulator assemblies.

- Detailed Aerial Inspection: This inspection technique is planned to occur approximately every three years. This will include an extensive flyover effort with a primary focus on wire systems and insulators assemblies and a secondary focus on pole structure components.

- Ground Based Inspection: This inspection technique is planned to occur approximately every three years at varying locations. This will include personnel traveling to the structure site and reviewing the structure from the ground with a primary focus on guys, anchors, structure plumbness and orientation, and arrester condition. The secondary focus during this inspection will be on wire systems and insulator assemblies.

- Special Inspections: This inspection technique describes possible special inspections that may occur over time as the need is determined and may include detailed foundation inspection, infrared inspection, and corrosion detection.

North Plains will notify the applicable jurisdictional agency and landowners or land-managing agencies of routine and preventative maintenance activities prior to the start of work. North Plains will obtain prior approval from the appropriate jurisdictional agencies and landowners or land-managing agencies prior to conducting routine or preventative maintenance that falls outside the Project right-of-way, permanent access roads, or ownership. In the event of an emergency, North Plains will conduct maintenance that is deemed necessary to protect the health and safety

[3] The Minimum Vegetation Clearing Distance is the calculated minimum distance in feet to prevent flashover between conductors and vegetation at various altitudes for both HVDC and EHV AC operating voltages.

of the public and contact the appropriate jurisdictional agencies and landowners as soon as it is safe to do so.

9.0 PLAN REVISIONS

TABLE 9.0-1

Plan Revisions

Revision Number	Revision Type(s)	Revision Date
Rev 0	Initial draft plan.	March 2023
Rev 1	Revised per agency and North Plains comments.	August 2024
Rev 2	Revised to reflect Project changes. Updated language for consistency across all Project plans.	August 2025
Rev 3	Revised language for consistency across Project documents.	January 2026

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NORTH PLAINS CONNECTOR PROJECT

ATTACHMENT A

Federal Land-Management Agency Stipulations

Bureau of Land Management

Access Roads

On BLM lands, North Plains will install construction mats for temporary overland travel and temporary access roads that are used by equipment weighing over 10 tons, while soils are wet or moist. Where mats are not installed, North Plains will strip the topsoil on temporary overland travel and temporary access roads across BLM-managed lands that are used by equipment weighing over 10 tons while soils are wet or moist (BLM, 2015). Topsoil will be segregated and stored as described in Section 5.8.1 of the CMRP.

Fugitive Dust Control

North Plains will not use chemical additives on BLM-managed lands.

Temporary Erosion and Sediment Control BMPs

On BLM-managed lands, all construction activities will cease when ruts greater than 4 inches occur (BLM, 2015).

All topsoil piles on BLM-managed lands that are not returned within 30 days of disturbance will be seeded with BLM-approved seed mix (see Attachment M of the CMRP) to maintain soil biological activity (BLM, 2015).

Decompaction

Where topsoil is stripped for the construction of temporary overland travel and temporary access roads on BLM lands, after construction is complete, North Plains will decompact to a minimum depth of 18 inches in two perpendicular passes (BLM, 2015). The topsoil will then be returned, and the site seeded with a BLM-approved native seed mix based on soil types provided by the BLM.

Seed Specifications

Fertilizer will not be applied on BLM-managed lands (BLM, 2015).

On BLM-managed lands, drill seeding will be conducted using a rangeland drill spaced no greater than 6 inches and equipped with a depth regulator to ensure proper depth of planting. The seed mixture will be evenly and uniformly planted over the disturbed area. Smaller/heavier seeds have a tendency to drop to the bottom of the drill and are planted first. North Plains will take appropriate measures to ensure this does not occur (BLM, 2015).

Where drilling is not possible on BLM-managed lands, seed will be broadcast, and the area will be raked or chained to cover the seed. When broadcasting the seed, the seeding rate will be doubled. The seeding will be repeated until satisfactory vegetative cover is established as determined by the BLM. Evaluation of growth will not be made before completion of the second growing season after seeding. The BLM will be notified a minimum of seven days prior to seeding of the Project (BLM, 2015).

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Permanent Revegetation

On BLM-managed lands, seed mixes will not contain primary or secondary noxious weed seed in the seed mixture (see BLM seed mixes and installation requirements provided in Attachment M of the CMRP).

U.S. Forest Service and USDA Agricultural Research Service

Waterbody Crossings

North Plains will design waterbody crossings as described in Section 5.3.1 of the CMRP, and consistent with Forest Service Handbook (FSH) 2509.25 (USFS, 2006).

North Plains will install infrastructure as close as perpendicular to the axis of the stream channel as engineering constraints allow, creating the shortest and most stable crossing as required by FSH 2509.25.

In accordance with FSH 2509.25, North Plains will remove temporary waterbody crossings seasonally on USFS- and USDA ARS-managed lands.

Wetland Crossings

In accordance with FSH 2509.25, North Plains will not use ice roads in wetlands until there is at least 1 foot of packed snow or 2 inches of frozen soil on USFS- and USDA ARS-managed lands.

Temporary Erosion and Sediment Control BMPs

On NFS-managed lands, North Plains will implement erosion and sediment control BMPs in accordance with the National Best Management Practices for Water Quality Management on National Forest System Lands.[1]

Seed Specifications

On USFS- and USDA ARS-managed lands, North Plains will comply with the seed specifications provided in USFS Seed Scenario #13 included in Attachment M of the CMRP.

Permanent Revegetation

On USFS- and USDA ARS-managed lands, North Plains will comply with the seed specifications provided in USFS Seed Scenario #13 included in Attachment M of the CMRP.

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NORTH PLAINS CONNECTOR PROJECT

ATTACHMENT B

Agricultural Impact Mitigation Plan

NORTH PLAINS CONNECTOR

A Grid United Project

Draft Agricultural Impact Mitigation Plan

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North Plains Connector LLC

GRID UNITED

January 2026

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ACRONYMS AND ABBREVIATIONS

AIMP	Draft Agricultural Impact and Mitigation Plan
CMRP	Construction Mitigation and Reclamation Plan
Contractor	construction contractor
EI	Environmental Inspector
Grid United	Grid United LLC
North Plains	North Plains Connector LLC
NRCS	Natural Resources Conservation Service
Plan	Draft Agricultural Impact and Mitigation Plan
Project	North Plains Connector Project

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1.0 INTRODUCTION

North Plains Connector LLC (North Plains), a Delaware limited liability company formed pursuant to Section 18-201 of the Delaware Limited Liability Company Act, has prepared this Draft Agricultural Impact Mitigation Plan (AIMP or Plan) for the North Plains Connector Project (Project), a proposed interregional electric connector line. North Plains, an affiliate of Grid United LLC (Grid United), is a Houston, Texas-based company developing next generation energy infrastructure to power the future. Grid United is focused on the infrastructure needed to make the U.S. power grid more modern, efficient, reliable, and secure.

2.0 PLAN PURPOSE

This AIMP outlines the standard procedures that North Plains will implement throughout Project construction to minimize and mitigate construction-related impacts to agricultural land use, such as remediation of damage to drain tile and lines, prevention of interference with irrigation systems, segregation of topsoil, decompaction of soil, repair of fence, management of livestock, and removal of stone, in addition to special mitigation where crossing or adjacent to specialty practices, such as organic farms or apiaries.

North Plains has also developed a Construction Mitigation and Reclamation Plan (CMRP), which describes the construction procedures and mitigation measures North Plains will implement to reduce potential Project-related impacts. This Plan references the CMRP where additional guidance is provided therein.

3.0 REGULATORY COMPLIANCE

North Plains will coordinate with the Montana and North Dakota Departments of Agriculture, federal and state land management agencies, and other applicable federal, state, and local agencies regarding implementation of the AIMP. North Plains will comply with all applicable federal, state, county, and local regulations pertaining to the preservation of agricultural land.

Where permit and agency requirements differ, North Plains will follow the more stringent requirements.

4.0 ROLES AND RESPONSIBILITIES

North Plains will select a third-party construction contractor to construct the Project. The construction contractor (Contractor) will be responsible for site preparation, installation of support structures, general Project construction, testing and commissioning, health and safety, and environmental compliance including agricultural mitigation and restoration. However, North Plains is responsible for construction of all associated facilities.

For the duration of the Project construction, North Plains will implement and maintain the measures outlined in this Plan, the CMRP, and in all applicable Project permits.

4.1 ENVIRONMENTAL INSPECTION

North Plains will employ Environmental Inspectors (EI) during the construction phase. Further information on EIs and their responsibilities is provided in the CMRP.

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5.0 TRAINING

Before commencing construction, North Plains will organize environmental training sessions for relevant Project personnel. These training programs will cover relevant construction, restoration, and mitigation plans, including this Plan, along with any applicable permit conditions. Furthermore, North Plains will conduct large-group training sessions before each work crew begins construction, followed by periodic follow-up training for newly assigned personnel. Training will be documented, and training records will be saved with Project files.

6.0 AGRICULTURAL PROTECTION MEASURES

North Plains will reclaim the land to its former condition to the extent possible, or compensate each landowner, as appropriate, for damages and/or impacts to agricultural operations caused resulting from construction activities. North Plains will determine reclamation and compensation needs after discussion with the landowner or their designee.

6.1 ADVANCE NOTICE OF ACCESS TO PRIVATE PROPERTY

Once North Plains and landowners have reached agreements and construction activities have been scheduled, North Plains will provide the landowner or the landowner's designee with advance notice before beginning construction on the property. Prior notice will consist of a personal contact, email, letter, or a telephone contact informing the landowner or landowner's designee of North Plain's intent to access the land. North Plains will document all contact with landowners and, if requested, will provide copies of such documentation and any correspondence to North Plains.

North Plains will consult with landowners when planning the construction schedule to minimize impacts on livestock practices, calving, planting, harvesting, or other agricultural activities.

Where feasible, North Plains will coordinate Project activities to provide access for farm equipment and livestock to fields otherwise isolated by construction activities. North Plains will construct temporary fences and gates across the construction area to prevent entry by livestock, as necessary.

6.2 LIVESTOCK OPERATIONS

North Plains will construct temporary fences and gates during construction, as necessary. Any fences, gates, cattle guards, or corrals damaged by construction will be immediately repaired or replaced. Landowners may negotiate to assume the responsibility for repair, relocation, reconfiguration, or replacement of damaged fences or other livestock-related infrastructure in fair settlement with North Plains. In the event livestock requires temporary relocation or supplemental feed, North Plains will reimburse a reasonable cost incurred for the transport of livestock, acquisition of temporary pastureland, or additional supplemental feed during construction and reclamation activities in accordance with easement stipulations. Removal or alteration of existing range improvements on public land will be prohibited.

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6.3 IRRIGATION SYSTEMS

If Project construction activities or Project workspace intersect an operational or planned spray irrigation system, North Plains will work with the landowner or landowner's designee to establish an acceptable amount of time during which the irrigation system may be out of service.

If feasible and mutually acceptable to North Plains and the landowner(s), temporary measures will be implemented to allow an irrigation system to continue to operate across land on which the transmission lines are being constructed. North Plains will work with the landowner or landowner's designee to identify a preferable construction time. To avoid damaging the pipes or impeding access to the irrigation lines for maintenance, North Plains will work with landowners to identify the locations of underground water lines prior to finalizing structure locations to avoid siting the structures above or adjacent to buried lines.

If irrigation lines, or access to those lines for maintenance, are adversely impacted by construction activities associated with the Project, North Plains will restore the irrigation lines, including the relocation, reconfiguration, and replacement of existing lines, as needed. Landowners may negotiate to undertake the responsibility for repair, relocation, reconfiguration, or replacement of damaged lines in fair settlement with the North Plains. In the event a landowner chooses to undertake this responsibility, North Plains will not be responsible for correcting repairs after construction is complete.

6.4 ACCESS ROADS

If public roads do not provide sufficient access, North Plains will attempt to use existing private roads for access to and from the construction workspace. The location of access roads to be used for construction purposes requires agreement with the landowner or their designee. Temporary bridges, culverts, or other methods will be implemented so as not to impede proper drainage, as further described in the CMRP. Temporary roads will be removed upon Project completion. The land will be returned to its previous use and reclaimed as nearly as possible to the conditions that existed prior to construction, to include decompaction, where needed. Reclamation measures are described further in the CMRP and Section 6.12 of this Plan.

6.5 DUST CONTROL

North Plains will implement dust control measures during construction in accordance with the CMRP. North Plains will coordinate with farm operators to provide adequate dust control in areas where specialty crops are susceptible to damage from dust.

6.6 WEED CONTROL

Weed control will be carried out in accordance with the CMRP and Invasive and Noxious Weed Management Plans.

6.7 CONSTRUCTION IN WET CONDITIONS

During construction, North Plains may suspend certain activities in wet soil conditions based on consideration of the following factors:

- extent of surface ponding;

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- potential for rutting, defined as the creation of linear depressions made by tire tracks of machinery that results in the mixing of topsoil and subsoil;
- extent and location of potential rutting and compaction and determining whether traffic can be rerouted around the wet area; and
- type of equipment and nature of the construction operations proposed for that day.

North Plains will monitor upcoming weather forecasts to determine if significant rainfall is anticipated during construction. North Plains will appropriately plan work considering the potential for wet conditions and prepare to implement mitigation measures in the event of wet weather conditions and excessive waterflow. North Plains will implement such corrective measures should conditions subsequently worsen. North Plains will cease work in the applicable area until North Plains determines that site conditions are such that work may continue in conformance with the required regulatory authorizations.

6.8 PREVENTION OF SOIL EROSION

North Plains will implement erosion prevention and sediment control measures during construction in accordance with the CMRP.

Following construction, agricultural lands will be returned to the landowner, unless other arrangements have been made between North Plains and the landowner. North Plains will reseed and mulch non-cultivated agricultural land, such as pastures and perennial grass hayfields, in consultation with landowners or will make arrangements with landowners who prefer to conduct the reseeding of these areas. North Plains will work with the landowner or landowner's designee to prevent erosion on cultivated agricultural lands in instances where disturbed areas cannot be planted before the first winter season.

6.9 TOPSOIL SEPARATION AND STORAGE

Where grading is required, North Plains will strip the topsoil layer and potentially into the subsoil layer and will separate the topsoil and subsoil in storage piles within the Project workspace. North Plains will maintain separation in the form of a gap or a physical barrier, such as a thick layer of mulch or silt fence between the topsoil and subsoil piles to prevent mixing, as further described in the CMRP.

North Plains will segregate up to 12 inches of topsoil, unless otherwise dictated by applicable permits or regulations or requested by the landowner in areas of deep topsoil. Under no circumstances will North Plains use topsoil to fill a low area or backfill structure holes. North Plains will not use topsoil to construct ramps at road or waterbody crossings.

6.10 CONSTRUCTION WATER DISCHARGES

Appropriation and discharging activities will follow the requirements identified in the CMRP and applicable regulations and permit requirements to ensure compliance with Montana and North Dakota water quality standards.

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6.11 LAND LEVELING

Following the completion of construction, North Plains will restore the Project workspace to as close to the original pre-construction conditions as practicable as described in the CMRP. If uneven settling occurs or surface drainage problems develop as a result of construction, North Plains will provide additional land leveling services upon landowner's written notice, or as required by the conditions of permits and authorizations. The completion of land leveling will be scheduled in coordination with the landowner, weather and soil conditions permitting. Alternatively, North Plains will negotiate with the landowner for reasonable compensation in lieu of restoration.

6.12 COMPACTION, RUTTING, AND SOIL RESTORATION

In areas where grading has occurred particularly along upland temporary access roads, North Plains may decompact soils as described in the CMRP. Some short-term decreases in agricultural productivity are possible in areas where ground disturbance has occurred, particularly access roads. North Plains will make reasonable efforts to restore agricultural productivity of the Project workspace and will address any related compensation obligations through agreements with landowners.

North Plains will reclaim rutted land as near as practical to its pre-construction condition. North Plains will compensate landowners, as appropriate, for damages caused by construction.

6.13 EXCESS ROCK

North Plains will remove rocks exposed due to construction activity from the Project workspace prior to and after topsoil replacement as described in the CMRP.

6.14 SOIL AMENDMENTS

North Plains will apply amendments, such as fertilizer and soil pH modifier materials, based on landowner agreements, except in wetlands. North Plains will consult with the local soil conservation authority and land-managing agency or landowner on the type and application of soil amendments recommended to establish the desired vegetative cover at that location. This may include soil testing.

6.15 DAMAGED SOIL CONSERVATION PRACTICES

Soil conservation practices in place in the Project workspace, such as terraces and vegetated swales, that are damaged by construction activities will be restored to the extent practicable to their pre-construction condition.

7.0 PLAN REVISIONS

Table 7.0-1

Plan Revisions

Revision Number	Revision Type(s)	Revision Date
Rev 0	Initial Plan draft.	May 2025
Rev 1	Updated language for consistency across all project plans.	August 2025
Rev 2	Updated language for consistency across all project plans.	January 2026

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NORTH PLAINS CONNECTOR PROJECT

ATTACHMENT C

Blasting Plan

NORTH PLAINS CONNECTOR

A Grid United Project

Draft Blasting Plan

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Submitted by:

North Plains Connector LLC

GRID UNITED

January 2026

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ACRONYMS AND ABBREVIATIONS

CFR	Code of Federal Regulations
CMRP	Construction Mitigation and Reclamation Plan
Contractor	construction contractor
Grid United	Grid United LLC
North Plains	North Plains Connector LLC
Project	North Plains Connector Project
Plan	Draft Blasting Plan
USFWS	U.S. Fish and Wildlife Service

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1.0 INTRODUCTION

North Plains Connector LLC (North Plains), a Delaware limited liability company formed pursuant to Section 18-201 of the Delaware Limited Liability Company Act, has prepared this Draft Blasting Plan (Plan) for the North Plains Connector Project (Project), a proposed interregional electric connector line. North Plains, an affiliate of Grid United LLC (Grid United), is a Houston, Texas-based company developing next generation energy infrastructure to power the future. Grid United is focused on the infrastructure needed to make the United States' power grid more modern, efficient, reliable, and secure.

2.0 PLAN PURPOSE

Shallow bedrock is found through an extensive portion of the Project area, which may necessitate blasting to facilitate the excavation of foundations for transmission structures and facility infrastructure and access roads. If construction crews encounter hard rock during grading or excavation for foundations or access roads, crews may need to perform blasting using explosives to loosen or fracture the rock to reach the required depth. This Plan outlines the standard procedures that North Plains will implement during blasting, including safety precautions and notifications.

North Plains has also developed a Construction Mitigation and Reclamation Plan (CMRP), which describes the construction procedures and mitigation measures North Plains will implement to reduce potential Project-related impacts. This Plan references the CMRP where additional guidance is provided therein.

3.0 REGULATORY COMPLIANCE

North Plains will obtain all necessary permits and will comply with all legal requirements in connection with the use, storage, and transportation of explosives including Title 29 Part 1926 Subpart U of the Code of Federal Regulations (CFR), Title 49 CFR Chapter III. The State of Montana has incorporated federal regulations 29 CFR 1926.860, 29 CFR 1926.900 through 1926.914, and 29 CFR 1910.109) regarding the use of explosives into the Administrative Rules of Montana 24.131.406.

Additionally, North Plains will adhere to recommendations and requirements issued by the applicable land-managing agency, such as the U.S. Forest Service, the Bureau of Land Management, U.S. Department of Agriculture, Agricultural Research Service or State Trust Lands.

North Plains will employ qualified, experienced, and licensed professionals to perform blasting operations. North Plains will require the blasting supervisor to be thoroughly familiar with and comply with the rules, regulations, requirements, and conditions of the Occupational Safety and Health Administration and all federal, state, county and local regulations governing blasting operations. North Plains will require evidence of experience, licenses, certifications, and permits required to complete blasting operations.

Blasting operations will not proceed until appropriate permits have been obtained and approval by North Plains has been issued. Where requirements or conditions differ, the more stringent will apply.

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4.0 ROLES AND RESPONSIBILITIES

North Plains will select a third-party construction contractor to construct the Project. The construction contractor (Contractor) will be responsible for site preparation, installation of support structures, general Project construction, testing and commissioning, health and safety, and environmental compliance, including the contents of this Plan. However, North Plains is responsible for construction of all associated facilities.

For the duration of the Project construction, North Plains will implement and maintain the measures outlined in this Plan, the CMRP, and in all applicable Project permits.

4.1 ENVIRONMENTAL INSPECTION

North Plains will employ environmental inspectors (EIs) during the construction phase. Further information on EIs and their responsibilities is provided in the CMRP.

5.0 TRAINING

Before commencing construction, North Plains will organize environmental training sessions for relevant Project personnel. These training programs will cover relevant construction, restoration, and mitigation plans, including this Plan, along with any applicable permit conditions. Furthermore, North Plains will conduct large-group training sessions before each work crew begins construction, followed by periodic follow-up training for newly assigned personnel. Training will be documented, and training records will be saved with Project files.

6.0 STANDARD BLASTING PROCEDURES AND COMMITMENTS

North Plains will implement standard blasting best management practices throughout the duration of the Project. Only workers thoroughly experienced and licensed in handling explosives will be allowed to supervise, handle, haul, load, or shoot explosives. In those jurisdictions where the licensing of blasters is mandatory, the blasting supervisor will provide North Plains with proof of the required certification. No blasting will be done without approval from North Plains and the blasting supervisor.

Additionally, North Plains will conduct blasting in accordance with best management practices, such as the following:

- All blasting will be performed by current registered licensed blasters and will comply with regulatory requirements in connection with the transportation, storage, and use of explosives and blast vibration limits for nearby structures, utilities, and wildlife.
- North Plains will always protect workers and the public from any injury or harm that might arise from drilling dust and the use of explosives.
- North Plains will conduct blasting activities during regular, daylight working hours.
- North Plains will clear and clean up each blasting location before and after all blasting operations.

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- North Plains will conduct blasting in a manner to achieve small rock fragmentation of a maximum of 1 foot in diameter.
- North Plains may pile blasting mats or subsoil over the blast location to prevent flyrock from being blown outside the construction area.
- North Plains will use appropriate flags, barricades, and warning signals to ensure safety during blasting operations.
- North Plains will carefully plan and control all blasting activities near buildings, structures, and other facilities susceptible to vibration or air blast damage to eliminate the possibility of damage to such facilities and structures.
- Where blasting will be conducted in the vicinity of pipelines, North Plains will coordinate with the appropriate pipeline operator and will follow operator-specific procedures, as applicable.
- North Plains will perform blasting testing of surface-water resources and water wells within the distance established by applicable permits.
- Where damages result from blasting, the North Plains will repair such damage or provide fair compensation to the landowner or land managing agency.

6.1 SENSITIVE SPECIES

North Plains will avoid blasting activities within 0.5 mile of occupied bat hibernacula, if present, between November 1 and April 14, when hibernacula may be occupied. North Plains will develop site-specific blasting plans if blasting is proposed within 0.5 mile of an occupied bat hibernacula.

Based on the U.S. Fish and Wildlife Service (USFWS) 2024 Eagle Rule and coordination with USFWS to date, North Plains will seek a disturbance permit if construction or blasting are required within 0.5 mile of a bald or golden eagle nest or potential bald or golden eagle nest.

7.0 TRANSPORTATION OF EXPLOSIVES

Transportation of explosives will comply with all applicable federal, state, and local laws, including Title 29 CFR Part 1926 Subpart U and Title 49 CFR Chapter III. These regulations are administered by the U.S. Department of Transportation and regulate the packaging, labeling, materials compatibility, driver qualifications, and safety of transported explosives. Every effort will be made to minimize the transportation of explosives through congested or heavily populated areas.

7.1 FEDERAL REGULATIONS

Per Title 29 CFR Part 1926 Subpart U Section 1926.902:

- Motor vehicles or conveyances transporting explosives will only be driven by a licensed driver who is physically fit and familiar with the local, state, and federal regulations governing the transportation of explosives.

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- Smoking or carrying matches or any other flame-producing device, firearm, or loaded cartridges will be prohibited while in or near a motor vehicle transporting explosives.

- Explosives, blasting agents, and blasting supplies will not be transported with other materials. Blasting caps, including electric, will not be transported in the same vehicle with other explosives.

- Vehicles used for transporting explosives will be strong enough to carry the load without difficulty and will be maintained in good mechanical condition.

- When explosives are transported by an open-body vehicle, a Class II magazine or original manufacturer's container will be securely mounted on the bed to contain the cargo.

- All vehicles used for the transportation of explosives will have tight floors and any exposed spark-producing metal on the inside of the body will be covered with wood or other non-sparking material to prevent contact with containers of explosives.

- Every motor vehicle or conveyance used for transporting explosives will be marked or placarded on both sides, the front, and the rear with the word “Explosives” in red letters, not less than 4 inches in height, on white background.

- Each vehicle used for transportation of explosives will be equipped with a fully charged fire extinguisher, in good condition. An Underwriters Laboratory-approved extinguisher of not less than 10-ABC rating will meet the minimum requirement. The driver will be trained in the use of the extinguisher on his vehicle.

- Motor vehicles or conveyances carrying explosives, blasting agents, or blasting supplies, will not be taken inside a garage or shop for repairs or servicing.

- Motor vehicles carrying explosives will not be left unattended at any time.

Per Title 49 CFR Chapter III Parts 390-397:

- Every motor vehicle containing hazardous materials will be driven and parked in compliance with the laws, ordinances, and regulations of the jurisdiction in which it is being operated.

Where requirements differ, the more stringent will apply.

7.2 STATE REGULATIONS

7.2.1 Montana

Per the Administrative Rules of Montana 61-9-413, the State of Montana has the following requirements for vehicles transporting explosives.

- Any person operating any vehicle transporting any explosive as a cargo or part of a cargo upon a highway will at all times comply with the provisions of this section.

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- Vehicles transporting explosives will be marked or placarded on each side and the rear with the word "EXPLOSIVES" in letters not less than 8 inches high, or there will be displayed on the rear of such vehicle a red flag not less than 24 inches square marked with the word "DANGER" in white letters 6 inches high.

- Vehicles transporting explosives will be equipped with not less than two fire extinguishers, filled and ready for immediate use, and placed at a convenient point on the vehicle so used.

7.2.2 North Dakota

Per the North Dakota Century Code Section 39-21-44, any vehicle transporting any explosive or hazardous material as a cargo or part of a cargo upon a highway must be equipped with at least one fire extinguisher, filled and ready for immediate use, and placed at a convenient point on the vehicle.

North Plains will adhere to the Montana requirement of two fire extinguishers per vehicle, as it is the more stringent requirement.

8.0 ATTENDANCE AND SURVEILLANCE OF MOTOR VEHICLES

Class I explosives are defined in Title 49 CFR Part 173 as follows:

- Division 1.1: explosives that have a mass explosion hazard. A mass explosion is one which affects almost the entire load instantaneously.

- Division 1.2: explosives that have a projection hazard but not a mass explosion hazard.

- Division 1.3: explosives that have a fire hazard and either a minor blast hazard or a minor projection hazard or both, but not a mass explosion hazard.

- Division 1.4: explosives that present a minor explosion hazard. The explosive effects are largely confined to the package and no projection of fragments of appreciable size or range is to be expected. An external fire must not cause virtually instantaneous explosion of almost the entire contents of the package.

- Division 1.5: very insensitive explosives. This division is comprised of substances which have a mass explosion hazard but are so insensitive that there is very little probability of initiation or of transition from burning to detonation under normal conditions of transport.

- Division 1.6: extremely insensitive articles that do not have a mass explosion hazard. This division is comprised of articles which predominately contain extremely insensitive substances and that demonstrate a negligible probability of accidental initiation or propagation.

Class 2 materials explosives are defined in Title 49 CFR Part 173 as follows:

- Division 2.1: flammable gas

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- Division 2.2: non-flammable gas
- Division 2.3: poisonous gas

Class 3 materials explosives are defined in Title 49 CFR Part 173 as “flammable and combustible liquids.”

Class 4 materials explosives are defined in Title 49 CFR Part 173 as follows:

- Division 4.1: flammable solid
- Division 4.2: spontaneously combustible material
- Division 4.3: dangerous when wet material

Class 5 materials explosives are defined in Title 49 CFR Part 173 as follows:

- Division 5.1: oxidizer
- Division 5.2: organic peroxide

A motor vehicle which contains a Division 1.1, 1.2, or 1.3 material will be attended at all times by its driver or a qualified representative of the motor carrier that operates it, unless all the following conditions exist:

- the vehicle is located on the property of a motor carrier, on the property of a shipper or consignee of the explosives, in a safe haven, or, in the case of a vehicle containing 50 pounds or less of a Division 1.1, 1.2, or 1.3 material, on a construction or survey site;

- the lawful custodian of the explosives is aware of the nature of the explosives the vehicle contains and has been instructed in the procedures which will be followed in emergencies; and

- the vehicle is within the lawful custodian's unobstructed field of view or is located in a safe haven.

For purposes of this section:

- A motor vehicle will be considered attended when the person in charge of the vehicle is in the vehicle, awake, and not in a sleeper berth, or is within 100 feet of the vehicle and has it within their unobstructed field of view.

- A qualified representative of a motor carrier is a person who:

    - has been designated by the carrier to attend the vehicle;

    - is aware of the nature of the hazardous materials contained in the vehicle they attend;

    - as been instructed in the procedures they will follow in emergencies; and

    - is authorized to move the vehicle and has the means and ability to do so.

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- A safe haven is an area specifically approved in writing by local, state, or federal governmental authorities for the parking of unattended vehicles containing Division 1.1, 1.2, or 1.3 materials.

- The rules in this section do not relieve the driver from any obligation imposed by law relating to the placing of warning devices when a motor vehicle is stopped on a public street or highway.

8.1 PARKING

A motor vehicle which contains Division 1.1, 1.2, or 1.3 materials will not be parked under any of the following circumstances:

- on or within 5 feet of the traveled portion of a public street or highway;

- on private property, including on the premises of a fueling or eating facility, without the knowledge and consent of the person who is in charge of the property and who is aware of the nature of the hazardous materials the vehicle contains; or

- within 300 feet of a bridge, tunnel, dwelling, or place where people work, congregate, or assemble, except for brief periods when the necessities of operation require the vehicle to be parked and make it impracticable to park the vehicle in any other place.

A motor vehicle containing hazardous materials other than Division 1.1, 1.2, or 1.3 materials will not be parked on or within five feet of the traveled portion of public street or highway except for brief periods when the necessities of operation require the vehicle to be parked and make it infeasible to park the vehicle or equipment in any other place.

8.2 FUELING

Vehicle engines will remain off during fueling and personnel will be present and in control of the fueling process at the fuel tank until fueling is complete.

8.3 TIRES

A driver will examine each tire on a motor vehicle at the beginning of each use and each time the vehicle is parked. If a tire is found to be flat, leaking, or improperly inflated, the driver will repair, replace, or properly inflate the tire before the vehicle is driven again. However, if necessary, the vehicle may be driven to the nearest safe place to perform the required repair, replacement, or inflation.

If a tire is found to have overheated, the driver will immediately remove the overheated tire and place it at a safe distance from the vehicle. The driver will not operate the vehicle until the cause of the overheating is determined and corrected.

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8.4 SMOKING

Smoking will be prohibited during the loading, transporting, or unloading of explosives. Additionally, smoking or carrying of a lighted cigarette, cigar, or pipe will be prohibited on or within 25 feet of:

- a motor vehicle which contains Class 1 materials, Class 5 materials, or flammable materials classified as Division 2.1, Class 3, Divisions 4.1 and 4.2; or
- an empty tank motor vehicle which has been used to transport Class 3, flammable materials, or Division 2.1 flammable gases, which when so used, was required to be marked or placarded with the contents.

Smoking restrictions issued by land-managing agencies will be adhered to. Where requirements differ, the more stringent will apply.

8.5 DOCUMENTATION

A motor carrier that transports Division 1.1, 1.2, or 1.3 materials will furnish the driver of each motor vehicle in which the explosives are transported with a copy of the rules in this Plan and a document containing instructions on procedures to be followed in the event of accident or delay. The documents will include the nature of the explosives being transported, the precautions to be taken in emergencies such as fires, accidents, or leakages, and the names and telephone numbers of persons to be contacted in the event of an emergency. Drivers will sign a receipt for all received documents and will maintain the receipt for a minimum of one year from the date of signature.

9.0 SAFETY PROCEDURES

Safe storage and use of explosive materials will be a top priority during construction. North Plains will comply with all federal, state, and local laws and permit conditions regarding blasting safety.

9.1 STORAGE

At a minimum, the following storage requirements will be implemented:

- Explosives will be stored in an approved structure and storage facilities will be bullet-resistant, weather-resistant, theft-resistant, and fire-resistant.
- Storage sites will be located in out-of-sight areas with restricted access; kept cool, dry, and well ventilated; and will be properly labeled and signed.
- Detonators will be stored separately from other explosive materials.
- The most stringent spacing between individual magazines will be determined according to the guidelines contained in state or local explosive storage regulations.
- Both the quantity and duration of temporary on-site explosives storage will be minimized.

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- North Plains will handle and dispose of dynamite storage boxes in accordance with relevant federal, state, and local laws.

9.2 BLASTING NOTIFICATION AND SAFETY PROCEDURES

North Plains will obtain appropriate permits from the appropriate county as needed, for the period when blasting may occur. North Plains will follow best management practices for blasting, including the following:

- North Plains will post warning signs at all Project entry points. Warning signs will include information on blasting, including the general hours blasting might take place, and audible signals to be used warning of impending blasting and to indicate that the site is all clear.

- Access points to areas where blasting will take place will be blocked at least 30 minutes prior to blasting to prevent access by the public. The site will be swept 5 minutes prior to blasting to ensure no unauthorized personnel have wandered onto the site. An audible warning signal, capable of carrying for one-half mile, will be used at least 2 minutes prior to blasting. An all-clear signal will be given once it has been determined the area is safe.

- Blasting in the vicinity of pipelines will be coordinated with the pipeline operator and will follow operator-specific procedures, as necessary.

- A determination of all clear danger will be derived once the blasting area has been inspected for undetonated or misfired explosives. The blasting area will also be inspected for hazards such as falling rock and rock slides. Once the area has been inspected and these issues have been addressed, the all-clear signal as described above will sound and persons will be able to safely re-enter the blast zone.

- Additional safety precautions will be developed to address site-specific conditions at the time of the blast. Special attention will be given to preventing potential hazards in the blasting area resulting from flying rock, destabilized walls, structures, presence of low flying aircraft, and dispersion of smoke and gases.

- Damages that result solely from the blasting activity will be repaired or the owner fairly compensated.

9.3 FIRE SAFETY

The presence of explosive materials on the Project site could potentially increase the risk of fire during construction. Special precautions will be taken to minimize this risk including, but not limited to:

- prohibiting ignition devices within 50 feet of explosives storage areas;

- properly maintaining magazine and explosive storage locations so they are clear of fuels and combustible materials, well ventilated, and fire-resistant;

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- protecting stored magazines and explosives from wildfires that could potentially occur in the immediate area;
- posting fire suppression personnel at the blast site during periods of high fire danger;
- prohibiting operation of motor vehicles containing hazardous materials near open flames unless the driver has taken precautions and determined that the vehicle can safely pass the fire without stopping;
- prohibiting parking of motor vehicles containing hazardous materials within 300 feet of an open fire; and
- prohibiting blasting during applicable fire restriction periods as established by the Montana Department of Natural Resources and Conservation Interactive Fire Map (Montana Department of Natural Resources and Conservation, 2024) and the North Dakota Department of Emergency Services Fire Declarations and Burn Restrictions (North Dakota Department of Emergency Services, 2024) (see the Fire Prevention and Suppression Plan for further information on monitoring activities).

10.0 PLAN REVISIONS

Table 10.0-1

Plan Revisions

Revision Number	Revision Type(s)	Revision Date
Rev 0	Initial Plan draft.	February 2025
Rev 1	Updated language for consistency across all project plans.	August 2025
Rev 2	Updated language for consistency across all project plans.	January 2026

11.0 REFERENCES

Montana Department of Natural Resources and Conservation (DNRC). 2024. DNRC Interactive Fire Map. Available online at: https://mtdnrc.maps.arcgis.com/apps/webappviewer/index.html?id=6bea18851bec440d9260cb0d28f53281. Accessed July 2024.

North Dakota Department of Emergency Services. 2024. North Dakota Fire Declarations and Burn Restrictions Mapper. Available online at: https://experience.arcgis.com/experience/c5da309af17b4c48a3b953675a77f654. Accessed July 2024.

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NORTH PLAINS CONNECTOR PROJECT

ATTACHMENT D

Fire Prevention and Suppression Plan

NORTH PLAINS CONNECTOR

A Grid United Project

Draft Fire Prevention and Suppression Plan

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North Plains Connector LLC

GRID UNITED

January 2026

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ACRONYMS AND ABBREVIATIONS

BLM	Bureau of Land Management
CMRP	Construction Mitigation and Reclamation Plan
Contractor	construction contractor
Grid United	Grid United LLC
MTDNRC	Montana Department of Natural Resources and Conservation
NDDES	North Dakota Department of Emergency Services
NOAA	National Oceanic and Atmospheric Administration
NWS	National Weather Service
North Plains	North Plains Connector LLC
Project	North Plains Connector Project
Plan	Draft Fire Prevention and Suppression Plan
USDA	U.S. Department of Agriculture
USFS	U.S. Forest Service

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1.0 INTRODUCTION

North Plains Connector LLC (North Plains), a Delaware limited liability company formed pursuant to Section 18-201 of the Delaware Limited Liability Company Act, has prepared this Draft Fire Prevention and Suppression (Plan) for the North Plains Connector Project (Project), a proposed interregional electric connector line. North Plains, an affiliate of Grid United LLC (Grid United), is a Houston, Texas-based company developing next generation energy infrastructure to power the future. Grid United is focused on the infrastructure needed to make the United States' power grid more modern, efficient, reliable, and secure.

2.0 PLAN PURPOSE

This Plan provides measures that North Plains will implement throughout construction activities to reduce the potential for fires, the emergency procedures to be implemented in the event of a fire, including agency notifications, and procedures for restoration of a burned area.

North Plains has also developed a Construction Mitigation and Reclamation Plan (CMRP), which describes the construction procedures and mitigation measures North Plains will implement to reduce potential Project-related impacts. This Plan references the CMRP where additional guidance is provided therein.

3.0 REGULATORY COMPLIANCE

The prevention and suppression of wildfires in the Project area is carried out by the Bureau of Land Management (BLM), U.S. Department of Agriculture (USDA), U.S. Forest Service (USFS), and local fire districts and agencies. Individual fire crews from BLM Field Offices and USFS Ranger Districts coordinate fire suppression activities on federal land within their jurisdictions.

During implementation of Project construction activities, North Plains will:

- ensure that prevention, detection, pre-suppression, and suppression activities are conducted in accordance with this Plan; federal, state, and county laws; ordinances; and regulations pertaining to fire;
- accompany agency representatives on inspections and take corrective action upon notification that North Plains is out of compliance with fire-protection requirements; and
- restrict ground disturbance activities during applicable fire restriction periods as established by the Montana Department of Natural Resources and Conservation (MTDNRC) Interactive Fire Map (MTDNRC, 2024) and the North Dakota Department of Emergency Services (NDDES) Fire Declarations and Burn Restrictions (NDDES, 2024).

Contact information for reporting fires is presented in Table 7.1.1-1 of this Plan.

4.0 ROLES AND RESPONSIBILITIES

North Plains will select a third-party construction contractor to construct the Project. The construction contractor (Contractor) will be responsible for site preparation, installation of support

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structures, general Project construction, testing and commissioning, health and safety, and environmental compliance, to include hazardous materials management. However, North Plains is responsible for construction of all associated facilities.

For the duration of the Project construction, North Plains will implement and maintain the measures outlined in this Plan, the CMRP, and in all applicable Project permits.

North Plains will be responsible for providing all necessary fire suppression equipment to their employees and operating under the requirements of this Plan. All federal, state, and county laws, ordinances, rules, and regulations, which pertain to prevention, pre-suppression, and suppression of fires, will be strictly adhered to by North Plains. All personnel will be advised of their responsibilities under the applicable fire laws and regulations and the contents of this Plan.

The fire prevention and suppression measures described in this Plan will be in effect during the execution of Project construction activities. These restrictions may change by advance written notice by fire-control or federal authorities and where requirements differ, the more stringent will be applied.

4.1 ENVIRONMENTAL INSPECTION

North Plains will employ Environmental Inspectors during the construction phase. Further information on Environmental Inspectors and their responsibilities is provided in the CMRP.

5.0 TRAINING

Before commencing construction, North Plains will conduct environmental training sessions for relevant Project personnel. These training programs will cover relevant construction, restoration, and mitigation plans, including this Plan, along with any applicable permit conditions. Furthermore, North Plains will conduct periodic follow-up training for newly assigned personnel and as needed. Training will be documented, and the training records will be saved with Project files.

6.0 WILDFIRE AWARENESS

North Plains will monitor daily for local land management agency or other state- or local agency-issued fire warnings or restrictions for the Project area and adhere to any guidance provided.

The MTDNRC Interactive Fire Map (MTDNRC, 2024) identifies locations of fires, fire restrictions, smoke and air conditions, and Agency Protection Boundaries. The NDDES North Dakota Fire Declarations and Burn Restrictions Mapper (NDDES, 2024) lists burn restrictions, fire danger ratings, red flag warnings, and fire weather watches.

6.1 FIRE DANGER RATINGS

North Plains will use Fire Danger Ratings to direct daily activities and in-field crew safety meetings. Fire Danger Ratings consider current and recent weather, fuel types, and fuel moisture, and are used by agencies in determining mitigation or curtailment of operations.

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Fire Danger Ratings and their descriptions are available on the Wildland Fire Assessment website (Wildland Fire Assessment, 2024), the MTDNRC Interactive Fire Map (MTDNRC, 2024), and the NDDES Declarations and Burn Restrictions Mapper (NDDES, 2024).

6.2 RED FLAG EVENTS

The National Oceanic and Atmospheric Administration (NOAA) National Weather Service (NWS) Red Flag program issues Red Flag Warnings when warm temperatures, very low humidities, and stronger winds are expected to combine to produce an increased risk of fire danger. A Red Flag Warning is issued to advise of occurring or imminent red flag conditions, generally anticipated within the next 12 to 24 hours. The NWS may also issue a Fire Weather Watch to advise of the possible development of red flag conditions in the near future, generally anticipated within the next 24 to 72 hours (about 3 days).

Red Flag Warnings are posted on the NOAA NWS website at https://www.weather.gov/ (NOAA-NWS, 2024a).

NOAA criteria (NOAA-NWS, 2024b) for issuing a Red Flag Warning include the following:

- Relative humidity of 15 percent or less in addition to sustained surface winds, or frequent gusts, of 25 miles per hour or greater. Both conditions must occur simultaneously for at least 3 hours in a 12-hour period.
- Temperature higher than 75 degrees Fahrenheit.
- Widely scattered dry thunderstorms with 15 percent or more coverage over the area. A thunderstorm is considered “dry” if it produces less than 0.10 inch rainfall.

Additional factors that may contribute to a Red Flag Warning include:

- significant lightning occurrence after a hot, dry period;
- a significant cold frontal passage, which is expected to cause strong sustained and gusty winds, and an abrupt wind shift, especially dry cold fronts with little or no rainfall; and
- any combination of weather and fuels conditions such as long term drought, much higher than normal maximum temperatures coupled with very low humidity, and low fuel moisture.

Current fire conditions, dangers, and restrictions will be addressed in daily safety briefings and used to direct daily activities.

- North Plains will maintain awareness of active fires in the vicinity of the Project workspace including containment status, fire-fighting deployment activities, and potential for fire to interact with Project activities.
- North Plains will monitor meteorological and environmental conditions in the field to assess the risk and potential for fire for increased risk of conditions.

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- North Plains will discuss the evacuation plan prior to leaving vehicle parking locations.
- All personnel will identify and inform North Plains and other personnel of signs of an active fire, such as smoky smell or visible smoke.
- All personnel will be aware of other natural factors and human-induced activities in the Project area that increase exposure to a wildland fire, such as thunderstorms or non-project construction activities.

7.0 FIRE PREVENTION MEASURES

7.1 PRE-CONSTRUCTION AND CONSTRUCTION PHASES

7.1.1 Notifications

North Plains will notify the applicable agency(s) when a Project-related fire occurs within or adjacent to the construction area. North Plains will immediately take safe actions to prevent and suppress fires on and adjacent to the Project area that are a result of Project-related activities. Unless the fire exceeds immediate control, North Plains will employ its workers and equipment to prevent fire spread. If immediate control is not possible, all personnel will immediately exit the area to predetermined muster locations a safe distance from the fire and follow the steps outlined in this Plan.

Prior to construction, North Plains will contact the appropriate fire-control authorities to establish communications, obtain any required permits, such as burning or fire waiver permits prior to conducting burning activities, and/or fulfill other obligations as directed by fire-control authorities.

Table 7.1.1-1 below provides contact information for reporting fires within the Project area.

TABLE 7.1.1-1

Contact Information for Reporting Fire

Regulatory Authority	Address	Phone
U.S. Department of Agriculture – National Forest System Lands		
Dakota Prairie Grasslands	2000 Miriam Circle Bismarck, ND 58501	(701) 989-7300
Little Missouri National Grasslands	99 23rd Ave. W. Suite B Dickinson, ND 58601	(701) 227-7800
U.S. Department of Agriculture - Agricultural Research Station		
Fort Keough	243 Fort Keogh Road Miles City, MT 59301	(406) 874-8200
Bureau of Land Management		
Montana	111 Garryowen Road Miles City, MT 59301	(406) 233-2800 911
Montana Department of Natural Resources and Conservation		
Custer County	County Fire Warden 1010 Main Street Miles City, MT 59301	(406) 542-4304 911
Fallon County	Disaster Emergency Services 10 W Fallon Ave Baker MT 59313	(406)-778-7121 911

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TABLE 7.1.1-1 **Contact Information for Reporting Fire**		
Regulatory Authority	Address	Phone
Rosebud County	Fire Chief 242 East Front St Forsyth, MT 59327	(406) 253-0208 (406) 346-4270 911
North Dakota Department of Emergency Services		
Golden Valley County	Emergency Manager PO Box 67 Beach, ND 58621-0067	(701) 872-3713 911
Grant County	Emergency Manager PO Box 261 Carson, ND 58529-0261	(701) 622-3944 911
Hettinger County	Emergency Manager 336 Pacific Ave Mott, ND 58646-7502	(701) 824-4227 911
Morton County	Emergency Manager 210 2nd Ave NW Mandan, ND 58554-3124	(701) 667-3290 911
Oliver County	Emergency Manager PO Box 39 Stanton, ND 58571-0039	Office: (701) 745-3022 Cell: (701) 301-0446 911
Slope County	Emergency Manager Amidon, ND 58620-9691	(701) 879-6329 911

7.1.2 Equipment

North Plains' Contractor will have adequate suppression equipment on site in sufficient numbers so each employee on-site has access to fire suppression equipment commensurate with the types of activities performed.

- Equipment may include water trucks; portable water pumps; water backpacks; chemical fire extinguishers; hand tools such as shovels, axes, Pulaski fire tools, and chain saws; and heavy equipment adequate to construct fire breaks.
- Personnel will also be equipped with appropriate personal protective equipment, such as a hard hat, work gloves, and eye protection. Fire retardant clothing will be used in accordance with federal regulations.
- All equipment will be maintained in a serviceable condition and will be readily available.

7.1.3 Communications

North Plains will be responsible for maintaining contact with fire-control agencies and will be equipped with a radio, satellite, or cellular telephone to enable immediate contact with local fire-control agencies. If telephone coverage is not available, North Plains will use the radio to contact their base, who will telephone emergency dispatch.

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7.1.4 Restricted Operations

North Plains will restrict or cease operations in specified locations during periods of high fire danger at the direction of the land management agency's closure order. Restrictions may vary from stopping certain operations at a given time to stopping all operations. It will be North Plains' responsibility to ensure personnel are aware of and following area fire orders.

7.1.5 Smoking

- North Plains will designate areas for smoking and will prohibit smoking of any kind around flammable materials at all times and on the entire construction site when the fire hazard is high.
- Smoking will be strictly prohibited on private lands, as well as anywhere there is vegetation or other combustible fuel source in the immediate vicinity and/or on/along any public roads that are not improved, such as gravel or pavement.
- On public lands where conditions allow smoking, unfinished product and cigarette filters will be disposed of via appropriate means, such as in a bottle with water or other device designed for the purpose of safe disposal of such products.

7.1.6 Parking

- Motorized equipment, including worker transportation vehicles, will only be driven or parked within the designated and approved work limits.
- Equipment and personal vehicle parking areas, staging areas, and designated vehicle-parking areas may be cleared to remove potentially flammable vegetation material. Clearing will extend a minimum of 2 feet beyond the edge of the area to be occupied but not beyond the boundaries of the approved Project workspace.
- Whenever possible, parking will be avoided in, on, and over vegetation or any other combustible material.
- Hot engines and equipment components such as mufflers can potentially increase the risk of fire ignitions in vegetated areas. Where vegetation is present, and prior to parking, personnel will first stomp down the vegetation and then use water distribution systems to wet the vegetation beneath and immediately adjacent to where each vehicle will be parked.
- After parking, vehicle undercarriages will be visibly inspected for signs of debris or vegetation contact with the vehicle heat sources.
- Whenever possible, vehicles will be backed into their parking spots to allow for a quick exit in the event of an emergency. Where backing in is not viable, space will be maintained between parallel parked vehicles, so vehicles are able to freely leave the area. When and where safe to do so, keys will be left in the vehicle so that any driver can quickly move the vehicle.

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7.1.7 Maintenance

- Vehicles, including utility terrain vehicles, will be regularly washed and serviced to ensure vehicle cooling systems are efficient and as often as needed to remove vegetation that could become a combustible fuel source. While performing morning vehicle walkaround inspections, North Plains' Contractor will also inspect vehicle radiators and the undercarriage.

- Water storage systems will be full at the start of every day and refilled during the day, as necessary.

- Fire extinguishers will be inspected at the start of each day to ensure proper charge.

- Batteries for communications devices, such as cellular phones, satellite phones, SPOT Beacons, or similar devices will be fully charged at the start of each day.

7.1.8 Refueling

- Fuel trucks will have a large fire extinguisher charged with the appropriate chemical to control electrical and gas fires.

- All equipment and vehicle refueling will be done in a designated area that has been cleared of flammable material prior to initiating refueling activities.

7.1.9 Welding

- Standard fire equipment will be located in all vehicles and at welding sites. A spark shield will be required. All equipment will be kept in a serviceable condition and readily available.

- Flammable vegetation will be soaked with water or removed from an area large enough to contain all sparks from any spark-producing equipment or tools, including welding, cutting, drilling steel, or grinding.

- A spotter will be designated to watch for fire while equipped with suppression tools including fire extinguishers, a shovel, and a backpack water pump.

- Spark-producing activities will be completed while fire suppression personnel are present within the construction area to monitor for the possibility of ignition from smoldering embers.

7.1.10 Blasting

The presence of explosive materials on the Project site could potentially increase the risk of fire during construction. Special precautions will be taken to minimize this risk in conjunction with this Plan, the Blasting Plan, and the CMRP including, but not limited to:

- prohibiting ignition devices within 50 feet of explosives storage areas;

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- properly maintaining magazine storage sites so they are clear of fuels and combustible materials, well ventilated, and fire-resistant;
- protecting magazines and magazine storage sites from wildfires that could occur in the immediate area;
- posting fire suppression personnel at blast sites during high fire danger periods; and
- prohibiting blasting during extreme fire danger periods or as directed by agencies.

7.1.11 Burning

- North Plains may allow the burning of non-merchantable wood in accordance with all state and local regulations where North Plains has acquired the applicable permits and approvals from applicable agencies and landowners.
- Burning will not be allowed in wetlands or agricultural lands.
- Burning within 100 feet of a wetland or waterway will be prohibited without site-specific approval in advance from North Plains and in accordance with applicable permits and approvals.
- Crews will conduct burning, if necessary, in compliance with fire danger ratings and warnings.

7.1.12 Flammable Liquids and Explosives

- The handling and use of explosives will be conducted in strict conformance with all local, state, and federal regulations, and as detailed in this Plan, Blasting Plan, and the Hazardous Materials and Waste Management Plan.
- North Plains will store flammable materials in approved containers away from ignition sources and remove flammable waste from the construction site.
- Glass containers will not be used to store gasoline or other flammables.

7.1.13 Spark Arrestors

All equipment assigned to the Project will be inspected and approved by North Plains. Stationary and mobile internal combustion engines will be equipped with spark arrestors that meet agency standards, and for which the following standards will apply:

- Light trucks and cars with factory-installed mufflers in good condition may be used on roads where the roadway is cleared of all vegetation.
- Vehicles equipped with catalytic converters may present potential fire hazards and will be parked in areas where vegetation is less than 8 inches tall.

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- Spark arrestors will be used on roads where vegetation exists and will be maintained in good working order.

7.1.14 Road Closures

North Plains will coordinate with local road authorities and the appropriate fire-suppression agencies of any scheduled road closures to ensure emergency routes are available. North Plains will minimize, to the extent possible, the duration of road closures. North Plains will work with the local road authorities to identify a bypass or detour if necessary. North Plains will clearly mark all bypasses or detours and will designate one person to direct traffic for the duration the bypass or detour is in use.

7.1.15 Inspections and Monitoring

North Plains will ensure flammable operations, such as welding, and suppressed fires are monitored until determined completely extinguished. Federal, state, and local fire-control agencies may perform inspections in areas under their jurisdiction at their discretion.

8.0 FIRE SUPPRESSION MEASURES

8.1 PRE-CONSTRUCTION AND CONSTRUCTION

If a fire occurs within the Project area during construction, North Plains will take the following actions:

- Ensure the safety of all personnel in the area.
- Take immediate action to suppress fires using available manpower and equipment.
- Immediately notify the nearest fire-suppression agency of the fire location, action taken, and status.
- Relinquish fire-suppression activities to agency fire-management officers upon their arrival.

If a reported fire is controlled, North Plains will note the location and monitor the progress in extinguishing the fire. North Plains will designate an employee to remain at the scene until the fire is fully extinguished. The extinguished fire will be monitored in accordance with procedures described in this Plan.

- If the fire is unmanageable field crews will, in the following order:
    - evacuate via planned routes to predetermined safe locations,
    - call 911, and
    - call the district dispatch for the area.

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9.0 PLAN REVISIONS

TABLE 9.0-1

Plan Revisions

Revision Number	Revision Type(s)	Revision Date
Rev 0	Initial plan draft.	March 2025
Rev 1	Updated language for consistency across all project plans.	August 2025
Rev 2	Updated language for consistency across all project plans.	January 2026

10.0 REFERENCES

Montana Department of Natural Resources and Conservation. 2024. DNRC Interactive Fire Map. Available online at: https://mtdnrc.maps.arcgis.com/apps/webappviewer/index.html?id=6bea18851bec440d9260cb0d28f53281. Accessed July 2024.

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NORTH PLAINS CONNECTOR PROJECT

ATTACHMENT E

Hazardous Materials and Waste Management Plan

NORTH PLAINS CONNECTOR

A Grid United Project

Draft Hazardous Materials Management Plan

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North Plains Connector LLC

GRID UNITED

January 2026

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ACRONYMS AND ABBREVIATIONS

CMRP	Construction Mitigation and Reclamation Plan
Contractor	construction contractor
DOT	Department of Transportation
EPA	U.S. Environmental Protection Agency
Grid United	Grid United LLC
North Plains	North Plains Connector LLC
Plan	Draft Hazardous Materials Management Plan
Project	North Plains Connector Project

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1.0 INTRODUCTION

North Plains Connector LLC (North Plains), a Delaware limited liability company formed pursuant to Section 18-201 of the Delaware Limited Liability Company Act, has prepared this Draft Hazardous Materials Management Plan for the North Plains Connector Project (Project), a proposed interregional electric connector line. North Plains, an affiliate of Grid United LLC (Grid United), is a Houston, Texas-based company developing next generation energy infrastructure to power the future. Grid United is focused on the infrastructure needed to make the United States' power grid more modern, efficient, reliable, and secure.

2.0 PLAN PURPOSE

This Plan provides measures North Plains will use throughout construction to reduce the risks associated with the use, storage, transportation, production, and disposal of hazardous materials, including hazardous substances and wastes.

The objectives of this Plan are to minimize the potential for a spill of fuel or other hazardous material, contain any spill to the smallest possible area, mitigate any hazardous material spill, and protect areas that are environmentally sensitive.

North Plains has also developed a Construction Mitigation and Reclamation Plan (CMRP), which describes the construction procedures and mitigation measures North Plains will implement to reduce potential Project-related impacts. This Plan references the CMRP where additional guidance is provided therein.

3.0 REGULATORY COMPLIANCE

Construction activities associated with the Project are subject to various regulations regarding the storage and handling of hazardous materials. When assessing which mitigation measures are appropriate for a specific area, North Plains will adhere to this Plan and the applicable federal, state, and local permits that condition or regulate hazardous waste management. Where permit and agency requirements differ, the more stringent requirements will be followed.

In the event of an unanticipated release, North Plains will follow the steps and notification requirements outlined in the Spill Prevention and Response Plan to maintain compliance with regulatory reporting requirements.

4.0 ROLES AND RESPONSIBILITIES

North Plains will select a third-party construction contractor to construct the Project. The construction contractor (Contractor) will be responsible for site preparation, installation of support structures, general Project construction, testing and commissioning, health and safety, and environmental compliance, to include hazardous materials management. However, North Plains is responsible for construction of all associated facilities.

For the duration of Project construction activities, North Plains will implement and maintain the measures outlined in this Plan and in all applicable Project permits.

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4.1 ENVIRONMENTAL INSPECTION

North Plains will employ Environmental Inspectors during the construction phase. Further information on Environmental Inspectors and their responsibilities is provided in the CMRP.

5.0 TRAINING

Before commencing construction, North Plains will organize environmental training sessions for relevant Project personnel. These training sessions will cover relevant construction, restoration, and mitigation plans, including this Plan, along with any applicable permit conditions. Construction staff will be trained on the hazardous material management requirements, including proper handling, storage, and disposal. Furthermore, North Plains will conduct large-group training sessions before each work crew begins construction, followed by periodic follow-up training for newly assigned personnel. Training will be documented, and training records will be saved with Project files.

6.0 HAZARDOUS MATERIAL AND WASTE MANAGEMENT

Construction of the Project will require the use of certain potentially hazardous materials, such as fuels, oils, explosives, as well as herbicides or pesticides. Hazardous materials have the potential to pose a significant threat to human health and the environment based upon their quantity, concentration, or chemical composition.

Potential risks associated with these materials can be reduced substantially when stored, used, transported, and disposed of properly, as described in the following sections.

North Plains will also follow cleanup procedures outlined in the Spill Prevention and Response Plan in the event of spills of potentially hazardous materials during construction and operation of the Project.

6.1 OVERVIEW OF HAZARDOUS MATERIALS PROPOSED FOR USE

To the maximum extent possible, North Plains will minimize the use and generation of hazardous waste during the Project, including, but not limited to, minimizing the amount of hazardous materials needed for the Project; using alternative non-hazardous substances; recycling usable material such as oils, paints, and batteries; and filtering and reusing solvents and thinners.

Hazardous materials used during Project construction may include petroleum products such as gasoline, diesel fuel, and hydraulic fluids; lubricating oils and solvents; cleansers; explosives; and pesticides, herbicides, and fertilizers. North Plains will prepare a complete inventory of all hazardous materials onsite during Project construction. North Plains will maintain copies of the required Safety Data Sheet for each hazardous chemical onsite and will ensure that copies are readily accessible during each work shift to all employees within their respective work areas.

All materials used during construction will be used according to manufacturer recommendations; labeling; federal, state, and local regulations; and as outlined in the Project CMRP. Herbicide storage and application will follow the requirements described in the Invasive and Noxious Management Plan.

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North Plains will be responsible for consulting with the applicable agencies if extremely hazardous substances are to be used during Project activities.

6.2 STORAGE OF HAZARDOUS MATERIALS

Hazardous materials will be stored in designated locations only. Hazardous materials will not be stored in surface water conveyances, or within the 100-year floodplain. North Plains will prohibit storage of hazardous materials within 100 feet of a waterbody, wetland boundary, spring, environmentally sensitive area, or within a municipal watershed. North Plains will also prohibit use and storage of hazardous materials, chemicals, fuels, lubricating oils, and other petroleum products within 200 feet of active private water wells and identified public or municipal water wells.

Secondary containment will be of sufficient size to contain the contents of the single largest unit stored at any one time, plus 10 percent. Additional precautions will include limiting the quantity and amount of time such materials are stored near surface waters, implementing barriers between hazardous materials and the surface waters, and employing trained personnel to monitor activities at the storage location(s). Cleanup materials, including absorbent spill pads, booms, and plastic bags will also be stored in these areas and in quantities sufficient to contain a release, should one occur. No smoking signs will be conspicuously placed wherever there is a hazard from a flammable or reactive material. Explosives storage is discussed in detail in the Project CMRP and Blasting Plan. North Plains will maintain records of stored hazardous waste or materials throughout Project construction.

6.2.1 Storage Containers

Containers storing hazardous waste or materials will be compatible with the wastes or materials stored. Materials will not be stored in containers that previously held an incompatible waste or material. Containers storing hazardous wastes will be labeled, dated, and kept sealed at all times, except when adding or removing contents. Hazardous wastes and materials will be secured in a manner which prevents damage, vandalism, or theft. All storage areas will be secured via gates, locks, or guard personnel at night and during periods of non-construction.

Secondary containment will be provided for all hazardous liquid materials stored on-site and will consist of bermed or diked areas, spill pallets, or other appropriate storage capable of holding 110 percent of the volume of the largest volume of stored material. North Plains will inspect containers weekly at a minimum to verify the integrity of the containers and secondary containment systems. If a container is damaged or leaks, the waste will be transferred to an appropriate container in good condition.

6.2.2 Container Labeling Requirements

North Plains will comply with the following labeling requirements for any container used on site to store hazardous wastes. Containers will be labeled with the information below and as required in 40 CFR 262:

- the waste accumulation start date and the words “hazardous waste;”
- the composition and physical state of the waste; and

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- warning words indicating the particular hazards of the waste, such as flammable, corrosive, reactive, or toxic.

6.3 TRANSPORTATION OF HAZARDOUS MATERIALS

Procedures for loading and transporting fuels and other hazardous materials will meet the minimum requirements established by the U.S. Department of Transportation (DOT), Montana and North Dakota DOTs, U.S. Forest Service, and Bureau of Land Management, as well as other pertinent regulations.

Hazardous materials used for the Project will, at all times, be properly stored in approved containers and labeled, including during transportation. Containers used for transportation will comply with U.S. DOT and applicable state transportation requirements. Smaller containers will be used on site to transport needed amounts of hazardous materials to a specific location. Transfer of materials from large to small containers will be performed using the appropriate equipment, including pumps, hoses, and safety equipment; hand pouring techniques will not be used.

Prior to transporting hazardous materials, appropriate shipping papers will be completed, and North Plains will inspect the containers to ensure they are sealed in such a manner that no material will be released. Transportation of hazardous materials will be performed by a licensed hazardous materials transport contractor in accordance with all federal, state, and local regulations. In addition, North Plains will ensure all handling or packaging of hazardous materials and all paperwork for transport of hazardous materials is performed by properly trained personnel in accordance with applicable federal and state regulations.

Special provisions apply to the transportation of explosives and are discussed in greater detail in the Project CMRP and Blasting Plan. Additional requirements regarding liquids transfer and transport are included in the Spill Prevention and Response Plan.

6.4 REFUELING AND SERVICING

North Plains will make every reasonable effort to minimize the threat of a fuel spill during refueling and servicing. Fuel/service vehicles will carry a suitable absorbent material to collect approximately 20 gallons of spilled materials. In addition, all vehicles will be inspected for leaks prior to entering or exiting the Project site, and regularly throughout Project construction. North Plains will perform regular maintenance and inspection of equipment and vehicles that Project construction crews will operate near or cross over waterbodies or wetlands.

Construction equipment will be removed from wetlands and parked a minimum of 100 feet away from surface waters, including waterbodies, wetlands, and springs, at the end of each workday. Where no accessible or suitable upland areas are available, and upon approval from North Plains, stationary equipment located within 100 feet of a surface water or conveyance will be placed within secondary containment appropriate for the largest volume contained within the equipment.

Maintenance, refueling, and lubrication of equipment and vehicles will not be allowed within 100 feet of a waterbody, wetland boundary, spring, active private water well and identified public or municipal water well, environmentally sensitive area, or within a municipal watershed. Construction vehicles such as trucks, bulldozers, and excavators, helicopters, and equipment such as pumps and generators will be fueled and serviced in designated areas.

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Refueling locations will generally be located in level, upland locations to minimize the potential for a spilled substance to reach a surface water. Typically, smaller rubber-tired and personnel vehicles will be refueled and serviced at local gas stations or material yards, and tracked vehicles will be refueled and serviced on-site. In some cases, pickup trucks or fuel tankers may be used to refuel and service construction vehicles on the right-of-way.

Washing of construction vehicles, such as concrete trucks, will be allowed only in designated areas at least 100 feet from a waterbody, wetland boundary, spring, active private water well and identified public or municipal water well, environmentally sensitive area, or within a municipal watershed. Washing areas will be contained with berms or other barriers to prevent transport of wastewater or sediments into surface waters or stormwater conveyances. Waste concrete material will be removed and properly disposed of once it has hardened.

Refueling or use of other hazardous liquids may occur within these setback areas only if the Environmental Inspector has determined that there is no reasonable alternative, and the Contractor has taken appropriate steps (including secondary containment structures) to prevent spills. North Plains will monitor the activity and will have spill response equipment onsite and readily available. Should a spill occur, North Plains will notify the appropriate agency and/or emergency response authorities.

Refueling, vehicle washing and maintenance, and spill prevention and response are discussed in greater detail in the CMRP and Spill Prevention and Response Plan.

7.0 DISPOSAL OF HAZARDOUS WASTES

Hazardous wastes will be regularly collected and disposed of in accordance with all applicable federal, state, and local regulations. North Plains will assign hazardous materials oversight to specific individuals prior to, and throughout, construction of the Project.

While not anticipated, should hazardous wastes be generated and stored onsite for greater than 90 days, North Plains will apply for a U.S. Environmental Protection Agency (EPA) Identification Number, which is needed to complete the Uniform Hazardous Waste Manifest to ship wastes off-site.

7.1 CONTAMINATED CONTAINERS

Any container that once held hazardous material products or wastes will be deemed potentially hazardous due to the potential presence of residual hazardous material within the container. To be managed as a non-hazardous waste, the containers will meet the following requirements:

- The containers will be empty, which means as much of the contents have been removed as possible using practices commonly used to remove materials from that type of container so none will be released regardless of the position of the container.

- A container previously storing compressed gas will be considered empty when the pressure in the container approaches atmospheric.

- Empty containers with a volume of less than five gallons may be disposed of as a non-hazardous solid waste or scrapped.

- Empty containers with a volume greater than five gallons will be returned to the vendor for re-use, sent to a drum recycler for reconditioning, or used or recycled on-site.

The above requirements will occur within one year of the container being emptied.

7.2 WASTE OIL FILTERS

Used metal canister oil filters may be managed as non-hazardous wastes provided:

- filters are thoroughly drained of free flowing oil. Oil which drips out of a filter drop-by-drop will not be considered free flowing;
- filters are accumulated, stored, and transferred in a closed, rainproof container;
- filters are transferred for the purposes of recycling; and
- filters are not terne-plated (an alloy of tin and lead).

Terne-plated oil filters are considered a hazardous waste and, if not recycled, will be managed as such.

7.3 USED OILS

Used oils are defined by the EPA (2024) as:

- used synthetic oil, usually derived from coal, shale, or polymer-based starting material;
- used engine oil typically includes gasoline and diesel engine crankcase oils and piston-engine oils for automobiles, trucks, boats, airplanes, locomotives, and heavy equipment;
- used transmission fluid;
- used refrigeration oil;
- used compressor oil;
- any oil that has been refined from crude oil and, as a result of use, has been contaminated with physical or chemical impurities;
- any oil that has been refined from crude oil and, as a consequence of extended storage, spillage, or contamination with non-hazardous impurities such as dirt, rags, and water, is no longer useful for its intended purpose; and
- spent lubricating fluids that have been removed from a truck, heavy equipment, automobile, or bus.

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The following are not considered used oils:

- waste oil that is bottom clean-out waste from virgin fuel storage tanks, virgin fuel oil spill cleanups, or other oil wastes that have not actually been used;
- products such as antifreeze and kerosene;
- vegetable and animal oil; and
- petroleum distillates used as solvents.

Used oil may be considered a hazardous waste if:

- the concentrations of polychlorinated biphenyls exceed 50 parts per million;
- total halogens exceed 1,000 parts per million and/or
- it is mixed with a hazardous waste.

Used oil not being burned or recycled will be managed as a hazardous waste unless laboratory analysis determined it to be non-hazardous.

8.0 PLAN REVISIONS

Table 8.0-1
Plan Revisions

Revision Number	Revision Type(s)	Revision Date
Rev 0	Initial Plan draft.	February 2025
Rev 1	Revised Plan for North Plains Comments. Updated language for consistency across all project plans.	August 2025
Rev 2	Updated language for consistency across all project plans.	January 2026

9.0 REFERENCES

U.S. Environmental Protection Agency. 2024. Reference Table for What is Used Oil. Available online at https://www.epa.gov/hw/reference-table-question-what-used-oil. Accessed August 12, 2024.

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NORTH PLAINS CONNECTOR PROJECT

ATTACHMENT F

Invasive and Noxious Species Management Plan

NORTH PLAINS CONNECTOR

A Grid United Project

Noxious Weed and Aquatic Invasive Species Management Plan

Montana

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Prepared by:

North Plains Connector LLC

GRID UNITED

Revised January 2026

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ACRONYMS AND ABBREVIATIONS

AIS	aquatic invasive species
AIS Act	Montana Aquatic Invasive Species Act
ANS	Montana Aquatic Nuisance Species
APHIS	Animal and Plant Health Inspection Service
ARM	Administrative Rules of Montana
ARS	Agriculture Research Service
BLM	Bureau of Land Management
CMRP	Construction Mitigation and Reclamation Plan
County Weed Boards	Rosebud County Weed Board, Custer County Weed and Pest Board, and Fallon County Noxious Weed Board
CWD	County Weed District
Grid United	Grid United LLC
MCA	Montana Code Annotated
MDA	Montana Department of Agriculture
MFWP	Montana Fish, Wildlife, and Parks
North Plains	North Plains Connector LLC
Plan	Draft Noxious Weed and Aquatic Invasive Species Management Plan – Montana
Project	North Plains Connector Project
the Departments	Montana Department of Agriculture; Montana Fish, Wildlife and Parks; Montana Department of Natural Resources and Conservation; and Montana Department of Transportation
USDA	U.S. Department of Agriculture
USDOI	U.S. Department of the Interior
Weed Control Act	Montana County Weed Control Act

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1.0 INTRODUCTION

North Plains Connector LLC (North Plains), a Delaware limited liability company formed pursuant to Section 18-201 of the Delaware Limited Liability Company Act, has prepared this Draft Noxious Weed and Aquatic Invasive Species Management Plan – Montana (Plan) for the North Plains Connector Project (Project), a proposed interregional electric connector line. North Plains, an affiliate of Grid United LLC (Grid United), is a Houston-based company developing next generation energy infrastructure to power the future. Grid United is focused on the infrastructure needed to make our power grid more modern, efficient, reliable, and secure.

The Project is located in Custer, Fallon, and Rosebud counties in Montana and crosses lands owned by state and federal agencies, as well as private landowners.

2.0 PLAN PURPOSE

North Plains recognizes that construction activities may promote the spread of noxious weeds and aquatic invasive species (AIS) on public and private lands along the Project. The invasion of noxious weeds and AIS can reduce the economic productivity and ecological integrity of lands and waters in Montana (Montana Aquatic Nuisance Species [ANS] Technical Committee, 2002; Montana Department of Agriculture [MDA], 2017). Soil disturbance may stimulate weed seeds already present in the soil seed bank to germinate and establish, and movement of equipment used in weed-infested areas or AIS-infested waters during construction of the Project could promote the spread of noxious weeds and AIS species to new lands and waters.

North Plains' goal is to outline the management strategies that will be used to minimize the spread of noxious weeds and AIS identified within the Project workspace in compliance with law or regulation. Management strategies will be implemented where applicable and appropriate prior to construction, and during Project construction, reclamation, and operation phases. Existing noxious weed occurrences will be documented throughout the Project workspace through pre-construction surveys, publicly available datasets, or monitoring.

North Plains has also developed a Construction Mitigation and Reclamation Plan (CMRP), which describes the construction procedures and mitigation measures North Plains will implement to reduce potential Project-related impacts. This Plan references the CMRP where additional guidance is provided therein.

3.0 REGULATORY COMPLIANCE

This section provides a brief overview of federal and state legislation and regulatory compliance applicable to noxious weeds and AIS in the Project area. North Plains will conduct Project activities in accordance with all local, state, and federal regulations regarding the control and management of noxious weeds and AIS.

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3.1 FEDERAL REGULATIONS

3.1.1 U.S. Department of Agriculture

3.1.1.1 U.S. Department of Agriculture- Animal and Plant Health Inspection Service

The U.S. Department of Agriculture (USDA) Animal and Plant Health Inspection Service (APHIS) is a federal noxious weed program designed to prevent the introduction of nonindigenous invasive plants into the U.S. APHIS noxious weed activities include exclusion and permitting in cooperation with other agencies and state agencies, and integrated management of introduced weeds, including biological control.

3.1.1.2 USDA Agricultural Research Service - Fort Keogh

The Project crosses the USDA Agriculture Research Service (ARS) – Fort Keogh site, at which rangeland is managed for livestock. All Project activities within this area will be conducted in accordance with federal, state, and local regulations, Project permits, and with any additional requirements or stipulations put forth by the ARS.

3.1.2 U.S. Department of the Interior

The U.S. Department of the Interior (USDOI) defines an invasive species as a "non-native organism whose introduction causes or is likely to cause economic or environmental harm or harm to human, animal, or plant health" (USDOI, 2021). The USDOI Invasive Species Strategic Plan (2021) provides a comprehensive management strategy for agencies within the USDOI, and builds on agencies' existing invasive species management plans and collaborative partnerships to describe strategic on-the-ground actions to reduce the threat of invasive species.

In addition to the state and county listed noxious weeds, discussed in Section 3.3, the USDOI lists the following species that may be present in the Project area as invasive species:

- Elodea (waterweed);
- Cheatgrass; and
- Emerald ash borer.

3.1.3 Bureau of Land Management

USDOI Bureau of Land Management (BLM) Manual 9015 (1992) defines a noxious weed as "a plant that interferes with management objectives for a given area of land at a given point in time" and an invasive species as "a non-native species whose introduction causes or is likely to cause economic or environmental harm or harm to human, animal, or plant health. Invasive species include plants, animals, pathogens, and other organisms in terrestrial and aquatic habitats."

BLM Manual 9015 (1992) directs the BLM to manage noxious weeds and undesirable plants on BLM lands by reducing existing population levels, managing and controlling existing infestations, preventing the establishment and spread of new infestations. The BLM requires Project owners to evaluate the risk of spreading noxious weeds throughout the Project and ensure that Project contracts contain commitments which hold North Plains responsible for the prevention and control of noxious weeds associated with Project activities.

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3.2 STATE REGULATIONS

3.2.1 Noxious and Regulated Weeds

The Administrative Rules of Montana (ARM) 4.5.201 designates certain exotic plants as noxious weeds under the Montana County Weed Control Act (Weed Control Act) and requires all counties to implement management guidelines consistent with the criteria outlined in the Weed Control Act, as described below. Noxious weeds are assigned a priority level depending on the species' known presence in Montana, which determines the required management criteria for all species within a given priority level, as described below:

- Priority 1A species are not present or have limited presence in Montana and require eradication if detected, education, and prevention (ARM 4.5.206).
- Priority 1B species have limited presence in Montana and require eradication or containment and education (ARM 4.5.207).
- Priority 2A species are common in isolated areas of the state. Management is prioritized by the Rosebud County Weed Board, the Custer County Weed and Pest Board, and the Fallon County Noxious Weed Board (collectively, County Weed Boards) and includes eradication or containment and management of these species (ARM 4.5.208).
- Priority 2B species are abundant in Montana and widespread in many counties. Management is prioritized by the County Weed Boards and includes eradication or containment and management of these species (ARM 4.5.209).
- ARM 4.5.102 does not designate Priority 3 regulated plants as noxious weeds, but ARM 4.5.210 does recognize under them as species with the potential to cause significant negative impacts. Priority 3 regulated plants may not be intentionally spread or sold other than as a contaminant in agriculture products. The state recommends research, education, and prevention of these species, but does not require control, unless required by individual counties.

The Weed Control Act defines a noxious weed as any exotic terrestrial or aquatic plant species established or introduced in the state that may negatively impact agriculture, forestry, livestock, wildlife, or other beneficial uses or harm native plant communities (7-22-2101, Montana Code Annotated [MCA]). The MDA is responsible for designating statewide noxious weeds and provides leadership and coordination for noxious weed management throughout Montana.

The Weed Control Act establishes weed management districts composed of one or more counties, also referred to as County Weed Districts (CWDs), across the state and assigns the responsibility of administering each CWD's noxious weed management program to their respective County Weed Board (7-22-2102, MCA). The CWDs are responsible for developing noxious weed management plans, implementing the Weed Control Act, designating additional noxious weeds relevant to each CWD, and coordinating with state and federal agencies on public lands (MDA, 2017).

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According to the Weed Control Act, it is unlawful to allow a noxious weed to propagate or go to seed, except where a noxious weed management program or agreement has been made (7-22-2116, MCA).

Per MCA 7-22-2152, developments that require state or local approval and may result in potential noxious weed spread, including major facility developments proposed under the Montana Major Facility Siting Act (70-20, MCA), must submit a written revegetation plan to the relevant County Weed Board(s) for approval prior to construction. The revegetation plan will describe the proposed seeding and/or planting methods intended to reestablish cover and provide weed management in disturbed areas. North Plains will notify the County Weed Board(s) at least 15 days prior to construction commencement, and construction activity will not commence in a given county until the revegetation plan has been approved.

3.2.2 Aquatic Invasive Species

The Montana Aquatic Invasive Species Act (AIS Act) defines an AIS as a non-native aquatic species that has potential to cause harm to the economy, environment, recreation, or human health (80-7-1003, MCA). According to the 2002 Montana ANS Management Plan, AIS are assigned a priority level (listed below) based the species' establishment in the state and the availability of management strategies for those species (Montana ANS Technical Committee, 2002):

- Priority Class 1 species are not established in Montana but have a high potential for invasion. Limited management strategies are available and include prevention and eradication of new populations.
- Priority Class 2 species are established and have potential to spread in Montana. Limited management strategies are available and include prevention, impact mitigation, and population size control.
- Priority Class 3 species are not established in Montana but have a high potential for invasion. Available management strategies include prevention and eradication of new populations.
- Priority Class 4 species are established and have potential to spread in Montana. Management strategies are available and include prevention, impact mitigation, and population size control.

Per the AIS Act, there is no centralized authority for coordinating AIS management activities in the state. Instead, the MDA; Montana Fish, Wildlife, and Parks (MFWP); Montana Department of Natural Resources and Conservation; and Montana Department of Transportation (collectively, the Departments) all have the authority to manage AIS as necessary, based on their existing responsibilities in the state (Montana ANS Technical Committee, 2002). MCA 80-7-1007 allows the Departments to develop and implement individual or Department-wide invasive species management plan(s) to detect, prevent, and control invasive species under each agency's individual or collective jurisdiction. These plan(s) address the transport of AIS; designation and treatment of AIS within invasive species management areas, such as designated areas or bodies of water where the Departments regulate AIS or potential carriers of AIS; and rules for inspection and quarantine of vessels and equipment, such as any implement or machinery that has been at

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least partially immersed in surface waters, traveling within the state or into Montana from a neighboring state.

MCA 80-7-1012 states it is unlawful to, "purchase, sell, barter, distribute, propagate, transport, introduce, or possess an invasive species," except for approved purposes. After use within an invasive species management area, North Plains will drain all vessels and equipment of water or implement other reasonable measures to drain water if North Plains cannot disengage a drain plug or a drain plug does not exist, prior to being transported on land or a public highway (80-7-1010, MCA). Currently, there are no invasive species management areas within Rosebud, Custer, or Fallon Counties in Montana (MFWP, 2024); however, MCA 80-7-1015 establishes a statewide invasive species management area and requires mandatory inspection of vessels and equipment entering the state.

Vessels and equipment transported into the state or within the state from west of the Continental Divide require inspection prior to in-water use (MFWP, 2023a; MFWP, 2024). North Plains may use existing check stations, if present along the Project, or may coordinate with the MFWP AIS Program to receive the required inspections. Prior to inspection, vessels and equipment will be clean and dry, with no visible mud or vegetation (MFWP, 2024). If North Plains identifies an AIS on a vessel or equipment, they will clean and decontaminate that vessel or equipment before it is allowed to leave the inspection site or check station (80-7-1011, MCA). North Plains will coordinate with MFWP to notify the Department with primary jurisdiction immediately and the equipment owner will comply with required treatment and control procedures.

3.3 STATE AND COUNTY LISTED NOXIOUS WEEDS AND AQUATIC INVASIVE SPECIES

Montana has 36 Priority 1A, 1B, 2A, and 2B designated statewide noxious weeds and 5 designated statewide Priority 3 regulated plants (ARM 4.5.210), where control is enforced by all counties in Montana (MDA, 2019b). As noted in Section 3.2.1, control of Priority 3 regulated species is recommended, but not required under the Weed Control Act. One or more CWDs lists six additional plants that they enforce within the jurisdiction of those districts.

According to the MFWP, Montana has 29 AIS, including 1 amphibian, 3 crustaceans, 9 fish, 1 mammal, 7 mollusks, and 8 plants (MFWP, 2023b). MFWP also lists five fish parasites and pathogens as AIS; however, these are not discussed in this Plan. Of the eight aquatic invasive plants listed, three are also designated by MDA as statewide noxious weeds and three are Priority 3 regulated plants. Of the AIS species listed by MFWP, 18 of 29 have not yet been detected in Montana. Table 3.3-1 includes a list of the statewide noxious and regulated weeds, CWD-listed noxious weeds, and AIS enforced within the counties crossed by the Project.

TABLE 3.3-1

State and County Enforced Noxious Weeds and Aquatic Invasive Species

Common Name/Species Category	Scientific Name	State Priority [a]	Habitat [b]	Enforcement Area
NOXIOUS AND REGULATED WEEDS				
Plants [c]				
Black henbane	*Hyoscyamus albus*	None	Terrestrial	Rosebud County, Montana
Blueweed	*Echium vulgare*	Priority 1B	Terrestrial	All counties in Montana
Brazilian waterweed [c,d]	*Egeria densa*	Priority 3	Aquatic	All counties in Montana
Canada thistle	*Cirsium arvense*	Priority 2B	Terrestrial	All counties in Montana

TABLE 3.3-1

State and County Enforced Noxious Weeds and Aquatic Invasive Species

Common Name/Species Category	Scientific Name	State Priority [a]	Habitat [b]	Enforcement Area
Cheatgrass	*Bromus tectorum*	Priority 3	Terrestrial	All counties in Montana
Common buckthorn	*Rhamnus cathartica*	Priority 2A	Terrestrial	All counties in Montana
Common burdock	*Arctium minus*	None	Terrestrial	Fallon County, Montana
Common reed	*Phragmites australis* ssp. *australis*	Priority 1A	Terrestrial	All counties in Montana
Common tansy	*Tanacetum vulgare*	Priority 2B	Terrestrial	All counties in Montana
Curlyleaf pondweed [c]	*Potamogeton crispus*	Priority 2B	Aquatic	All counties in Montana
Dalmatian toadflax	*Linaria dalmatica*	Priority 2B	Terrestrial	All counties in Montana
Diffuse knapweed	*Centaurea diffusa*	Priority 2B	Terrestrial	All counties in Montana
Dyer's woad	*Isatis tinctoria*	Priority 1A	Terrestrial	All counties in Montana
Eurasian watermilfoil [c]	*Myriophyllum spicatum, M. spicatum* x *M. sibiricum*	Priority 2A	Aquatic	All counties in Montana
Field bindweed	*Convolvulus arvensis*	Priority 2B	Terrestrial	All counties in Montana
Flowering rush [c]	*Butomus umbellatus*	Priority 2A	Aquatic	All counties in Montana
Hoary alyssum	*Berteroa incana*	Priority 2B	Terrestrial	All counties in Montana
Houndstongue	*Cynoglossum officinale*	Priority 2B	Terrestrial	All counties in Montana
Hydrilla [c,d]	*Hydrilla verticillata*	Priority 3	Aquatic	All counties in Montana
Knotweed complex	*Polygonum cuspidatum, P. sachalinense, P.* x *bohemicum, Fallopia japonica, F. sachalinensis, F.* x *bohemica, Reynoutria japonica, R. sachalinensis, and R.* x *bohemica*	Priority 1B	Terrestrial	All counties in Montana
Kochia	*Bassia scoparia*	None	Terrestrial	Rosebud County, Montana
Leafy spurge	*Euphorbia esula*	Priority 2B	Terrestrial	All counties in Montana
Meadow hawkweed complex	*Hieracium caespitosum, H. praealturm, H. floridundum,* and *Pilosella caespitosa*	Priority 2A	Terrestrial	All counties in Montana
Medusahead	*Taeniatherum caput-medusae*	Priority 1A	Terrestrial	All counties in Montana
Orange hawkweed	*Hieracium aurantiacum, Pilosella aurantiaca*	Priority 2A	Terrestrial	All counties in Montana
Oxeye daisy	*Leucanthemum vulgare*	Priority 2B	Terrestrial	All counties in Montana
Parrot feather watermilfoil [c,d]	*Myriophyllum aquaticum or M. brasiliense*	Priority 3	Aquatic	All counties in Montana
Perennial pepperweed	*Lepidium latifolium*	Priority 2A	Terrestrial	All counties in Montana
Poison hemlock	*Conium maculatum*	None	Terrestrial	Fallon and Rosebud counties, Montana
Puncture vine	*Tribulus terrestris*	None	Terrestrial	Rosebud County, Montana
Purple loosestrife	*Lythrum salicaria*	Priority 1B	Aquatic	All counties in Montana
Rush skeletonweed	*Chondrilla juncea*	Priority 1B	Terrestrial	All counties in Montana
Russian knapweed	*Acroptilon repens, Rhaponticum repens*	Priority 2B	Terrestrial	All counties in Montana
Russian olive	*Elaeagnus angustifolia*	Priority 3	Terrestrial	All counties in Montana
Saltcedar	*Tamarix* spp.	Priority 2B	Terrestrial	All counties in Montana
Scotch broom	*Cytisus scoparius*	Priority 1B	Terrestrial	All counties in Montana
Scotch thistle	*Onopordum acanthium*	None	Terrestrial	Rosebud County, Montana
Spotted knapweed	*Centaurea stoebe, C. maculosa*	Priority 2B	Terrestrial	All counties in Montana
St. Johnswort	*Hypericum perforatum*	Priority 2B	Terrestrial	All counties in Montana
Sulfur cinquefoil	*Potentilla recta*	Priority 2B	Terrestrial	All counties in Montana
Tall buttercup	*Ranunculus acris*	Priority 2A	Terrestrial	All counties in Montana

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TABLE 3.3-1

State and County Enforced Noxious Weeds and Aquatic Invasive Species

Common Name/Species Category	Scientific Name	State Priority [a]	Habitat [b]	Enforcement Area
Tansy ragwort	*Senecio jacobaea, Jacobaea vulgaris*	Priority 2A	Terrestrial	All counties in Montana
Ventenata	*Ventenata dubia*	Priority 2A	Terrestrial	All counties in Montana
Whitetop	*Cardaria draba, Lepidium draba*	Priority 2B	Terrestrial	All counties in Montana
Yellow starthistle	*Centaurea solstitialis*	Priority 1A	Terrestrial	All counties in Montana
Yellow toadflax	*Linaria vulgaris*	Priority 2B	Terrestrial	All counties in Montana
Yellowflag iris	*Iris pseudacorus*	Priority 2A	Aquatic	All counties in Montana
AQUATIC INVASIVE SPECIES				
Amphibian				
American bullfrog	*Lithobates catesbeianus*	Class 4	Aquatic	All counties in Montana
Crustaceans				
Fishhook waterflea [e]	*Cercopagis pengoi*	Unknown	Aquatic	All counties in Montana
Rusty crayfish [e]	*Orconectes rusticus*	Class 1	Aquatic	All counties in Montana
Spiny waterflea [e]	*Bythotrephes longimanus*	Class 1	Aquatic	All counties in Montana
Fish				
Bighead carp [e]	*Hypopthalmichthys nobilis*	Class 1	Aquatic	All counties in Montana
Black carp [e]	*Mylopharyngodon piceus*	Class 1	Aquatic	All counties in Montana
Grass carp [e]	*Ctenopharyngodon idella*	Class 1	Aquatic	All counties in Montana
Northern snakehead [e]	*Channa argus*	Unknown	Aquatic	All counties in Montana
Round goby [e]	*Neogobius melanostomus*	Class 1	Aquatic	All counties in Montana
Ruffe [e]	*Gymnocephalus cerna*	Class 1	Aquatic	All counties in Montana
Silver carp [e]	*Hypopthalmichthys molitrix*	Class 1	Aquatic	All counties in Montana
Tench [e]	*Tinca tinca*	Class 1	Aquatic	All counties in Montana
Zander [e]	*Sander lucioperca*	Class 1	Aquatic	All counties in Montana
Mammals				
Nutria [e]	*Myocastor coypus*	Class 1	Aquatic	All counties in Montana
Mollusks				
Asian clam	*Corbicula* spp.	Unknown	Aquatic	All counties in Montana
Chinese mystery snail [e]	*Cipangopaludina chinensis malleat*	Unknown	Aquatic	All counties in Montana
Faucet snail	*Bithynia tentaculata*	Unknown	Aquatic	All counties in Montana
New Zealand mudsnail	*Potamopyrgus antipodarum*	Class 2	Aquatic	All counties in Montana
Quagga mussel	*Dreissena rostriformis bugensis*	Unknown	Aquatic	All counties in Montana
Red-rim melania	*Melanoides tuberculata*	Unknown	Aquatic	All counties in Montana
Zebra mussel	*Dreissena polymorpha*	Class 1	Aquatic	All counties in Montana
Plants				
Brazilian waterweed [c,e]	*Egeria densa*	Priority 3	Aquatic	All counties in Montana
Curlyleaf pondweed [c]	*Potamogeton crispus*	Priority 2B/ Class4	Aquatic	All counties in Montana
Eurasian watermilfoil [c]	*Myriophyllum spicatum, M. spicatum* x *M. sibiricum*	Priority 2A/Class 3	Aquatic	All counties in Montana
Flowering rush [c]	*Butomus umbellatus*	Priority 2A/Class4	Aquatic	All counties in Montana
Fragrant waterlily [d]	*Nymphaea odorata*	Unknown	Aquatic	All counties in Montana
Hydrilla [c,e]	*Hydrilla verticillata*	Priority 3/ Class 1	Aquatic	All counties in Montana
Parrot feather watermilfoil [c,e]	*Myriophyllum aquaticum or M. brasiliense*	Priority 3	Aquatic	All counties in Montana
Yellow floating heart [d,e]	*Nymphoides peltata*	Unknown	Aquatic	All counties in Montana

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TABLE 3.3-1

State and County Enforced Noxious Weeds and Aquatic Invasive Species

Common Name/Species Category	Scientific Name	State Priority [a]	Habitat [b]	Enforcement Area

[a] Noxious weed priority levels include Priority 1A, Priority 1B, Priority 2A, Priority 2B, and Priority 3; AIS priority levels include Class 1, Class 2, Class 3, and Class 4.
[b] For noxious weeds, the aquatic habitat descriptor includes both submerged and emergent aquatic plant species.
[c] Identified as both a noxious weed or regulated weed by MDA (2019b) and an aquatic invasive plant by MFWP (2023b).
[d] Identified as an aquatic invasive plant by the MFWP (2023b), but not listed as a statewide noxious or regulated plant by MDA (2019b).
[e] AIS currently undetected in Montana, according to MFWP (2023b).
Sources: MDA, 2019a and 2019b; MFWP, 2023b; Montana ANS Technical Committee, 2002.

3.4 NOXIOUS WEED PRESENCE

North Plains conducted surveys for state- and county-listed noxious weed species within the Project survey corridor. Noxious weed surveys were conducted concurrently with the wetland and waterbody surveys during the growing season between 2022 and 2025; surveys were not timed to coincide with any species-specific morphological state. Table 3.4-1 shows noxious weeds with confirmed presence in the Project survey corridor based on occurrences documented during noxious weed surveys in 2022, 2023, and 2024. Surveys in 2025 are ongoing and are not included in Table 3.4-1.

TABLE 3.4-1

Confirmed Noxious Weed Presence by County within the Project Survey Corridor

Species	Rosebud	Custer	Fallon
Canada Thistle	X	X	X
Cheatgrass [a]			X
Field Bindweed	X	X	X
Houndstongue			
Leafy Spurge		X	X
Saltcedar	X	X	
Spotted Knapweed			X
Tall Buttercup		X	
Tansy Ragwort			X

[a] Not considered a noxious weed in Montana but is considered a statewide regulated plant with potential to have significant negative impacts.
Source: Western EcoSystems Technology, Inc, 2025

4.0 ROLES AND RESPONSIBILITIES

North Plains will select a third-party construction contractor to construct the Project. The primary construction contractor (Contractor) will be responsible for site preparation, installation of support structures, general Project construction, testing and commissioning, health and safety, and environmental compliance including noxious weed and AIS management and control, as described in this Plan. However, North Plains is responsible for construction of all associated facilities.

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For the duration of the Project, North Plains will implement and maintain the measures outlined in this Plan, the CMRP, and in all applicable Project permits.

4.1 ENVIRONMENTAL INSPECTION

North Plains will employ Environmental Inspectors during the construction phase. Further information on Environmental Inspectors and their responsibilities is provided in the CMRP.

4.2 COUNTY WEED BOARDS

The public is encouraged to work with County Weed Board coordinators, extension agents, and other experts to identify and report suspected noxious and regulated weeds. In addition to the functions described in Section 3.2.1, the role of the County Weed Boards is to provide guidance regarding noxious weed detection and control by landowners and land occupants within each county and to investigate signed complaints received by a County Weed Board coordinator regarding noxious weeds. County Weed Boards can offer assistance as it relates to identification, prevention, and treatment of noxious weeds.

Table 4.2-1 includes the primary contact information for the Custer, Fallon, and Rosebud County Weed Boards, according to the Montana Weed Control Association (2020).

TABLE 4.2-1

County Weed Board Coordinator Contact Information

County / Contact Title	Name	Phone	Email
CUSTER			
Weed Coordinator	Byron Hould	(406) 874-3370	b.hould@co.custer.mt.us
FALLON			
Weed Coordinator	Sara Berger	(406) 778-8131	bergers@falloncounty.net
ROSEBUD			
Weed Coordinator	Amy Adler	(406) 346-7608	aadler@rosebudcountymt.com

Source: Montana Weed Control Association, 2020.

5.0 TRAINING

Before commencing construction, North Plains will organize environmental training sessions for relevant Project personnel. These training programs will cover relevant construction, restoration, and mitigation plans, including this Plan, along with any applicable permit conditions. Furthermore, North Plains will conduct large-group training sessions before each work crew begins construction, followed by periodic follow-up training for newly assigned personnel. Training will be documented, and training records will be saved with Project files.

North Plains will provide noxious weed identification, management, and control training to Project personnel prior to commencing construction. As part of this training, North Plains will review and ensure Project personnel understand the contents of this Plan and the CMRP. As needed, North Plains will make available a copy of *Montana's Noxious Weeds* (Montana State University Extension, 2020), which includes photos of all Montana statewide designated noxious weeds and Priority 3 regulated plants.

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6.0 NOXIOUS WEED MANAGEMENT AND CONTROL

6.1 PREVENTATIVE MEASURES

6.1.1 Noxious and Regulated Weeds

Noxious weeds can be spread by natural processes, such as wildlife and wind, as well as through human means involving vehicles, construction equipment, and construction or restoration activities. Implementation of preventative measures to control the spread of noxious weeds is the most cost-effective management approach. North Plains will implement noxious weed preventative measures that are consistent with state and county regulations, and will work with County Weed Board coordinators, as necessary.

North Plains will implement the following preventative measures within the Project workspace for statewide and CWD-listed noxious weeds and, when feasible, Priority 3 regulated plants (collectively, noxious and regulated weeds):

- Prior to moving equipment to the Project area, North Plains will thoroughly clean construction equipment, including construction mats, to limit the potential for the spread of noxious and regulated weeds. North Plains will clean the equipment at designated wash stations in upland areas.

- Prior to construction, North Plains will complete noxious weed surveys within the Project workspaces to map known populations of noxious and regulated weeds. North Plains will mark areas of the Project workspace that contain documented occurrences of noxious and regulated weeds (i.e., infested areas). Such markings will clearly indicate the limits of the infestation within the construction workspace.

- During construction, North Plains will clean the tracks, tires, and blades of equipment by hand or compressed air to remove excess soil prior to moving equipment out of mapped noxious weed infested areas or use wash stations to remove vegetative materials.

- North Plains will use mulch and straw or hay bales that are certified free of noxious weeds for temporary erosion and sediment control in disturbed areas.

- North Plains will implement pre-construction control treatments, such as mowing prior to seed development and/or herbicide treatments by a state-certified applicator in infested areas prior to vegetation clearing; site grading, excavation, or other soil-disturbing work; or overland travel within or through infested areas identified during the noxious weed surveys.

- Pre-construction control treatments will avoid the use of herbicides within 100 feet of a waterbody or wetland.

6.1.2 Aquatic Invasive Species

Like noxious and regulated weeds, AIS can be spread by natural processes and human means. The movement of vehicles and construction equipment from infested waters can allow for AIS, including plants and animals, to be transported to new locations and water diversions can allow

for AIS from different areas to invade new habitats (Montana ANS Technical Committee, 2002). Since there are limited acceptable controls available for use in aquatic habitats once an AIS has been established, implementation of preventative measures to control the spread of AIS is the most cost-effective management approach.

North Plains will implement the following preventative measures in wetlands and waterbodies:

- Vehicles and equipment intended for in-water use in Montana will be inspected when entering the state or crossing the Continental Divide. North Plains will be responsible for initiating vehicle and equipment inspections prior to Project use. Inspections may occur at existing state check stations, or by coordinating with the MFWP AIS Program for alternative inspection options. Check station locations can be found at https://fwp.mt.gov/conservation/aquatic-invasive-species/watercraft-inspection-stations. If the inspection uncovers an AIS, North Plains will remain at the check station until the vehicle or equipment is cleaned and decontaminated.

- Upon completion of in-water work activities, North Plains will remove all visible mud, vegetation, or aquatic debris from the vehicles or equipment, drain areas that may retain or store water, and dry or disinfect the vehicles and equipment prior to relocation to another Project site or transport on a public highway. North Plains may clean the equipment with high-pressure washing equipment at designated wash stations in upland areas, if necessary to fully remove the debris.

- North Plains will coordinate with MFWP to identify any new AIS management areas along the Project prior to construction commencement. After in-water use within an AIS management area, North Plains will inspect in-water work vehicles and equipment at a state watercraft check station or by coordinating with the MFWP AIS Program. If the inspection uncovers an AIS, North Plains will remain at the check station until the vehicle or equipment is cleaned and decontaminated.

- North Plains will not wash equipment within 100 feet of wetlands or waterbodies.

- North Plains will clean and dry equipment such as temporary flumes, culverts, timber mats, or bridge structures after removal from a wetland or waterbody and prior to Project relocation or transport.

6.2 TREATMENT AND CONTROL METHODS

North Plains will conduct noxious and regulated weed treatments in accordance with existing regulations and landowner or agency agreements. Pre-treatment of noxious weed infestations will be conducted prior to vegetation clearing or ground-disturbing construction activities if pre-treatment will aid in controlling the spread of weeds during construction. North Plains will choose the best available treatment and control methods based on site-specific information, including the season, location, and the noxious or regulated weed species present. Control methods may include herbicide application or mechanical measures, such as mowing or manual removal.

During construction, North Plains will periodically monitor the construction areas to allow for early detection of noxious weed infestations. If noxious or regulated weeds are observed within construction areas, North Plains or a state-certified herbicide applicator will implement appropriate

control measures in an attempt to control the identified infestations and to reduce the spread or proliferation of weeds within the construction area.

During inactive periods of construction, defined as periods of 120 days or longer, North Plains will treat any previously identified noxious weed or regulated weed-infested areas, as well as any new infestations areas within the construction corridor, as determined necessary.

After construction activities are complete, North Plains will reclaim the Project workspace in accordance with the CMRP and using seed mixes approved by the landowner and land-managing agencies.

After Project construction has been completed in areas disturbed by construction and areas over which North Plains will retain surface use control, such as converter stations, North Plains will provide weed control to limit the potential spread of noxious or regulated weeds onto adjacent lands. Any herbicide spraying performed by North Plains will be done by a state-licensed or state-certified applicator.

6.2.1 Control Methods

North Plains will determine appropriate weed management techniques based on the current conditions at the location of infestation. Weed management techniques may include hand-pulling, mechanical removal, or the use of herbicides. These methods are discussed below.

Before using a noxious weed control method not outlined in this Plan, North Plains will consult with the appropriate County Weed Board(s).

6.2.1.1 Hand-pulling or Pulling Tools

Hand-pulling weeds has a small ecological impact, causes minimal damage to neighboring vegetation, and has low to no cost. It does, however, require significant labor and, thus, can only be used as a control method for small infestations. Hand-pulling may be used when individual or small numbers of weeds are observed in the right-of-way.

Handheld tools are available to remove weeds in the same manner as hand-pulling. These tools provide additional leverage and the capability to remove weeds with deeper and/or larger roots. As with hand-pulling, this method, if used, will be limited to small infestations.

6.2.1.2 Mechanical

Mowing or brushing can quickly remove large swaths of weeds, but care must be taken that cuttings are removed promptly to prevent regrowth or prevent weeds from being carried offsite via wind or water to germinate in adjacent uninfested areas. Additionally, if mowing or brushing is used, North Plains will identify the weed(s) present and confirm the species' life cycle and control timing requirements to ensure that they are cut at the appropriate point in development (e.g., prior to flowering or seed maturation) to prevent regrowth or spread.

6.2.1.3 Chemical (Herbicides)

North Plains will base herbicide selection on information gathered from local County Weed Boards and/or the MDA. Prior to herbicide application, North Plains or the state-certified applicator will

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obtain any required permits or approvals from the CWD and landowner. Herbicide type(s) will be determined based on the weed species present and existing land use and land cover in the areas where the herbicide will be applied. Whenever possible, the state-certified applicator will select effective, species-appropriate herbicides that are unlikely to drift, leach to groundwater or wash into streams, are nontoxic to people and other organisms, and easy to apply. The state-certified applicator will make every effort to minimize negative environmental impacts when conducting herbicide applications.

A state-certified applicator will conduct herbicide applications in accordance with all applicable laws and regulations. The state-certified applicator will strictly adhere to all label instructions and implement all manufacture guidelines for the type of herbicide and application used and based on conditions in the field at the time. For example, manufacturer's guidelines recommend that users only apply herbicides under appropriate weather conditions, that application sprayers be mounted low to the ground, and that sprayer booms incorporate specialized nozzles designed to produce large droplet sizes with limited drift potential. Adherence to these specifications and manufacturer label directions will minimize the potential for drift or transport of herbicides to off right-of-way areas. All herbicides applied prior to or during construction will be non-residual or will have a significant residual effect no longer than 30 days. The state-certified applicator will keep a copy of the herbicide Safety Data Sheets at work sites.

The state-certified applicator may employ vehicle-mounted sprayers and/or hand application methods depending on the infestation location(s) and conditions in the field. Vehicle-mounted sprayers (e.g., handgun, boom, and injector) will be used primarily in open areas that are readily accessible by vehicle. The state-certified applicator will use hand application methods (e.g., backpack spraying) that target individual plants to treat small scattered noxious weed populations in rough terrain or where required due to the proximity to sensitive plants, wetlands or waterbodies, or other sensitive wildlife habitats. The state-certified applicator(s) will complete calibration checks of equipment at the beginning of spraying and periodically thereafter to ensure proper application rates are achieved. Industry standards and/or manufacturer's guidelines will determine the required or appropriate application equipment calibration checks. The state-certified applicator will maintain application records, including: the active ingredient; formulation; application rate; date, time, and location; and provide copies, as requested.

The state-certified applicator will manage and use herbicides according to the provisions listed below.

- Herbicide application procedures will be conducted by a licensed, state-certified commercial applicator to ensure that proper mixing, application, cleanup, personal protection, and safety procedures are followed.

- The state-certified applicator will bring herbicides to the Project site premixed or mix them in a closed transfer system, in returnable/refillable containers, and transfer contents by closed transfer system to application tanks to limit worker and environmental exposure and eliminate the need for disposal of herbicide containers in area landfills.

- The state-certified applicator will transport herbicides in a manner that will prevent tipping or spilling, and the inspections staff will monitor all herbicide equipment and containers daily for leaks.

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- North Plains will prepare a Spill Prevention and Response Plan to address handling, storage, and spill response prior to herbicide use.

- The state-certified applicator will not use, store, or mix herbicides within 100 feet of a wetland or waterbody, or as specified in permits for federal or state lands, whichever is more stringent.

- North Plains will not apply herbicide using aerial methods; state-certified applicator will apply herbicides using vehicle-mounted sprayers and/or hand application methods.

- After herbicide application on public lands, the state-certified applicator will post signage indicating the extent of the treated areas.

6.2.1.4 BLM-Managed Lands

In accordance with Appendix B of the BLM Vegetation Treatments Using Herbicides Final Programmatic Environmental Impact Statement Record of Decision (2007), North Plains will implement the following measures within the Project workspace on BLM lands:

- Prior to herbicide use on BLM land, North Plains will coordinate with BLM to identify applicable procedures that would be implemented within the Project workspace on BLM land. These will include a subset of the Standard Operating Procedures for Applying Herbicides identified within Appendix B PEIS Record of Decision (2007).

- Coordinate with BLM regarding special status species that may occur or are known to occur on the BLM lands crossed by the Project. North Plains will consider effects to special status species when selecting herbicide treatments before treating an infested area.

- The state-certified applicator will not apply herbicides within 100 feet of known special status plant occurrences within BLM lands without prior approval. Herbicides used within 100 feet of special status plant species will be selected to minimize risks to sensitive plants and restricted to hand application methods.

- Avoid treating vegetation during time-sensitive periods (e.g., nesting and migration, sensitive life stages) for special status species with documented presence within 100 feet of the area to be treated, unless doing so is required for effective control of the noxious weed species.

- Minimize treatments near waterbodies during periods when fish or aquatic special status species are in life stages most sensitive to the herbicide(s) used and use spot rather than broadcast or aerial treatments.

- North Plains will use the requested seed mixes and procedures provided by the BLM and described in Section 6 of the CMRP.

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7.0 POST CONSTRUCTION RESTORATION AND REVEGETATION

7.1 SITE RESTORATION AND REVEGETATION

After construction activities are complete, North Plains will reclaim the Project workspace in accordance with the CMRP and using seed mixes approved by the landowner and land-managing agencies. North Plains will coordinate with the BLM and ARS regarding preferred seed mixes to be used on the portions of the Project that cross these federally managed lands. Site restoration will involve grading disturbed work areas to approximate pre-construction contours and natural drainage patterns as closely as possible. North Plains will maintain temporary erosion controls until replaced by permanent erosion control structures or until restoration is complete.

7.2 MONITORING AND OPERATION

Following construction, North Plains' on-site operations staff will monitor all mapped or newly identified infestation sites within the areas disturbed by Project construction and all areas over which North Plains retains control of the surface use. North Plains will perform monitoring annually for a minimum of three years following construction or per mutual agreement between North Plains and the appropriate County Weed Board. In addition, North Plains will conduct reseeding, as needed, to re-establish a desirable vegetative cover to stabilize the soils and slow the potential for re-invasion of noxious and regulated weeds.

In areas with continued presence of noxious or regulated weeds, the weed treatment and control measure(s) chosen will be the best available for the season, location, and species, as described in Section 6.2. Where necessary, a state-certified applicator will complete herbicide applications. The County Weed Coordinator(s) may inspect all sites of concern, as they deem necessary, and will determine if the infestation sites have been eradicated.

8.0 PLAN REVISIONS

TABLE 8.0-1

Plan Revisions

Revision Number	Revision Type(s)	Revision Date
Rev 1	Initial draft plan	August 2024
Rev 2	2024 Noxious weed survey and other minor updates incorporated	July 2025
Rev 3	Update for consistency with other plans	January 2026

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NORTH PLAINS CONNECTOR

A Grid United Project

Draft Noxious Weed Management Plan North Dakota

DRAFT

Prepared by:

North Plains Connector LLC

GRID UNITED

January 2026

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ACRONYMS AND ABBREVIATIONS

APHIS	Animal and Plant Health Inspection Service
CFR	Code of Federal Regulations
CMRP	Construction Mitigation and Reclamation Plan
County Weed Boards	Morton, Golden Valley, Grant, Hettinger, Oliver, and Slope County Weed Boards
CTS	closed transfer system
FEIS	Final Environmental Impact Statement
Grid United	Grid United LLC
NDCC	North Dakota Century Code
NDDA	North Dakota Department of Agriculture
NDDTL	North Dakota Department of Trust Lands
NFS	National Forest System
North Plains	North Plains Connector LLC
Plan	Draft Noxious Weed Management Plan – North Dakota
Project	North Plains Connector Project
State certified applicator	State certified contractor for herbicide applications
USDA	U.S. Department of Agriculture
USFS	U.S. Forest Service

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1.0 INTRODUCTION

North Plains Connector LLC (North Plains), a Delaware limited liability company formed pursuant to Section 18-201 of the Delaware Limited Liability Company Act, has prepared this Draft Noxious Weed Management Plan (Plan) for the North Plains Connector Project (Project), a proposed interregional electric connector line. North Plains, an affiliate of Grid United LLC (Grid United), is a Houston-based company developing next generation energy infrastructure to power the future. Grid United is focused on the infrastructure needed to make the United States' power grid more modern, efficient, reliable, and secure.

2.0 PLAN PURPOSE

North Plains recognizes that construction activities may promote the spread of noxious weeds on public and private lands. Soil disturbance may stimulate weed seeds already present in the soil seed bank to germinate and establish, and movement of equipment used in weed-infested areas during construction of the Project could promote the spread of noxious weeds to new lands and waters.

North Plains' goal is to outline the management strategies that will be used to minimize the spread of noxious weeds identified within the Project workspace in compliance with law or regulation. Management strategies will be implemented where applicable and appropriate prior to construction, and during Project construction, reclamation, and operation phases. Existing noxious weed occurrences will be documented throughout the Project workspace through pre-construction surveys, publicly available datasets, or monitoring.

North Plains has also developed a Construction Mitigation and Reclamation Plan (CMRP), which describes the construction procedures and mitigation measures North Plains will implement to reduce potential Project-related impacts. This Plan references the CMRP where additional guidance is provided therein.

3.0 REGULATORY COMPLIANCE

This section provides a brief overview of federal and state legislation and regulatory compliance applicable to noxious weeds in the Project area. North Plains will conduct Project activities in accordance with all local, state, and federal regulations regarding the control and management of noxious weeds.

3.1 FEDERAL REGULATIONS

3.1.1 U.S. Department of Agriculture

3.1.1.1 U.S. Department of Agriculture - Animal and Plant Health Inspection Service

The U.S. Department of Agriculture (USDA) Animal and Plant Health Inspection Service (APHIS) is a federal noxious weed program designed to prevent the introduction of nonindigenous invasive plants into the U.S. APHIS noxious weed activities include exclusion and permitting and in cooperation with other agencies and state agencies, and integrated management of introduced weeds, including biological control.

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3.1.1.2 U.S. Forest Service

The authority to manage for invasive species on National Forest System (NFS) lands and other lands under U.S. Forest Service (USFS) control is delegated at Title 7, Code of Federal Regulations (CFR), section 2.20 (7 CFR 2.20) and Title 7, CFR, section 2.60 (7 CFR 2.60). Title 36, CFR Parts 221, 222, 228, 241, 251, 261, 290, 292, 293, 296, and 297 provide additional authorities to manage and regulate invasive species across NFS lands, including establishing requirements and prohibitions to prevent and control aquatic and terrestrial invasive species. In addition, USFS regulations at 36 CFR 222.8 outline the Agency's obligation to work cooperatively in identifying invasive species, including noxious weeds, problems, and initiating control programs in aquatic and terrestrial areas of the USFS (USFS, 2011).

3.1.1.3 USFS Dakota Prairie Grasslands/Little Missouri National Grasslands

The USFS Dakota Prairie Grasslands Noxious Weed Management Project Final Environmental Impact Statement (FEIS) describes the USFS approach to treat and control existing infestation sites, as well as an adaptive strategy for treating up to 13,900 acres of new or previously unknown noxious weed infestations. The FEIS (USFS, 2007) also documents analysis conducted to determine the potential environmental consequences of treating noxious weeds on the Dakota Prairie Grasslands. North Plains will adhere to Appendix F of the FEIS (2007), USDA – Forest Service Guide To Noxious Weed Prevention Practices (USFS, 2001), and any other USFS recommendations and requirements when conducting weed control and reclamation activities on NFS lands.

The FEIS and Land and Resource Management Plan For the Dakota Prairie Grasslands Northern Region (USFS, 2001) addresses control and management of noxious weeds species as a high priority for ensuring long-term health of national grasslands and includes national goals relevant to land and resource management based on USFS manual objective statements.

3.2 STATE REGULATIONS

3.2.1 Noxious and Regulated Weeds

The Project is located in Golden Valley, Slope, Hettinger, Grant, Morton and Oliver Counties in North Dakota. At the state and county levels, the Agricultural Commissioner and County Weed Officers are responsible for organizing a noxious weed control or eradication program with all political subdivisions within North Dakota that own, control, or have jurisdiction over land (North Dakota Century Code [NDCC], 2024).

NDCC Chapter 4.1-47 defines a noxious weed as a plant propagated by either seed or vegetative parts, and determined to be injurious to public health, crops, livestock, land, or other property. Additionally, this chapter states that each person must do all things necessary and proper to control the spread of noxious weeds; makes it illegal for any person to distribute, sell, or offer for sale a noxious weed within the state; and defines the duties of the Agriculture Commissioner, including maintaining the State Noxious Weed List (NDCC, 2024).

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Per NDCC Chapter 4.1-47-30:

- a person may not willfully transport any material that contains noxious weed seeds or propagating parts on a public road, in a manner that allows for the dissemination of noxious weeds;
- a person may not willfully drive or transport any equipment on a public road, in a manner that allows for the dissemination of noxious weeds; and
- a person may not willfully dispose of any material that contains noxious weed seeds or propagating parts in a manner that allows for the dissemination of noxious weeds.

3.2.1.1 North Dakota Department of Trust Lands

In accordance with North Dakota Department of Trust Lands (NDDTL) land leases, noxious weeds must be controlled. The NDDTL does not list any additional weeds beyond those listed in at the state and county levels; however, they do list the following six 'watch list' species as having potential to become a nuisance to the land.

- yellow starthistle;
- black henbane;
- hoary cress;
- common tansy;
- Palmer amaranth; and
- waterhemp.

3.3 STATE AND COUNTY LISTED NOXIOUS WEEDS

The control of thirteen declared state noxious weeds is enforced by all cities and counties within North Dakota. Cities and counties have the option to add additional weeds for control enforcement only in their jurisdiction. Table 3.3-1 provides a list of the declared noxious weeds enforced within the counties and cities crossed by the Project, according to the State Noxious Weeds List (North Dakota Department of Agriculture [NDDA], 2023a) and the County and City Noxious Weeds List (NDDA, 2023b). The Project is not located within the jurisdiction of any city.

Table 3.3-1 includes a list of the statewide noxious and regulated weeds enforced within the counties crossed by the Project.

TABLE 3.3-1

State and County Enforced Noxious Weeds

Species Category / Common Name	Scientific Name	State Priority	Habitat	Enforcement Area
PLANTS				
Absinth wormwood	*Artemisia absinthium L.*	NA	Terrestrial	All cities and counties in North Dakota [a]
Baby's breath	*Gypsophila paniculata L.*	NA	Terrestrial	Grant County [b]
Black henbane	*Hyoscyamus albus*	NA	Terrestrial	Grant, Slope, and Golden Valley Counties
Canada thistle	*Cirsium arvense*	NA	Terrestrial	All cities and counties in North Dakota

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TABLE 3.3-1

State and County Enforced Noxious Weeds

Species Category / Common Name	Scientific Name	State Priority	Habitat	Enforcement Area
Common burdock	*Arctium minus*	NA	Terrestrial	Golden Valley County
Common mullein	*Verbascum thapsus L.*	NA		Golden Valley County
Dalmatian toadflax	*Linaria dalmatica*	NA	Terrestrial	All cities and counties in North Dakota
Diffuse knapweed	*Centaurea diffusa*	NA	Terrestrial	All cities and counties in North Dakota
Hoary cress	*Cardaria draba (L.) Desv.*	NA		Grant and Golden Valley Counties, State of North Dakota
Houndstongue	*Cynoglossum officinale*	NA	Terrestrial	All cities and counties in North Dakota
Leafy spurge	*Euphorbia esula*	NA	Terrestrial	All cities and counties in North Dakota
Musk thistle	*Carduus nutans L.*	NA		All cities and counties in North Dakota
Palmer amaranth	*Amaranthus palmeri*	NA		All cities and counties in North Dakota
Purple loosestrife	*Lythrum salicaria*	NA	Aquatic	All cities and counties in North Dakota
Russian knapweed	*Acroptilon repens, Rhaponticum repens*	NA	Terrestrial	All cities and counties in North Dakota
Saltcedar	*Tamarix spp.*	NA	Terrestrial	All cities and counties in North Dakota
Spotted knapweed	*Centaurea stoebe, C. maculosa*	NA	Terrestrial	Slope County [c]
Ventenata grass	*Ventenata dubia*	NA	Terrestrial	Grant County
Waterhemp	*A. rudis tuberculatus (Moq.)*	NA	Terrestrial	All cities and counties in North Dakota
Yellow toadflax	*Linaria vulgaris*	NA	Terrestrial	All cities and counties in North Dakota

[a] Source: https://www.ndda.nd.gov/divisions/plant-industries/noxious-weeds (2023a).
[b] Source: https://www.ndda.nd.gov/sites/www/files/documents/files.pdf (2023b).
[c] Included at the request of Slope County. While not designated a noxious weed in North Dakota, ventenata grass (*Ventenata dubia)* is present across the state line in Montana counties crossed by the Project.

3.4 NOXIOUS WEED PRESENCE

North Plains conducted surveys for state- and county-listed noxious weed species within the Project survey corridor. Noxious weed surveys were conducted concurrently with the wetland and waterbody surveys and were not timed to coincide with any species-specific morphological state. Table 3.4-1 shows noxious weeds with confirmed presence in the Project survey corridor based on occurrences documented during noxious weed surveys.

TABLE 3.4-1

Confirmed Noxious Weed Presence by County within the Project Survey Corridor

Species	Golden Valley	Slope	Hettinger	Grant	Morton	Oliver
Absinth Wormwood		X	X	X	X	
Canada Thistle	X	X	X	X	X	X
Cheatgrass [a]						
Cicer Milkvetch [a]			X			
Crested Wheatgrass [a]	X	X				
Field Bindweed	X	X	X	X	X	
Field Brome [a]	X	X				
Houndstongue		X				
Intermediate Wheatgrass [a]	X					
Kentucky Bluegrass [a]	X	X				
Leafy Spurge		X	X	X	X	X
Musk Thistle					X	

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TABLE 3.4-1

Confirmed Noxious Weed Presence by County within the Project Survey Corridor

Species	Golden Valley	Slope	Hettinger	Grant	Morton	Oliver
Saltcedar						
Smooth Brome [a]	X					
Spotted Knapweed						
Tall Buttercup						
Tansy Ragwort						

[a] Non-native or invasive plant species recognized by the USFS but not considered a statewide noxious weed in North Dakota

Source: WEST, 2024

4.0 ROLES AND RESPONSIBILITIES

North Plains will select a third-party construction contractor to construct the Project. The construction contractor (Contractor) will be responsible for site preparation, installation of support structures, general Project construction, testing and commissioning, health and safety, and environmental compliance, to include hazardous materials management. However, North Plains is responsible for construction of all associated facilities.

For the duration of the Project construction, North Plains will implement and maintain the measures outlined in this Plan, the CMRP, and in all applicable Project permits.

4.1 ENVIRONMENTAL INSPECTION

North Plains will employ Environmental Inspectors during the construction phase. Further information on Environmental Inspectors and their responsibilities is provided in the CMRP.

4.2 COUNTY WEED BOARD

North Dakota County Weed Boards encourage noxious weed control by landowners and land occupants within the county and investigate signed complaints received by the County Weed Officer regarding noxious weeds.

The jurisdiction of a County Weed Board extends to all land within the county but does not include any land within the corporate limits of a city if that city has established its own noxious weed control program under the conditions of NDCC Chapter 4.1-47; no city programs are crossed by the Project. North Plains will collaborate with county weed boards, as needed, in the identification, prevention, and treatment of noxious weeds. County Weed Boards can offer assistance as it relates to identification, prevention, and treatment of noxious weeds.

4.2.1 County Weed Officers

County Weed Officer responsibilities include, but are not limited to:

- cooperating with the board and the operation and enforcement of NDCC Chapter 4.1-47 within the county;
- maintaining awareness of the location of noxious weeds within the county;

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- meeting the pesticide certification requirements set forth in NDCC Chapter 4.1-33;
- encouraging noxious weed control by all landowners and land occupants within the county; and
- investigating all signed complaints received by the officer regarding noxious weeds.

Table 4.2.1-1 provides the primary contact information of the Morton, Golden Valley, Grant, Hettinger, Oliver, and Slope County Weed Boards (County Weed Boards), according to the 2023 County and City Weed Board Directory.

TABLE 4.2.1-1

County Weed Board Contact Information

County / Contact Title	Name	Phone	Email Address
GOLDEN VALLEY			
Chair	Gerald Streitz	(701) 690-7923	melland4@hotmail.com
Secretary/Treasurer	Ashley Ueckert	(701) 340-4685	ashley.uekert@ndsu.edu
SLOPE			
Weed Officer/Secretary	Joan Lorge	(701) 523-6675	jolorge@nd.gov
Chair	Dale Klug	(701) 523-5562	
HETTINGER			
Weed Officer	Tim Milliren	(701) 852-2952	rooster@ndsupernet.com
Chair	Devan Laufer	(701) 928-0100	dlaufer@nd.gov
GRANT			
Weed Officer/Secretary	Merlin Leithold	(701) 220-7908	leithold@westriv.com
Chair	Leonard Gerhardt	(701) 597-3591	
MORTON			
Weed Officer	Cody Schnabel	(701) 391-8006	cody.schnabel@mortonnd.org
Chair	Kevin Schmidt	(701) 220-9891	koschmidt@msn.com
OLIVER			
Weed Officer	Rick Schmidt	(701) 207-0010	rick.schmidt@ndsu.edu
Chair	Linda Nelson	(701) 794-8721	linelson@nd.gov

Source: NDDA, 2025. County and City Weed Boards. Available online at: https://www.ndda.nd.gov/sites/www/files/documents/files/WeedBoardDirectory_5_2025.pdf. Accessed August 2025.

5.0 TRAINING

North Plains will provide noxious weed identification, management, and control training as part of Contractor orientation. As part of this training, North Plains will review and ensure Project personnel understand the contents of this Plan. As needed, North Plains will make available a copy of *A Guide to North Dakota Noxious and Troublesome Weeds* (North Dakota State University, 2020), which includes photos of all North Dakota state and county listed noxious weeds.

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6.0 NOXIOUS WEED MANAGEMENT AND CONTROL

6.1 PREVENTIVE MEASURES

6.1.1 Noxious and Regulated Weeds

Noxious weeds can be spread by natural processes, such as wildlife and wind, as well as through human means involving vehicles and construction equipment, construction activities, farm equipment, and livestock. The most effective management approach to control the spread of noxious weeds is implementation of preventative measures.

North Plains will implement noxious weed preventative measures that are consistent with state and county regulations, and will work with County Weed Boards, as necessary.

- Prior to moving equipment to the Project area, North Plains will thoroughly clean construction equipment, including construction mats, to limit the potential for the spread of noxious weeds.
- North Plains will clean the equipment at designated wash stations in upland areas.
- Prior to construction, North Plains will complete noxious weed surveys within the Project workspace to map known populations of noxious and regulated weeds. North Plains will mark areas of the Project workspace that contain documented occurrences of noxious and regulated weeds (i.e., infested areas). Such markings will clearly indicate the limits of the infestation(s) within the construction area.
- A third-party contractor approved by the County Weed Officer, or a County Weed Officer familiar with the identification of listed state and county noxious weeds will perform surveying and mapping using geographical information systems/geographical positioning systems.
- During construction, North Plains will clean the tracks, tires, and blades of equipment by hand or compressed air to remove excess soil prior to movement of equipment out of noxious weed infested areas or use cleaning stations to remove vegetative materials.
- North Plains will use mulch and straw or hay bales that are certified free of noxious weeds for temporary erosion and sediment control in disturbed areas.
- North Plains will implement pre-construction treatments, such as mowing, prior to seed development or a state-certified contractor(s) will apply herbicide to areas of noxious weed infestation prior to other clearing, site grading, excavation, or other soil disturbing work at locations identified during the noxious weed surveys.
- Pre-construction control treatments will avoid the use of herbicides within 100 feet of a waterbody or wetland.
- While not designated a noxious weed in North Dakota, ventenata grass (*Ventenata dubia*) is present in western Montana counties crossed by the route. Slope County has requested ventenata grass be added to the list of weeds to be controlled by

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North Plains. North Plains will monitor for, and control, ventenata grass and report according to the procedures listed in Section 6.2.

6.2 TREATMENT AND CONTROL METHODS

North Plains will conduct noxious weed treatment methods in accordance with existing regulations and landowner or agency agreements. North Plains will adhere to Appendix F of the FEIS (2007), USDA – Forest Service Guide To Noxious Weed Prevention Practices (USFS, 2001), and any other USFS recommendations and requirements when conducting weed control and reclamation activities on NFS lands. Pre-treatment of noxious weed infestations will be conducted prior to vegetation clearing or ground-disturbing construction activities if pre-treatment will aid in controlling the spread of weeds during construction. North Plains and inspections staff will choose the best available treatment and control methods based on site-specific information, including the season, location, and the noxious or regulated weed species present. Control methods may include herbicide application or mechanical measures, such as mowing or manual removal.

During construction, North Plains will periodically monitor the construction areas to allow for early detection of infestations of noxious weeds. If noxious or regulated weeds are observed within construction areas, North Plains or a state-certified herbicide applicator will implement appropriate control measures in an attempt to control the identified infestations and to reduce the spread or proliferation of weeds within the construction area.

During inactive periods of construction, defined as periods of 120 days or longer, North Plains will treat any previously identified noxious weeds of concern sites, as well as any new areas within the construction corridor, as determined necessary by North Plains.

After construction activities are complete, North Plains will reclaim the Project workspace in accordance with the CMRP and using seed mixes approved by the landowner and land-managing agencies. North Plains will coordinate with the USFS regarding preferred seed mixes to be used on the portions of the Project that cross these federally managed lands.

After Project construction has been completed in areas disturbed by construction and areas over which North Plains will retain surface use control, such as converter stations, North Plains will provide weed control to limit the potential spread of noxious weeds onto adjacent lands. Any herbicide spraying performed by North Plains will be done by a state-licensed or state-certified applicator.

6.2.1 Control Methods

North Plains will determine appropriate weed management techniques based on the current conditions at the location of infestation. Weed management techniques may include hand-pulling, mechanical removal, or the use of herbicides. These methods are discussed below.

Before using a noxious weed control method not outlined in this Plan, North Plains will consult with the appropriate County Weed Board(s).

6.2.1.1 Hand-pulling or Pulling Tools

Hand-pulling weeds has a small ecological impact, causes minimal damage to neighboring vegetation, and has low to no cost. It does, however, require significant labor and thus can only

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be used in areas of small infestation. Hand-pulling may be used when individual or small numbers of weeds are observed cropping up in the right-of-way.

Handheld tools are available to remove weeds in the same manner as hand-pulling. These tools provide additional leverage and are able to remove weeds with deeper and/or larger roots. As with hand-pulling, this method, if used, will be limited to areas of small infestations.

6.2.1.2 Mechanical

Mowing or brushing can quickly remove large swaths of weeds, but care will be taken that cuttings are removed promptly to prevent regrowth or from being carried offsite via wind or water to germinate in uninfested areas. Additionally, if mowing or brushing is used, North Plains will identify the weed and be aware of that species timing requirements to ensure that they are cut at the appropriate point in development (e.g., prior to flowering) to prevent regrowth or spread.

6.2.1.3 Chemical (herbicides)

North Plains will base herbicide selection on information gathered from local county weed boards and/or the NDDA. Prior to herbicide application, the state-certified applicator will obtain any required permits or approvals from the local weed district and landowner. North Plains will adhere to Appendix F of the FEIS (2007), USDA – Forest Service Guide to Noxious Weed Prevention Practices (USFS, 2001), and any other USFS recommendations and requirements when conducting weed control and reclamation activities on NFS lands. Herbicide type(s) will be determined based on the weed species required to be controlled and existing land use of the area in which it will be applied. Whenever possible, the state-certified applicator will select effective, species-appropriate herbicides that are unlikely to drift, leach to groundwater or wash into streams, are nontoxic to people and other organisms, and easy to apply. The state-certified applicator will make every effort to minimize negative environmental impacts when conducting herbicide applications.

A state-certified applicator will conduct herbicide applications in accordance with this Plan and NDCC Chapter 4.1-47. The state-certified applicator will strictly adhere to all label instructions and implement all manufacture guidelines for the type of herbicide and application used and based on conditions in the field at the time. For example, manufacturer's guidelines might recommend that herbicides only be applied under appropriate weather conditions, that application sprayers be mounted low to the ground, and that sprayer booms incorporate specialized nozzles designed to produce large droplet sizes with limited drift potential. Adherence to these specifications and manufacturer label directions will minimize the potential for drift or transport of herbicides to off right-of-way areas. All herbicides applied prior to or during construction will be non-residual or will have a significant residual effect no longer than 30 days.

The state-certified applicator may employ vehicle-mounted sprayers and/or hand application methods depending on location(s) of infestation(s) and conditions in the field. The state-certified applicator will implement best management practices when applying herbicides in the construction area to reduce potential impacts to avian and wildlife species. The state-certified applicator will complete calibration checks of equipment at the beginning of spraying and periodically thereafter to ensure proper application rates are achieved. Industry standards and/or manufacturer's guidelines will determine the required or appropriate application equipment calibration checks. The state-certified applicator will maintain application records and provide copies, as requested,

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The state-certified applicator will manage and use herbicides according to the provisions listed below.

- Application procedures will be conducted by a licensed commercial applicator to ensure that proper mixing, application, cleanup, personal protection, and safety procedures are followed.
- The state-certified applicator will bring herbicides to the Project site premixed or mix in a closed transfer system (CTS), in returnable/refillable containers, and transfer contents by CTS to application tanks to limit worker and environmental exposure and eliminate the need for disposal of herbicide containers in area landfills.
- The state-certified applicator will transport herbicides in a manner that will prevent tipping or spilling, and the inspections staff will inspect all herbicide equipment and containers daily for leaks.
- The state-certified applicator will not use, store, or mix herbicides in or within 100 feet of a wetland or waterbody or as specified in permits for federal or state lands, whichever is more stringent.
- The state-certified applicator will not apply herbicides within 100 feet of known Regional Forester's Sensitive Species plant occurrences within NFS lands without prior regulatory approval.
- Herbicide applications on NFS lands will be approved by the USFS prior to use and applied in accordance with all applicable conditions of the Noxious Weed FEIS (2007).

7.0 POST CONSTRUCTION NOXIOUS WEED MANAGEMENT AND CONTROL

7.1 SITE RESTORATION AND REVEGETATION

After construction activities are complete, North Plains will reclaim the Project workspace in accordance with the CMRP and using seed mixes approved by the landowner and land-managing agencies. North Plains will coordinate with the USFS regarding preferred seed mixes to be used on the portions of the Project that cross these federally managed lands. Site restoration will involve grading disturbed work areas to approximate preconstruction contours and natural drainage patterns as closely as possible. North Plains will maintain temporary erosion controls until replaced by permanent erosion control structures or until restoration is complete.

7.2 MONITORING AND OPERATION

Following construction, North Plains' on-site operations staff will monitor all mapped and newly identified sites of infestation within areas disturbed by construction and all areas over which North Plains retains control of the surface use. North Plains will perform monitoring annually for a minimum of 5 years or per mutual agreement between North Plains and the appropriate County Weed Board. In addition, North Plains will conduct reseeding, as needed, to re-establish a desirable vegetative cover to stabilize the soils and slow the potential for re-invasion of noxious weeds.

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In areas with continued presence of noxious or regulated weeds, the weed treatment and control measure(s) chosen will be the best available for the season, location, and species, as described in Section 6.2. Where necessary, a state-certified applicator will complete herbicide applications. The County Weed Officer(s) may inspect all sites of concern, as they deem necessary, and will determine if the infestation sites have been eradicated.

8.0 PLAN REVISIONS

Table 8.0-1

Plan Revisions

Revision Number	Revision Type(s)	Revision Date
Rev 1	Initial Plan draft.	April 2023
Rev 2	Global revisions based on agency comments.	May 2024
Rev 3	Global revisions based on Montana Noxious Weed review.	August 2024
Rev 4	Updated language for consistency across all project plans.	August 2025
Rev 5	Updated language for consistency across all project plans.	January 2026

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NORTH PLAINS CONNECTOR PROJECT

ATTACHMENT G

MBTA Compliance Plan

NORTH PLAINS CONNECTOR

A Grid United Project

Draft Migratory Bird Treaty Act Compliance Plan

Prepared by:

North Plains Connector LLC, A Grid United LLC Company

GRID UNITED

October 2025

NORTH PLAINS CONNECTOR LLC
NORTH PLAINS CONNECTOR PROJECT
DRAFT MIGRATORY BIRD TREATY COMPLIANCE PLAN

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ACRONYMS AND ABBREVIATIONS

2024 Eagle Rule	Permits for Incidental Take of Eagles and Eagle Nests; Final Rule
AC	alternating current
APLIC	Avian Power Line Interaction Committee
APP	Avian Protection Plan
ARMP	Approved Resource Management Plan
BA	Biological Assessment
BCC	Birds of Conservation Concern
BCR	Bird Conservation Region
BE	Biological Evaluation
BFD	bird flight diverter
BGEPA	Bald and Golden Eagle Protection Act
BLM	Bureau of Land Management
CFR	Code of Federal Regulations
CMRP	Construction, Mitigation, and Reclamation Plan
DC	direct current
EHV	extra high voltage
EI	Environmental Inspector
EMP	Eagle Management Plan
ESA	Endangered Species Act
FR	Federal Register
HVDC	high-voltage direct current
HVDC Transmission Line	new 525-kV HVDC electric transmission line
IPaC	Information for Planning and Consultation
kV	kilovolt
LRMP	Land and Resource Management Plan
LOD	limits-of-disturbance
MBTA	Migratory Bird Treaty Act
MFWP	Montana Fish, Wildlife, and Parks
MLCF	Montana Landcover Framework
Morton County Converter Station	new AC/DC converter station in Morton County, North Dakota
Morton County Switchyard	new Morton County Switchyard, North Dakota
Morton Transmission Line	new 345-kV EHV AC electric transmission line in Morton County, North Dakota
MOU	memorandum of understanding
MP	milepost
MTNHP	Montana Natural Heritage Program
NDGFD	North Dakota Game and Fish Department

NLCD	National Land Cover Database
North Plains	North Plains Connector LLC
Oliver County Substation	new Oliver County Substation, North Dakota
Oliver Transmission Line	new 345-kV EHV AC electric transmission line in Morton and Oliver counties, North Dakota
OPGW	optical power ground wire
Plan	Migratory Bird Treaty Act Compliance Plan
Project	North Plains Connector Project
RFSS	Regional Forester's Sensitive Species
Rosebud County Converter Station	new AC/DC converter station in Rosebud County, Montana
Rosebud Transmission Line	new 500-kV extra high voltage AC electric transmission line in Rosebud County, Montana
SCP	Species of Conservation Priority
SOC	Species of Concern
SPRP	Spill Prevention and Response Plan
SSS	Special Status Species
SWAP	State Wildlife Action Plan
SWPPP	Stormwater Pollution Prevention Plan
USC	U.S. Code
USDA	U.S. Department of Agriculture
USEPA	U.S. Environmental Protection Agency
USFS	U.S. Forest Service
USFWS	U.S. Fish and Wildlife Service
White Lake NWR	White Lake National Wildlife Refuge
WMA	wildlife management area

1.0 INTRODUCTION

North Plains Connector LLC (North Plains), a Delaware limited liability company formed pursuant to Section 18-201 of the Delaware Limited Liability Company Act, has prepared this Migratory Bird Treaty Act Compliance Plan (Plan) for the North Plains Connector Project (Project), a proposed interregional electric connector line. North Plains is a wholly owned, indirect single-purpose subsidiary of Grid United LLC, a Houston-based company developing next generation energy infrastructure to power the future. Grid United LLC is focused on the infrastructure needed to make the U.S.'s power grid more modern, efficient, reliable, and secure.

The Project is an approximately 422-mile-long high-voltage direct current (HVDC) electric transmission line and associated infrastructure designed to connect the eastern and western energy grids in the United States. As proposed, the Project will extend from near Colstrip in southeastern Montana to two separate end points in southwestern North Dakota – one near the town of Center and the other near St. Anthony (see Figure 1.0-1). The Project crosses lands owned by state and federal agencies, as well as private landowners.

2.0 PLAN PURPOSE

North Plains has prepared this Plan to describe the potential impacts of the Project on migratory birds and document avoidance and minimization measures the Project will implement to reduce those potential impacts.

This Plan discusses measures that have already been implemented during the Project siting and design phases, as well as measures that will be implemented during Project construction and reclamation phases. Potential impacts during Project operations and maintenance are briefly described in this Plan, where relevant to measures implemented during earlier Project phases. However, measures applicable during operations and maintenance will be addressed in a separate Avian Protection Plan (APP).This Plan has been developed to demonstrate Project compliance with applicable state and federal regulations, including the Migratory Bird Treaty Act of 1918 (MBTA), Bald and Golden Eagle Protection Act of 1940 (BGEPA), Endangered Species Act of 1973 (ESA), and right-of-way and special use permit conditions on Bureau of Land Management (BLM), National Forest Service lands managed by U.S. Forest Service (USFS), and U.S. Department of Agriculture (USDA) Agricultural Research Service (ARS) lands. Species discussed in the Plan include migratory birds, eagles, species listed or proposed under the ESA, birds considered Regional Forester's Sensitive Species (RFSS) on USFS-managed lands, and birds considered Special Status Species (SSS) by BLM.

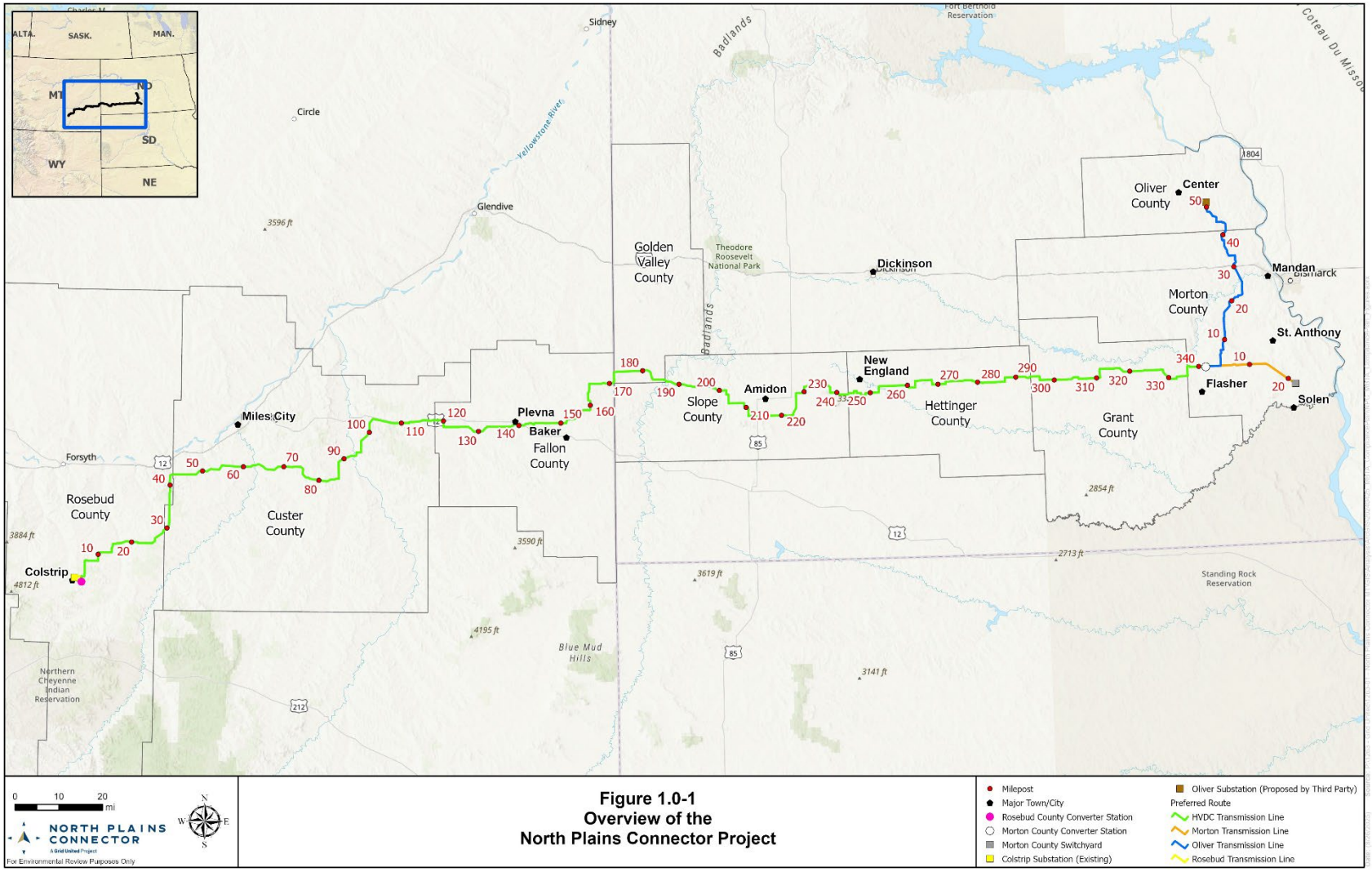


Figure 1.0-1
Overview of the
North Plains Connector Project

3.0 REGULATORY COMPLIANCE

This section provides a brief overview of federal and state legislation and regulatory compliance applicable to migratory birds with the potential to occur along the Project. North Plains will conduct Project activities in accordance with applicable state and federal agency regulations.

3.1 FEDERAL REGULATIONS

3.1.1 Migratory Bird Treaty Act

The MBTA (16 U.S. Code [USC] § 703–711 [1918]) assigns legal authority to the U.S. Fish and Wildlife Service (USFWS) to protect over 1,000 species of raptors, diurnal migrants, and passerine migratory birds from take. Under MBTA, "take" of migratory birds native to the United States and its territories is prohibited. The definition of "take" under MBTA includes killing, possessing or capturing migratory birds, and protections under the MBTA extend to the nests of protected species when they contain eggs or young. The USFWS enforces the MBTA and maintains a list of all species protected by the MBTA at 50 Code of Federal Regulations [CFR] § 10.13 (1973).

Currently, no permit is available for incidental take of migratory birds. In 2021, the USFWS provided advanced notice of its plan to develop a proposed rule authorizing the incidental taking or killing of migratory birds (86 Federal Register [FR] 54667 [2021]). The potential rule could include exceptions to the take prohibition, general permits for certain activities, and specific or individual permits. The USFWS held a public comment period regarding the potential rule that closed on December 3, 2021; however, a proposed rule has not yet been published and no other information has been made available as of the date of this document.

A series of legal opinions have been issued since 1978 regarding the issue of "incidental" or "non-purposeful" take under the MBTA. The current status of the legal scope and applicability of the MBTA to incidental take is in flux. On April 11, 2025, the Acting Solicitor for the U.S. Department of the Interior (USDOI) issued a legal opinion that specified that only intentional take of migratory birds is prohibited by the MBTA and that the prohibitions of the MBTA do not apply to the incidental take of migratory birds (USDOI, 2025). It is possible that USFWS will revert to the prosecutorial discretion model, which was commonly used prior to 2016 and was reinstituted as recently as October 2021. Given the likelihood for legal challenges and varying interpretations of whether incidental take is prohibited by the MBTA, North Plains has elected to voluntarily implement measures to avoid and minimize the incidental taking of migratory birds.

3.1.2 Bald and Golden Eagle Protection Act

In addition to the MBTA, bald (*Haliaeetus leucocephalus*) and golden (*Aquila chrysaetos*) eagles are protected under the BGEPA (16 USC § 668–668d [1940]). The BGEPA prohibits take, possession, transport, export, or import of any bald or golden eagle, whether alive or dead, including parts, nests, or eggs, unless allowed by permit. "Take" under the BGEPA includes pursuing, shooting, wounding, killing, or disturbing. "Disturbing" includes agitating or bothering to a degree that causes or is likely to cause injury, decreased productivity, or nest abandonment by interfering with normal breeding, feeding, or sheltering behavior. If a proposed project or action occurs in areas where nesting, feeding, or roosting eagles occur, then project proponents may need to take additional conservation measures to achieve compliance with the BGEPA.

In 2009, USFWS established permit regulations that authorize incidental eagle take of eagles (50 CFR § 22.26 [2009]). In 2024, the USFWS revised those regulations to streamline the permitting process in the *Permits for Incidental Take of Eagles and Eagle Nests; Final Rule* (2024 Eagle Rule; USFWS 2024a) for incidental take of eagles (50 CFR §§ 13 and 22 [1974]). The 2024 Eagle Rule follows the permitting approach previously defined in the *National Bald Eagle Management Guidelines* (USFWS, 2007) to create a general permit option and authorize bald eagle nest disturbance take associated with eligible activities (50 CFR § 22.280 [2024]), including:

- linear infrastructure construction and maintenance within 660 feet of a bald eagle nest;
- aircraft operation, including helicopters and fixed-wing aircraft within 1,000 feet of an in-use bald eagle nest; and
- blasting within 0.5 mile of an in-use bald eagle nest.

Golden eagle nest disturbance does not qualify for a general permit and instead requires a specific permit to authorize disturbance.

Certain construction and reclamation activities near eagle nests may increase the potential for eagle nest disturbance and may warrant permitting. Project coordination with the USFWS field offices and Migratory Bird Office is ongoing; Project-specific eagle permitting considerations and nest-specific avoidance and minimization measures are discussed in the Project's Eagle Management Plan (EMP).

3.1.3 Endangered Species Act

The ESA establishes a national policy for conserving threatened and endangered species of fish, wildlife, and plants, and the habitat on which they depend. The USFWS administers the ESA for terrestrial and freshwater species and is responsible for listing a species as threatened or endangered (listed species), designating critical habitat, developing and implementing protective regulations and recovery plans, and undertaking several other management and conservation efforts pursuant to the ESA.

Section 9 of the ESA prohibits the take of listed wildlife, where the definition of "take" includes harassing, harming, or killing (16 USC §§ 1532 [1973], 1538 [1973]). Harassment under ESA includes both intentional and negligent acts that may injure wildlife or significantly disrupt normal behavioral patterns such as breeding, feeding, or sheltering (50 CFR § 17.3 [1975]). Such acts may include significant habitat modification or degradation, where habitat impacts kill or injure wildlife by impairing essential behaviors such as breeding, feeding, or sheltering (50 CFR § 17.3 [1975]). Some threatened wildlife species are regulated under an ESA 4(d) Rule that may except take following specified restrictions.

Section 7 of the ESA requires federal agencies to consult or conference with the USFWS to ensure that any actions that they authorize, fund, or carry out do not jeopardize the continued existence of a federally listed or proposed species, or result in the destruction or adverse modification of designated or proposed critical habitat. In reviewing the Project, the U.S. Department of Energy, the lead federal agency for the Project, will consult or conference with the USFWS on behalf of USDA ARS, BLM, and USFS, in compliance with Section 7 to assess

whether the Project could adversely affect any federally listed or proposed terrestrial or freshwater species and designated or proposed critical habitat.

USFWS Information for Planning and Consultation (IPaC) identified three listed or proposed bird species as having the potential to occur within 1 mile of the Project limits-of-disturbance (LOD).[1] Listed species include the piping plover (*Charadrius melodus*), rufa red knot (*Calidris canutus rufa*), and whooping crane (*Grus americana*; USFWS, 2025a). A fourth bird species, the pinyon jay (*Gymnorhinus cyanocephalus*), under review for listing (USFWS, 2023a) could also be present. All four species are also listed as protected under MBTA, and therefore receive legal protection under its provisions. Coordination with USFWS regarding potential impacts on federally listed and proposed species is ongoing. Additional details regarding potential impacts and avoidance and minimization measures for these species are included in the Project's Biological Assessment (BA).

3.1.4 Executive Order 13186

Federal Executive Order 13186 (66 FR 3853 [2001]: *Responsibilities of Federal Agencies to Protect Migratory Birds*) directs federal agencies that have, or are likely to have, a measurable negative effect on migratory bird populations to develop and implement a Memorandum of Understanding (MOU) with the USFWS to protect migratory birds (66 FR 3853-3856 [2001]). The MOU must describe measures and actions that the federal agency will take to protect migratory birds, restore their habitat, and limit overall impacts.

The Project will cross federal land managed by the USDA ARS, BLM, and USFS. The BLM has an MOU with the USFWS that is currently expected to expire in 2027 (BLM, 2010, 2022). The USFS has an MOU with the USFWS that has no current expiration date (USFWS, 2009, 2022). Specific measures North Plains will implement to minimize impacts on migratory birds on USDA ARS, BLM, and USFS-managed lands in accordance with the agencies' migratory bird MOUs are discussed in this Plan. Additional measures specific to USFS-managed lands are discussed in the USFS Biological Evaluation (BE).

3.2 STATE REGULATIONS

State regulations protecting non-game birds generally reiterate the protections described under the MBTA. North Dakota Century Code 20.1-04-04 prohibits destroying or interfering with the nests and eggs of protected bird species. Montana Code Annotated also prohibits the killing of non-game birds and protects the nests and eggs of wild birds, except under certain circumstances covered by state permits (87-5-201).

4.0 ROLES AND RESPONSIBILITIES

North Plains will select a third-party construction contractor to construct the Project. The primary construction contractor and/or subcontractor(s) are responsible for site preparation, installation of support structures, general Project construction, testing and commissioning, health and safety, and environmental compliance including the implementation of measures described in this Plan. North Plains will own the entire Project and, as a result, is responsible for construction of all associated facilities.

[1] The LOD includes Project workspace and rights-of-way.

North Plains will be legally responsible for the implementation of this Plan. For the duration of the Project, North Plains will implement and maintain the measures outlined in this Plan and in all applicable Project permits.

North Plains will employ Environmental Inspectors (EIs) during construction and reclamation to ensure compliance with this Plan and all other environmental conditions and commitments. North Plains may also designate Biological Monitors to fulfill Plan obligations requiring specific biological training or expertise. Further information on EIs and their general responsibilities are provided in the Project's Construction, Mitigation, and Reclamation Plan (CMRP).

5.0 PROJECT DESCRIPTION

The Project will include an HVDC transmission line and related facilities that will provide up to 3,000 megawatts of transfer capacity at 525 kilovolts (kV) between the eastern and western grids. Specifically, the Project will connect the Midcontinent Independent System Operator and Southwest Power Pool on the eastern grid with the Western Electricity Coordinating Council electrical power markets on the western grid.

As listed below and shown on Figure 1.0-1 above, the Project will involve constructing new and modifying existing electric transmission facilities in Montana and North Dakota. The Project will consist of four transmission line segments and associated aboveground facilities, as follows:

- Modifications at the existing Colstrip Substation in Rosebud, which is owned and operated by NorthWestern Energy, will involve an approximately 13-acre expansion of the existing site to accommodate the Project. The existing Colstrip Substation will be modified to interconnect the Rosebud Transmission Line by installing equipment within and adjacent to the substation. NorthWestern Energy will expand the existing footprint of the Colstrip Substation by approximately 4 acres to the northwest and approximately 9 acres to the south and east to accommodate the interconnection. This will be the point of interconnection to the Western Electricity Coordinating Council power system for the western grid.

- A new 500-kV extra high voltage (EHV) alternating current (AC) Rosebud Transmission Line in Rosebud County, Montana (Rosebud Transmission Line). The new line will consist of two separate, parallel circuits, each approximately 3 miles long. The line will extend east from the existing Colstrip Substation to the new Rosebud County Switchyard associated with the new Rosebud County Converter Station.

- One new AC/ direct current (DC) converter station in Rosebud County, Montana (Rosebud County Converter Station). The converter station will connect the eastern terminus of the Rosebud Transmission Line to the western terminus of the new 525-kV HVDC Transmission Line. Additionally, two 0.3- and 0.4-mile single-circuit lines connect the switchyard to the converter station; these lines and the switchyard are collectively part of the Rosebud County Converter Station.

- A 342-mile HVDC Transmission Line rated up to 525 kV extending from Montana into North Dakota:

  - Montana: North Plains will install approximately 174 miles of the HVDC Transmission Line in Rosebud, Custer, and Fallon counties. The line will extend east from the new AC/DC Rosebud County Converter Station in Rosebud County near Colstrip, Montana to the Montana-North Dakota state line in Fallon County.

  - North Dakota: North Plains will install approximately 168 miles of the HVDC Transmission Line in Golden Valley, Slope, Hettinger, Grant, and Morton counties. The line will extend east from the Montana-North Dakota border in Golden Valley County to the new AC/DC Morton County Converter Station in Morton County, North Dakota.

- A new AC/DC converter station in Morton County, North Dakota (Morton County Converter Station). The converter station will connect the eastern terminus of the HVDC Transmission Line to the western terminus of two new 345-kV EHV AC electric transmission line segments.

- Approximately 22 miles of new 345-kV EHV AC Morton Transmission Line in Morton County, North Dakota. The line will extend east and southeast from the new Morton County Converter Station to the new Morton County Switchyard. The Morton County Switchyard will serve as the interconnection point to the Southwest Power Pool system for the eastern grid. The Morton County Switchyard will be constructed and operated by the utility owner (Basin Electric Power Cooperative).

- Approximately 52 miles of new 345-kV EHV AC Oliver Transmission Line located in Morton and Oliver counties, North Dakota. The line will extend east and north from the Morton County Converter Station in Morton County to the planned Oliver County Substation in Oliver County, North Dakota.

The Oliver County Substation is under development by Minnesota Power as part of a separate, independent project. The Oliver County Substation will serve as the interconnection point to the Midcontinent Independent System Operator for the eastern grid.

The Project includes a right-of-way centered on each transmission line. The Project's right-of-way is typically 200 feet, but may range from 125 to 320 feet to accommodate line neckdowns and co-location. North Plains will not use the entire right-of-way to construct the transmission lines. Instead, North Plains will perform construction activities within specific Project workspaces. Some portions of the right-of-way cross steep topography that prevents safe travel down the right-of-way. Other areas of the right-of-way cross culturally or environmentally sensitive resources. North Plains has designed the Project workspace to avoid these areas.

The Project workspace includes:

- permanent structure foundations and associated temporary structure pad workspace, located entirely within the Project right-of-way;

- permanent fiber repeater stations and temporary workspaces for fiber/line splicing sites;

- temporary workspaces for guard structures;

- access roads both within and outside of the rights-of-way, including new temporary and permanent access roads, existing access roads with and without improvements, and temporary overland travel paths;

- temporary workspace for pulling and tensioning sites extending outside of the right-of-way; and

- temporary workspaces and permanent facility locations for the Rosebud County Converter Station, Rosebud County Switchyard, Morton County Converter Station, and Morton County Switchyard.

Additionally, North Plains will clear trees and tall shrubs within the right-of-way during Project construction. Project operational activities will include routine inspections and periodic vegetation maintenance, such as the removal of tall woody vegetation that could compromise the integrity of the transmission lines. Forested vegetation within the right-of-way will be permanently converted to lower-growing vegetation.

The Project workspace and rights-of-way are collectively referred to as the limits-of-disturbance (LOD) in this document.

5.1 HABITAT DESCRIPTION

The Project is located within the Northwestern Great Plains Level III Ecoregion, which encompasses portions of eastern Montana, western North Dakota and South Dakota, northeastern Wyoming, and northern Nebraska (U.S. Environmental Protection Agency [USEPA], 2013). The ecoregion is semiarid and characterized by rolling plains, sporadic buttes, and badlands. Much of the region was originally dominated by native grasslands, which are now fragmented but persist in rangeland patches. Agricultural uses, including rangeland and crop production, are prevalent.

The Project is located within six level IV ecoregions: the Central Grasslands, River Breaks, Pine Scoria Hills, Missouri Plateau, Sagebrush Steppe, and Little Missouri Badlands, as described below (USEPA, 2013).

- The **Montana Central Grasslands** is fairly flat and contains numerous streams. Historic vegetation included short grasses, though much of the ecoregion is now used for pastureland (USEPA, 2013).

- The **River Breaks** is one of the more rugged level IV ecoregions in the area, has limited suitability for grazing cattle, and is generally uncultivated. Common plant species include threadleaf sedge (*Carex filifolia*), needle-and-thread (*Hesperostipa comata*), Rocky Mountain juniper (*Juniperus scopulorum*), little bluestem (*Schizachyrium scoparium*), and buffalograss (*Bouteloua dactyloides*; USEPA, 2013).

- The **Pine Scoria Hills,** like the River Breaks, are poor for cattle and agriculture. Forests of Rocky Mountain juniper and ponderosa pines (*Pinus ponderosa*) grow at higher elevations. A mixture of junipers and grasses can be found at lower elevations, (USEPA, 2013).

- The **Missouri Plateau** is a fairly open area with shortgrass prairie. Scattered throughout the ecoregion is wheat (*Triticum aestivum*), alfalfa (*Medicago sativa*), and pastureland (USEPA, 2013).

- The **Sagebrush Steppe** is a dry ecoregion made up of shortgrass prairie and sagebrush (*Artemisia* spp.) with the primary disturbance being from livestock grazing (USEPA, 2013).

- The **Little Missouri Badlands** is within the watershed of the Little Missouri River. Vegetation includes shortgrass prairie, juniper, and deciduous forests made up of cottonwood (*Populus* spp.) and green ash (*Fraxinus pennsylvanica*), which grow along streams. The land is typically used for pastureland and recreation (USEPA, 2013).

Potential bird habitat was assessed using data on vegetation and land cover from the Montana Landcover Framework (MLCF) (Montana Natural Heritage Program [MTNHP], 2017) and National Land Cover Database (NLCD) data in North Dakota (NLCD, 2024). Table 5.1-1 summarizes the acres of each land cover type located within the Project LOD, as shown in Figures 5.1-1 (Montana) and 5.1-2 (North Dakota). The land cover categories from the MLCF data were merged with NLCD categories for consistency.

According to the land cover datasets, most of the land in the Project LOD is herbaceous grassland, followed by forest, agriculture, and shrubland (Table 5.1-1). The remaining land cover types provide less than two percent of the land cover within the LOD.

TABLE 5.1-1

Land Cover Types within the Project Limits-of-Disturbance

Land Cover or Vegetation Community Type	Project Workspace (acres)	Right-of-Way (acres)	Project Limits-of-Disturbance Total (acres)	Project Limits-of-Disturbance Total (percentage)
Herbaceous [a]	2,573	4,115	6,688	56.9
Agriculture [b]	1,111	1,544	2,655	22.6
Shrubland	600	893	1,493	12.7
Forest and Woodland [c]	171	303	474	4.0
Other [d]	86	173	260	2.2
Sparse and Barren [e]	65	106	170	1.5
Open Water	<1	8	9	0.1
Total	**4,606**	**7,143**	**11,749**	**100**

[a] Includes herbaceous land covers, hay/pasture, and emergent herbaceous wetlands.
[b] Includes cultivated crops.
[c] Includes forested land covers and conservatively includes other land cover types with potential tree components.
[d] Includes developed areas and mining and resource extraction areas.
[e] Less than 15% vegetative cover.
Note: Values may not add up to totals shown due to rounding.
Existing access roads with no planned improvements for Project use have been omitted from the provided acreages.
Sources: Montana Natural Heritage Program 2017, National Land Cover Database 2024.

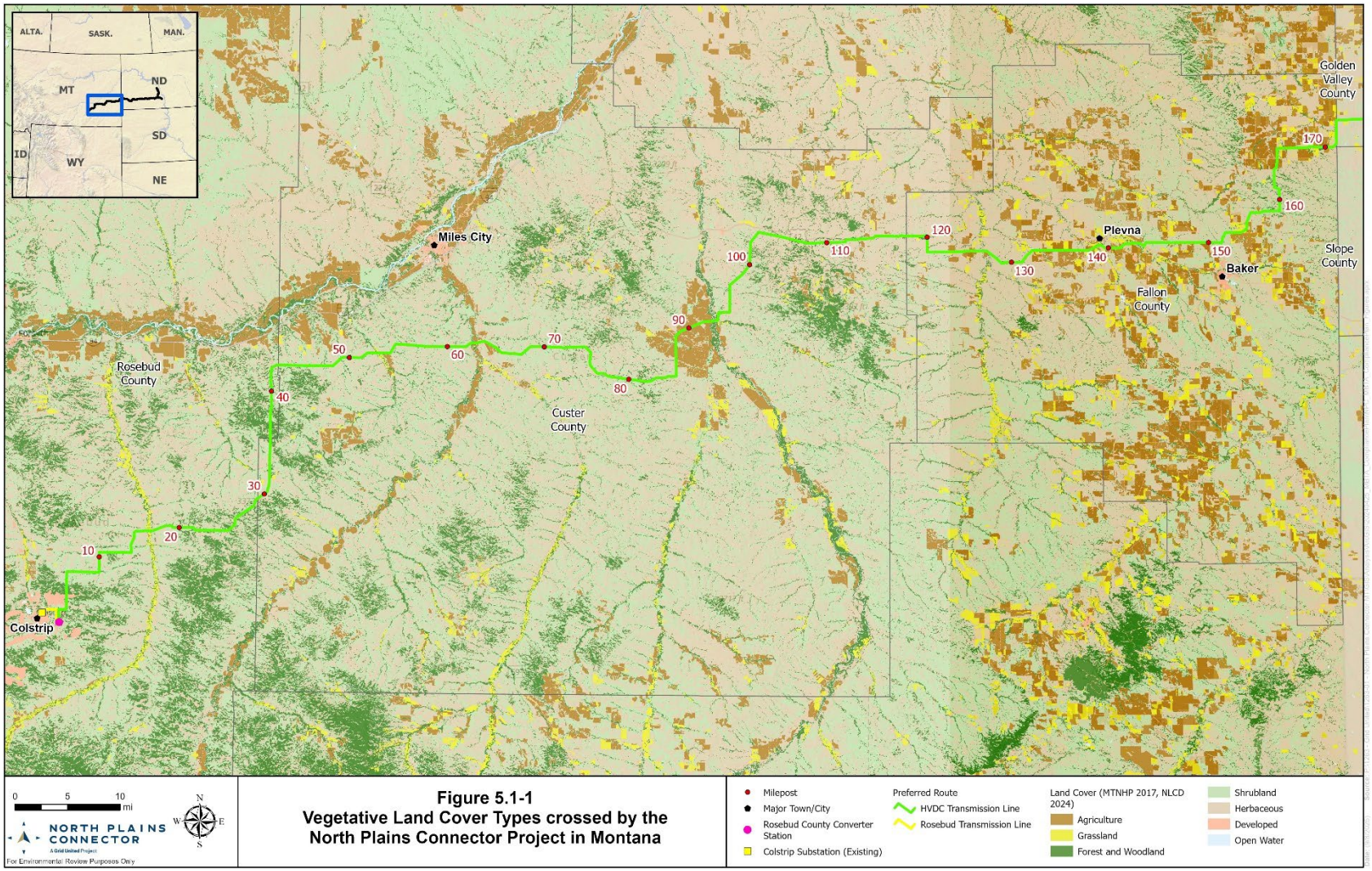


Figure 5.1-1
Vegetative Land Cover Types crossed by the North Plains Connector Project in Montana

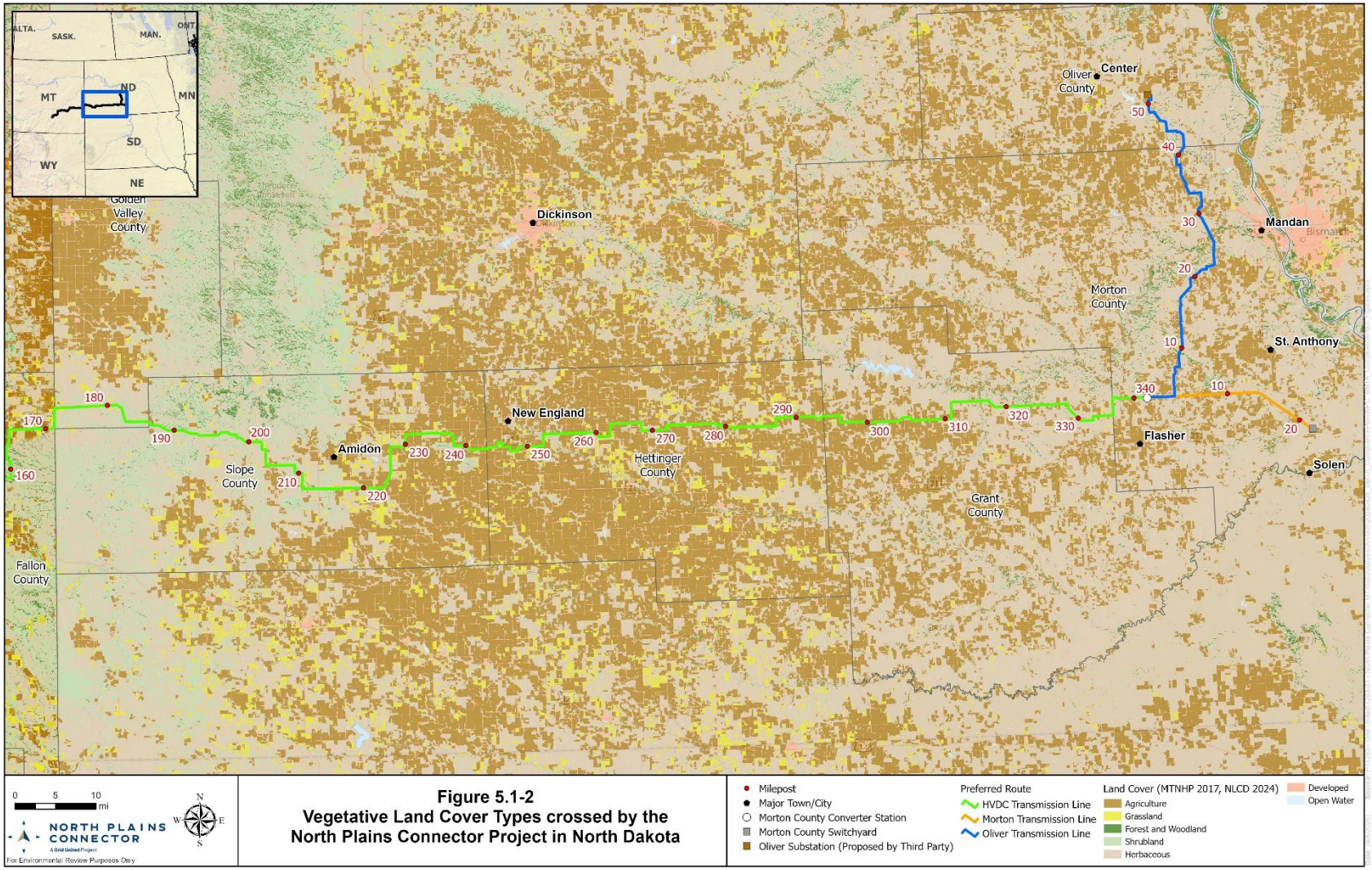


Figure 5.1-2
Vegetative Land Cover Types crossed by the North Plains Connector Project in North Dakota

5.2 PUBLIC LANDS

The Project workspace contains lands owned and managed by three federal agencies. In Montana, the Project crosses approximately 10 miles of BLM-managed land and approximately 8 miles of USDA Agricultural Research Service-managed land within Fort Keogh. In North Dakota, the Project crosses approximately 10 miles of USFS-managed land within the Little Missouri National Grassland.

The BLM provides protection to SSS species on BLM-managed lands. BLM's broad SSS designation is intended to encompass species already protected under the ESA, as well as locally or regionally rare species and species not currently protected under the ESA that may warrant special management consideration on BLM-managed lands. All BLM SSS receive protection within BLM-managed lands to promote species conservation and reduce the likelihood and need for future listing under the ESA (BLM, 2008). The avoidance and minimization measures within this Plan will also help the Project meet the requirements of the BLM Miles City Field Office's Approved Resource Management Plan (ARMP) (BLM, 2015).

The USFS maintains a list of RFSS to track and identify species facing population viability concerns within USFS-managed lands (USFS, 2024b). Like the BLM SSS, RFSS receive protection and management attention on USFS-managed lands (USFS, 2011). The Little Missouri National Grassland is included in the Land and Resource Management Plan for the Dakota Prairie Grasslands (LRMP) (USFS, 2001). Further information on Project compliance with the LRMP is detailed in the Project's Biological Evaluation.

Protected wildlife areas are designated or directly managed by federal and state agencies with the specific goal of creating or protecting wildlife habitat or vegetation. They include, but are not limited to, nature preserves, wildlife refuges, and wildlife management areas (WMAs).

White Lake National Wildlife Refuge (White Lake NWR) is located near the Project in Slope County. White Lake NWR is managed by the USFWS and is one of over 565 refuges and 38 wetland management districts in the National Wildlife Refuge System. The refuge provides habitat for many wildlife species, with high concentrations of waterfowl and shorebirds during spring and fall migration. White Lake NWR is located approximately 1 mile from the centerline of the HVDC Transmission Line.

There are no WMAs located within the Project LOD, but two state WMAs – Wilbur Boldt and Otter Creek – are located within 0.25-mile of the Project LOD in North Dakota. The Wilbur Boldt WMA encompasses an approximately 161-acre area within Oliver County, North Dakota. The WMA is located west of and adjacent to the Project terminus at the Oliver County Substation. The Otter Creek WMA encompasses an approximately 319-acre area within Grant County, North Dakota and is located approximately 0.15-mile north of the Project LOD (Figure 5.2-1). These WMAs are managed by the North Dakota Game and Fish Department (NDGFD) primarily for public use, including recreational activities such as hunting, fishing, and trapping (NDGFD, 2023).

There are no state parks in Montana or North Dakota near the Project LOD. However, the Project crosses approximately 15 miles of Montana State Trust Lands and approximately 5 miles of North Dakota State Trust Lands. Public lands near the Project are shown in Figure 5.2-1.

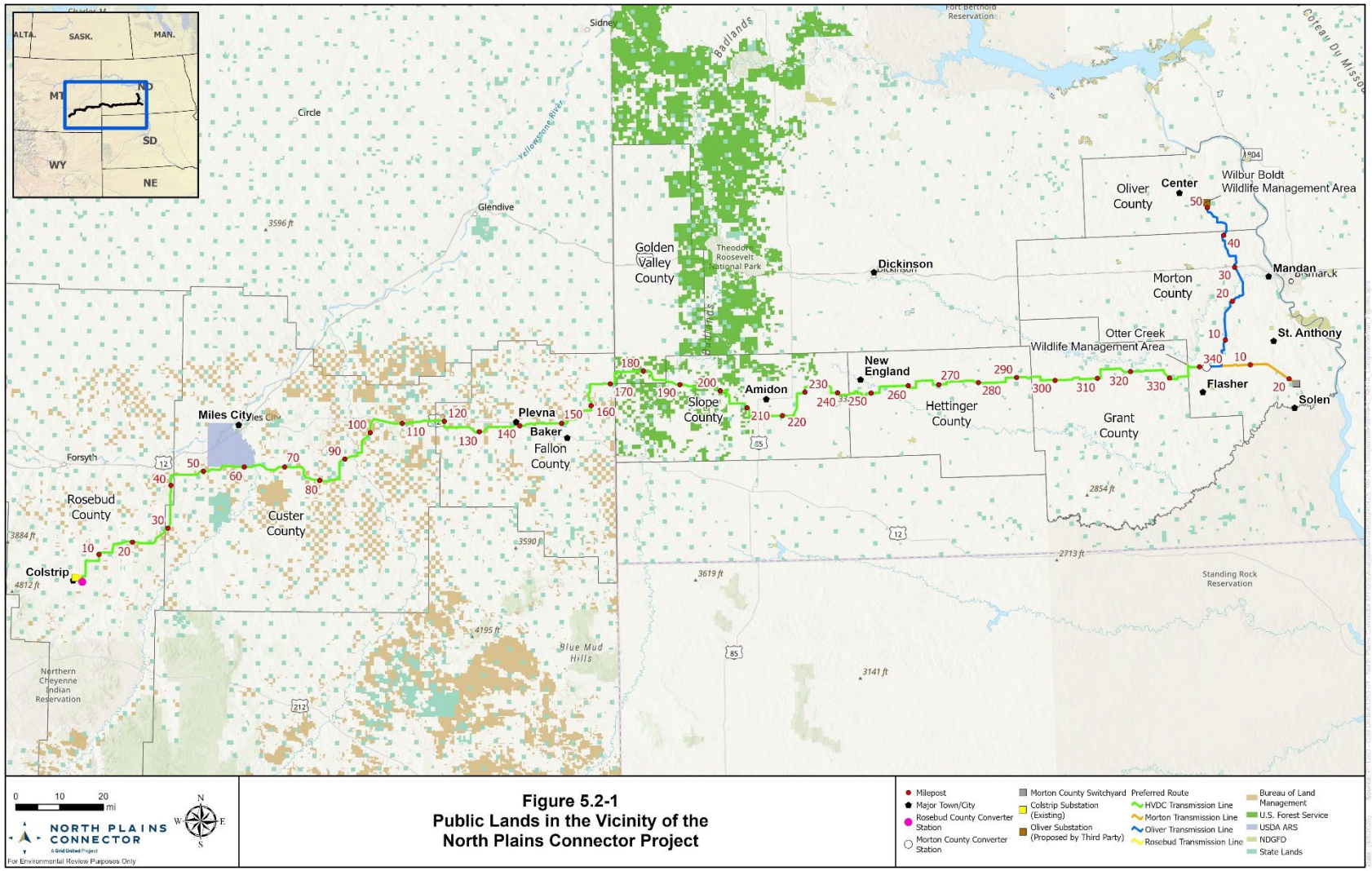


Figure 5.2-1
Public Lands in the Vicinity of the
North Plains Connector Project

6.0 MIGRATORY BIRDS POTENTIALLY OCCURRING ALONG THE PROJECT

A variety of migratory bird species could be present seasonally in available habitats along the Project. In North America, there are four flyways, representing generalized pathways birds use for migration that regulatory authorities use for the management of migratory bird populations (USFWS, 2025b). The Project is located in the middle of the Central Flyway, which includes the Northwest Territories, Saskatchewan, and most of Alberta in Canada; and Montana, North Dakota, Wyoming, South Dakota, Nebraska, Colorado, Kansas, New Mexico, Oklahoma, and Texas in the United States. The Central Flyway is important for a variety of migratory bird species, especially waterfowl, cranes (i.e., the sandhill crane [*Antigone canadensis*] and whooping crane), raptors, shorebirds, and passerines (Fritts, 2022).

When assessing a project's potential effects on bird species protected under the MBTA, conservation efforts are often guided by the USFWS Birds of Conservation Concern (BCC) list specific to the Bird Conservation Region (BCR) where the project is located. BCC are "migratory nongame birds that without additional conservation action are likely to become candidates for listing under the Endangered Species Act" (USFWS, 2021a). A BCR is an area with distinct habitats and species composition that distinguishes it from other nearby areas (U.S. North American Bird Conservation Initiative, 2021). There are 37 BCRs in North America. The Project is in BCR 17 – Badlands and Prairies, which is located in Montana, North Dakota, Wyoming, and South Dakota. A discussion on BCC species relevant to the Project is in Section 6.1.

Migratory birds with additional protections include species listed under the ESA and species designated by the BLM or USFS as sensitive species within their managed lands, including RFSS birds on USFS-managed lands and BLM SSS birds on BLM-managed lands.

States also designate species that are a high priority for local conservation efforts through their Species of Concern (SOC) list or State Wildlife Action Plan (SWAP). Montana includes state listings for SOC in the Montana SWAP (Montana Fish, Wildlife, and Parks [MFWP], 2015) and North Dakota includes Species of Conservation Priority (SCP) in the North Dakota SWAP (Dyke et al., 2015). A SOC or SCP designation does not provide regulatory protections for the listed species in either state. Species listed under the SWAP for North Dakota or SOC list for Montana and which are also BCCs are noted in Tables 6.2.1-1 and 6.2.1-2 (Dyke et al., 2015, MTNHP, 2024).

6.1 PROJECT SURVEYS

North Plains conducted aerial surveys to identify raptor nests, including bald and golden eagle nests, within 1 to 2 miles of the Project centerline in 2022 and 2023. Surveys in 2022 identified potential raptor nests for a broad range of species and colonial nesting waterbird rookeries, while surveys in 2023 focused on eagle nests, select diurnal sensitive raptor species nests,[2] and colonial nesting waterbird rookeries.[3]

In addition, North Plains conducted nest clearance surveys in select areas in 2025. Surveys primarily focused on locating nests of ground-nesting and burrowing species to avoid impacts

[2] Diurnal raptor BCC species included in the IPaC for the Project or considered SSS or RFSS on BLM- and USFS-managed lands, respectively, were targeted during Project surveys. These included: ferruginous hawk, prairie falcon, and peregrine falcon.

[3] Colonial nesting waterbird surveys were recommended during pre-survey coordination with state agencies.

during pre-construction geotechnical survey activities conducted for the Project during the breeding season.

Results from these survey efforts are incorporated in Sections 6.2 through 6.5, where relevant.

6.2 SPECIES

6.2.1 Birds of Conservation Concern

An IPaC review was conducted to identify BCC species with the potential to occur within a 1-mile buffer of the Project LOD (USFWS, 2025a). IPaC provides guidance on which of the BCR 17 species are likely to occur within a given area, as well as the status of the species as breeding season, winter, or year-round residents. The BCC list for BCR 17 includes 26 species (USFWS, 2021a); based on IPaC, 23 of the BCC birds have the potential to occur at the Project (Appendix A; Tables 6.2.1-1 and 6.2.1-2).

To better understand which species are likely to be relevant to the Project, occurrences of these species within the Project LOD were compiled from the following desktop sources to supplement Project nest surveys: USFS (burrowing owl), MTNHP Natural Heritage Inventory (species occurrences and eagle nests), eBird[4] (bird observations), and NDGFD (eagle nests).

Nests belonging to two BCC species (ferruginous hawk [*Buteo regalis*] and prairie falcon [*Falco mexicanus*]) were recorded during the Project raptor nest surveys (see Section 6.1 and 6.3.2 for details). Additionally, several singing male BCC were documented during nest clearance surveys in 2025. One potential Sprague's pipit (*Anthus spragueii*) nest was also recorded during these surveys, near a singing male in Fallon County, Montana. Willet (*Tringa semipalmata*) and red-headed woodpecker (*Melanerpes erythrocephalus*) were observed outside the LOD within one mile of the Project centerline during these surveys. Overall, 11 BCC species are known to occur within the Project LOD, many of which are ground-nesting passerines (Table 6.2.1-1).

The 11 species with survey or desktop occurrences within the Project LOD are included in Table 6.2.1-1. However, since occurrence data for some BCC species is sparse within the Project LOD, the expected geographic range was also evaluated for each species by consulting several additional data sources (NDGFD, 2019; Cornell Lab of Ornithology, 2024; MFWP, 2024; USFWS, 2025a). Twelve species with no documented occurrences in the Project LOD, but with the potential to occur along the Project are included in Table 6.2.1-2. Appendix A provides further information on the geographic range (by county) and nesting season for each BCC species.

[4] eBird is a publicly accessible database of bird observations managed by the Cornell Lab of Ornithology. Submissions are checked by regional experts to maintain the quality of available data (eBird, 2025).

TABLE 6.2.1-1

List of Birds of Conservation Concern with Documented Occurrences Along the North Plains Connector Project [a]

Species	Project is within Breeding Range	Federal Status	Montana Status [b]	North Dakota Status [c]	Range (States)
Baird's Sparrow (*Centronyx bairdii*) [d,e]	Yes	--	SOC	SCP Level III	MT; ND
Bobolink (*Dolichonyx oryzivorus*)	Yes	--	SOC	SCP Level II	MT; ND
Chestnut-collared longspur (*Calcarius ornatus*) [d]	Yes	--	SOC	SCP Level I	MT; ND
Ferruginous hawk (*Buteo regalis*) [d]	Yes	--	SOC	SCP Level I	MT; ND
Franklin's gull (*Leucophaeus pipixcan*) [d]	Yes	--	SOC	--	MT; ND
Grasshopper sparrow (*Ammodramus savannarum*)	Yes	--	--	SCP Level I	MT; ND
Lark bunting (*Calamospiza melanocorys*)	Yes	--	--	SCP Level I	MT; ND
Marbled godwit (*Limosa fedoa*)	Yes	--	--	SCP Level I	MT; ND
Northern harrier (*Circus hudsonius*)	Yes	--	--	SCP Level II	MT; ND
Sprague's pipit (*Anthus spragueiii*) [d,e]	Yes	--	SOC	SCP Level I	MT; ND
Thick-billed longspur (*Rhynchophanes mccownii*)	Yes	--	SOC	SCP Level III	MT; ND

[a] Table covers the Project Limits-of-Disturbance, including the Project workspace and right-of-way. Occurrence information is based on publicly available data, natural heritage inventory data, and/or survey data.

[b] SOC = Species of Concern

[c] SCP = Species of Conservation Priority. SCP designated in North Dakota's State Wildlife Action Plan are assigned a level from I to III, with I being the highest priority.

[d] Indicates wildlife species is a Special-status Species on Bureau of Land Management (BLM)-managed lands.

[e] Indicates wildlife species is a Regional Forester's Sensitive Species on USFS-managed lands.

MT = Montana; ND = North Dakota.

Sources: North Dakota Game and Fish Department 2019; BLM 2020; USFS 2023a, 2023b, 2024a; Montana Fish, Wildlife and Parks 2024; eBird 2025; Montana Natural Heritage Program 2025; North Dakota Parks and Recreation Department 2025; U.S. Fish and Wildlife Service 2025a.

TABLE 6.2.1-2

List of Birds of Conservation Concern with Potential to Occur Along the North Plains Connector Project

Species	Project is within Breeding Range	Federal Status [a]	Montana Status [b]	North Dakota Status [c]	Range (States)
Black tern (*Chlidonias niger*) [d]	Yes	--	SOC	SCP Level I	MT; ND
Black-billed cuckoo (*Coccyzus erythropthalmus*) [d]	Yes	--	SOC	SCP Level I	MT; ND
California gull (*Larus californicus*)	Yes	--	--	--	MT; ND
Lewis's Woodpecker (*Melanerpes lewis*)	Yes	--	SOC	--	MT
Lesser Yellowlegs (*Tringa flavipes*)	No	--	--	--	MT; ND
Long-eared owl (*Stigidae asio*)	Yes	--	--	--	MT; ND
Mountain plover (*Anarhynchus montanus*) [d]	Yes	--	SOC	--	MT
Pinyon jay (*Gymnorhinus cyanocephalus*) [d]	Yes	UR	SOC	--	MT
Prairie falcon (*Falco mexicanus*)	Yes	--	--	SCP Level II	MT; ND
Red-headed woodpecker (*Melanerpes erythrocephalus*) [d]	Yes	--	SOC	SCP Level I	MT; ND
Western grebe (*Aechmophorus occidentalis*)	Yes	--	--	--	MT; ND
Willet (*Tringa semipalmata*)	Yes	--	--	SCP Level II	MT; ND

[a] UR = under review for federal listing
[b] SOC = Species of Concern
[c] SCP = Species of Conservation Priority (Level I – III)
[d] Wildlife species is a Special-status Species on BLM-managed land.

MT = Montana; ND = North Dakota.

Sources: North Dakota Game and Fish Department 2019; BLM 2020; U.S. Forest Service 2023a, 2023b, 2024a; Montana Fish, Wildlife and Parks 2024; eBird 2025; Montana Natural Heritage Program 2025; North Dakota Parks and Recreation Department 2025; U.S. Fish and Wildlife Service 2025a.

6.2.2 Threatened and Endangered Species

Based on agency coordination and a review of IPaC (USFWS, 2025a), four migratory bird species with an ESA designation have potential to occur in the Project LOD (Table 6.2.2-1). Potential impacts and conservation measures for these species are discussed in more detail in the Project BA.

TABLE 6.2.2-1

Bird Species with an ESA Designation and Potential to Occur within the Project Limits-of-Disturbance

Species	Project is within Breeding Range	Federal Status [a]	Range (States)	Documented to Occur in the Project LOD
Pinyon Jay (*Gymnorhinus cyanocephalus*)	Yes	UR	MT	No
Piping Plover (*Charadrius melodus*)	No	LT	MT; ND	No
Rufa Red Knot (*Calidris canutus rufa*)	No	LT	MT; ND	No
Whooping Crane (*Grus americana*)	No	LE	MT; ND	No

[a] Listing under Endangered Species Act of 1973 (ESA); LE = Endangered; LT = Threatened; UR = under review for federal listing.

LOD = Limits-of-Disturbance; MT = Montana; ND = North Dakota.

Sources: North Dakota Game and Fish Department 2019; U.S. Forest Service 2023b, 2024a; Montana Fish, Wildlife and Parks 2024; eBird 2025; Montana Natural Heritage Program 2025; North Dakota Parks and Recreation Department 2025; U.S. Fish and Wildlife Service 2025a.

6.2.3 U.S. Forest Service Regional Forester's Sensitive Species

The USFS maintains a list of RFSS species that receive special management considerations on USFS-managed lands, including the Little Missouri National Grassland in western North Dakota. RFSS are defined as "those plant and animal species identified by a Regional Forester for which population viability is a concern, as evidenced by: (a) significant current or predicted downward trends in population numbers or density, or (b) significant current or predicted downward trends in habitat capability that would reduce a species' existing distribution (Forest Service Manual 2670.5(19), [2005]).

Within the Little Missouri National Grassland, there are six bird species designated as RFSS (see Table 6.2.3-1). None of the six RFSS bird species have been documented on USFS-managed land within the Project LOD.

TABLE 6.2.3-1

Regional Forester's Sensitive Bird Species with Potential to Occur in the Project Limits-of-Disturbance on U.S. Forest Service-managed Lands

Species	Project is within Breeding Range	Federal Status	Montana Status [a]	North Dakota Status [b]	Range (States)	Documented to Occur in the Project LOD on USFS-managed Lands
Baird's Sparrow (*Centronyx bairdii*)	Yes	-	SOC	SCP: Level I	MT; ND	No [c]
Burrowing Owl(*Athene cunicularia*)	Yes	-	SOC	SCP: Level II	MT; ND	No [c]
Greater Sage-grouse (*Centrocercus urophasianus*)	Yes	-	SOC	SCP: Level I	MT; ND	No [c]
Interior Least Tern (*Sternula antillarum athalassos*)	No	-	SOC	SCP: Level II	MT; ND	No
Long-billed Curlew (*Numenius americanus*)	Yes	-	SOC	SCP: Level I	MT; ND	No
Sprague's Pipit (*Anthus spragueii*)	Yes	-	SOC	SCP: Level I	MT; ND	No

[a] SOC = Species of Concern

[b] SCP = Species of Conservation Priority (Level I– III)

[c] Documented to occur within the Project LOD on non-U.S. Forest Service- (USFS-) managed lands.

LOD = Limits-of-Disturbance; MT = Montana; ND = North Dakota.

Sources: North Dakota Game and Fish Department 2019; USFS 2023a, 2023b, 2024a; Montana Fish, Wildlife and Parks 2024; eBird 2025; North Dakota Parks and Recreation Department 2025.

6.2.4 Bureau of Land Management Special Status Species

Like the USFS, BLM maintains a list of SSS that receive special protections on BLM-managed lands. The SSS list includes ESA listed, proposed, and candidate species (see Section 6.2.2) and BLM-designated Sensitive Species. BLM Sensitive Species are species that require special management to avoid further listing under the ESA.

There are a total of 26 SSS birds, including the 4 ESA species listed in Section 6.2.2 and 22 BLM Sensitive Species (see Table 6.2.4-1). Five BLM-designated sensitive bird species are known to occur on BLM-managed land within the Project LOD.

TABLE 6.2.4-1

Bureau of Land Management (BLM) Special Status Bird Species with Potential to Occur within the Project Limits-of-Disturbance on BLM-managed Lands

Species [a]	Project is within Breeding Range	Federal Status	Montana Status [b]	North Dakota Status [c]	Range (States)	Documented to Occur in the Project LOD on BLM-managed Land
American Bittern (*Botaurus lentiginosus*)	Yes	-	SOC	SCP: Level I	MT; ND	No
Baird's Sparrow (*Centronyx bairdii*)	Yes	-	SOC	SCP: Level I	MT; ND	Yes
Bald Eagle (*Haliaeetus leucocephalus*)	Yes	-	–	SCP: Level II I	MT; ND	No [d]
Black-backed Woodpecker (*Picoides arcticus*)	No	-	SOC	–	MT	No
Black-billed Cuckoo (*Coccyzus erythropthalmus*)	Yes	-	SOC	SCP: Level I	MT; ND	No
Black Tern (*Chlidonias niger*)	Yes	-	SOC	SCP: Level I	MT; ND	No
Brewer's Sparrow (*Spizella breweri*)	Yes	-	SOC	SCP: Level III	MT; ND	No [d]
Burrowing Owl (*Athene cunicularia*)	Yes	-	SOC	SCP: Level II	MT; ND	Yes
Chestnut-collared Longspur (*Calcarius ornatus*)	Yes	-	SOC	SCP: Level I	MT; ND	No [d]
Common Tern (*Sterna hirundo*)	No	-	SOC	-	MT; ND	No
Ferruginous Hawk (*Buteo regalis*)	Yes	-	SOC	SCP: Level I	MT; ND	Yes
Franklin's Gull (*Leucophaeus pipixcan*)	Yes	-	SOC	SCP: Level I	MT; ND	No [d]
Golden Eagle (*Aquila chrysaetos*)	Yes	-	SOC	SCP: Level II	MT; ND	No
Greater Sage-grouse (*Centrocercus urophasianus*)	Yes	-	SOC	SCP: Level I	MT; ND	Yes
Loggerhead Shrike (*Lanius ludovicianus*)	Yes	-	SOC	SCP: Level II	MT; ND	Yes
Long-billed Curlew (*Numenius americanus*)	Yes	-	SOC	SCP: Level I	MT; ND	No
Mountain Plover (*Charadrius montanus*)	Yes [e]	-	SOC	-	MT	No
Peregrine Falcon (*Falco peregrinus*)	No	-	-	SCP: Level III	MT; ND	No
Red-headed Woodpecker	Yes	-	SOC	SCP: Level I	MT; ND	No

TABLE 6.2.4-1

Bureau of Land Management (BLM) Special Status Bird Species with Potential to Occur within the Project Limits-of-Disturbance on BLM-managed Lands

Species [a]	Project is within Breeding Range	Federal Status	Montana Status [b]	North Dakota Status [c]	Range (States)	Documented to Occur in the Project LOD on BLM-managed Land
(*Melanerpes erythrocephalus*)						
Sage Thrasher (Oreoscoptes montanus)	Yes	-	SOC	-	MT	No
Sprague's Pipit (*Anthus spragueii*)	Yes	-	SOC	SCP: Level I	MT; ND	No
Veery (*Catharus fuscescens*)	Yes [e]	-	SOC	-	MT; ND	No

[a] BLM Special Status Species include BLM designated Sensitive Species and Endangered Species Act of 1973- (ESA-) listed, proposed, and candidate species. This table includes only BLM Sensitive Species; see Table 6.2.2-1 for ESA-related species.

[b] SOC = Species of Concern

[c] SCP = Species of Conservation Priority (Level I– III)

[d] Documented to occur within the Project Limits-of-Disturbance (LOD) on non-BLM-managed lands.

[e] Project LOD within or near the edge of the species' known breeding range.

MT = Montana; ND = North Dakota.

Sources: North Dakota Game and Fish Department 2019; Bureau of Land Management 2020; U.S. Forest Service 2023a; Montana Fish, Wildlife and Parks 2024; eBird 2025; Montana Natural Heritage Program 2025.

6.3 NESTS

6.3.1 Colonial Nesting Waterbirds and Waterbird Concentration Areas

Colonial nesting waterbird rookeries were surveyed concurrently with aerial raptor nest surveys in 2022 and 2023 within a 1-mile-buffer on either side of the proposed Project centerline at the time of survey. In addition, the MTNHP provided information on historical rookeries. During the Project surveys, two occupied active great blue heron (*Ardea herodias*) rookeries were observed within one mile of the Project centerline, including one in Custer County, Montana (eight nests) and one in Grant County, North Dakota (approximately 20 nests; Figure 6.3-1).

Five migratory waterbird concentration areas containing unidentified waterfowl, waterbirds, and shorebirds were incidentally observed during aerial surveys within one mile of the Project centerline in Montana. In addition, during the raptor nest surveys, Canada geese (*Branta canadensis*) were observed occupying eight stick nests originally constructed by raptors within one mile of the Project centerline. Results from the surveys provide information about potential stopover habitat for migrating waterbirds, although the surveys occurred late in the spring migration season (May) and likely did not capture all species that migrate through or breed in the area.

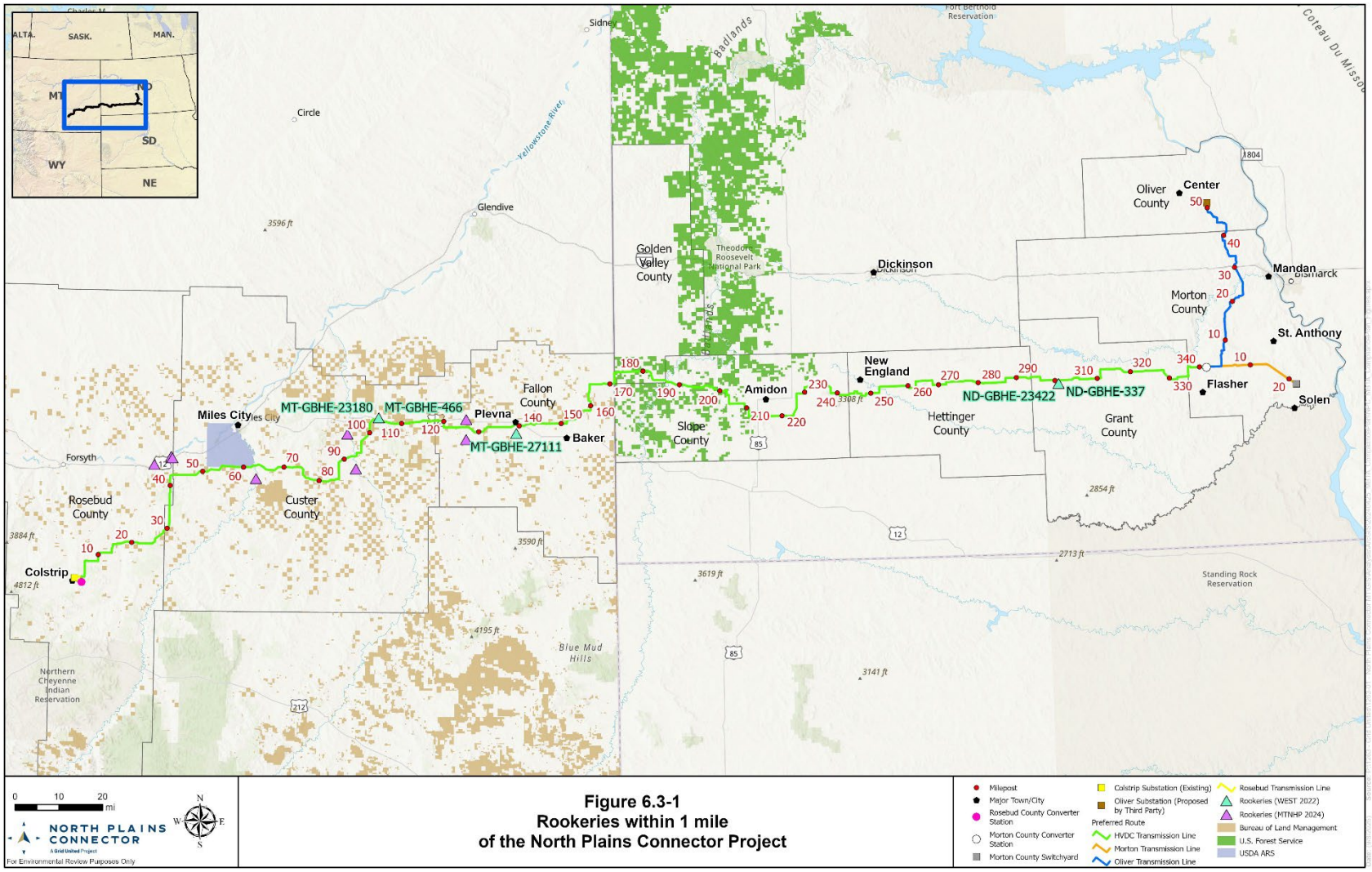


Figure 6.3-1
Rookeries within 1 mile
of the North Plains Connector Project

6.3.2 Non-eagle Raptor Nests

Project raptor nest surveys in 2022 and 2023 occurred within a 1-mile-buffer on either side of the proposed Project centerline at the time of survey. In areas where USFWS modeling (USFWS, 2019) indicated contiguous areas of moderate-high to very high predicted golden eagle nest site density, the survey buffer was increased to 2 miles. Surveyors documented 108 occupied non-eagle raptor nests within one mile of the current Project centerline, including those not unidentified to species (Table 6.3.2-1; Figures 6.3-2 and 6.3-3).

Seven species were identified occupying nests, the most common of which was the red-tailed hawk (*Buteo jamaicensis*), followed by the great horned owl (*Bubo virginianus*). Swainson's hawk (*Buteo swainsoni*), Cooper's hawk (*Accipiter cooperii*), prairie falcon, ferruginous hawk, and sharp-shinned hawk (*A. striatus*) nests were found in smaller numbers. The species observed within a raptor nest can vary from year to year. Burrowing owls (*Athene cunicularia*) occur along the Project. Known occurrences for this species were obtained from MTNHP and the USFS (see Figures 6.3-4 and 6.3-5). Details about individual non-eagle raptor nests near enough to the Project to warrant potential conservation measures are included in Appendix B.

TABLE 6.3.2-1

Non-eagle Raptor Nests Observed During Project Surveys in 2022 and 2023 along the North Plains Connector [a]

Species	Number of Occupied Nests Observed in Montana	Number of Occupied Nests Observed in North Dakota	Total Number of Occupied Nests Observed
Red-tailed hawk (*Bubo virginianus*)	16	46	**62**
Great horned owl (*Bubo virginianus*)	5	18	**23**
Swainson's Hawk (*Buteo swainsoni*)	2	6	**8**
Cooper's hawk (*Accipiter cooperii*)	1	2	**3**
Prairie Falcon (*Falco mexicanus*) [b]	1	1	**2**
Ferruginous hawk (*Buteo regalis*) [b,c]	0	2 [b]	**2**
Sharp-shinned Hawk (*Accipiter striatus*)	1	0	**1**
Unidentified raptor species	1	6	**7**
Total	**27**	**81**	**108**

[a] Table includes occupied potential non-eagle raptor nests within one mile of the current proposed workspace.
[b] Bird of Conservation Concern.
[c] One of the ferruginous hawk nests was consistent in size and structure with an eagle nest and is also included in Table 6.3.3-1.
Notes: The survey areas in 2022 and 2023 consisted of a 1-mile buffer around the proposed centerline at the time of the survey, with a 2-mile buffer in areas with moderate-high to very high predicted golden eagle nest site density (U.S. Fish and Wildlife Service 2019).
Sources: Western EcoSystems Technology, Inc., 2023a, 2023b.

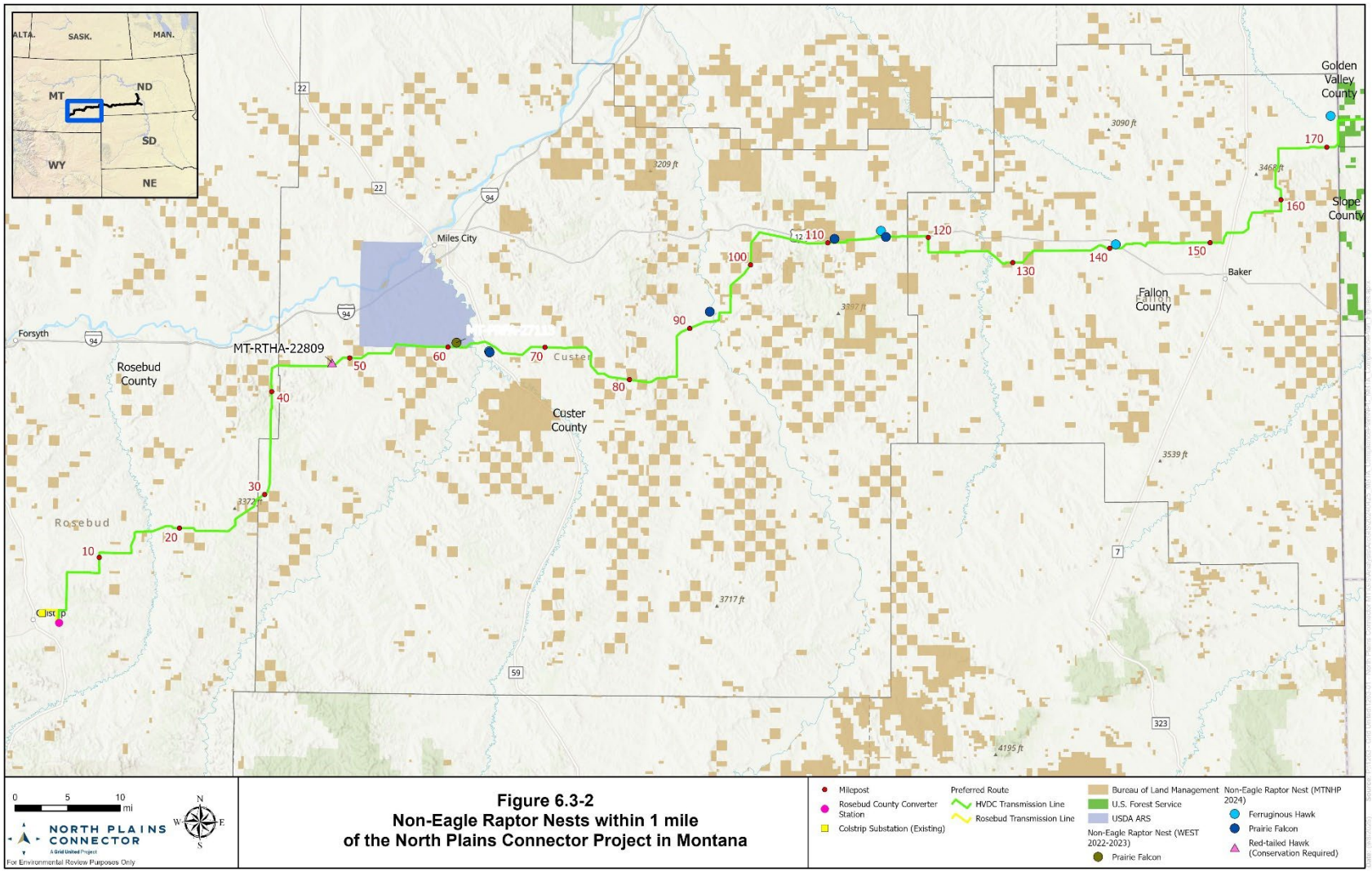


Figure 6.3-2
Non-Eagle Raptor Nests within 1 mile of the North Plains Connector Project in Montana

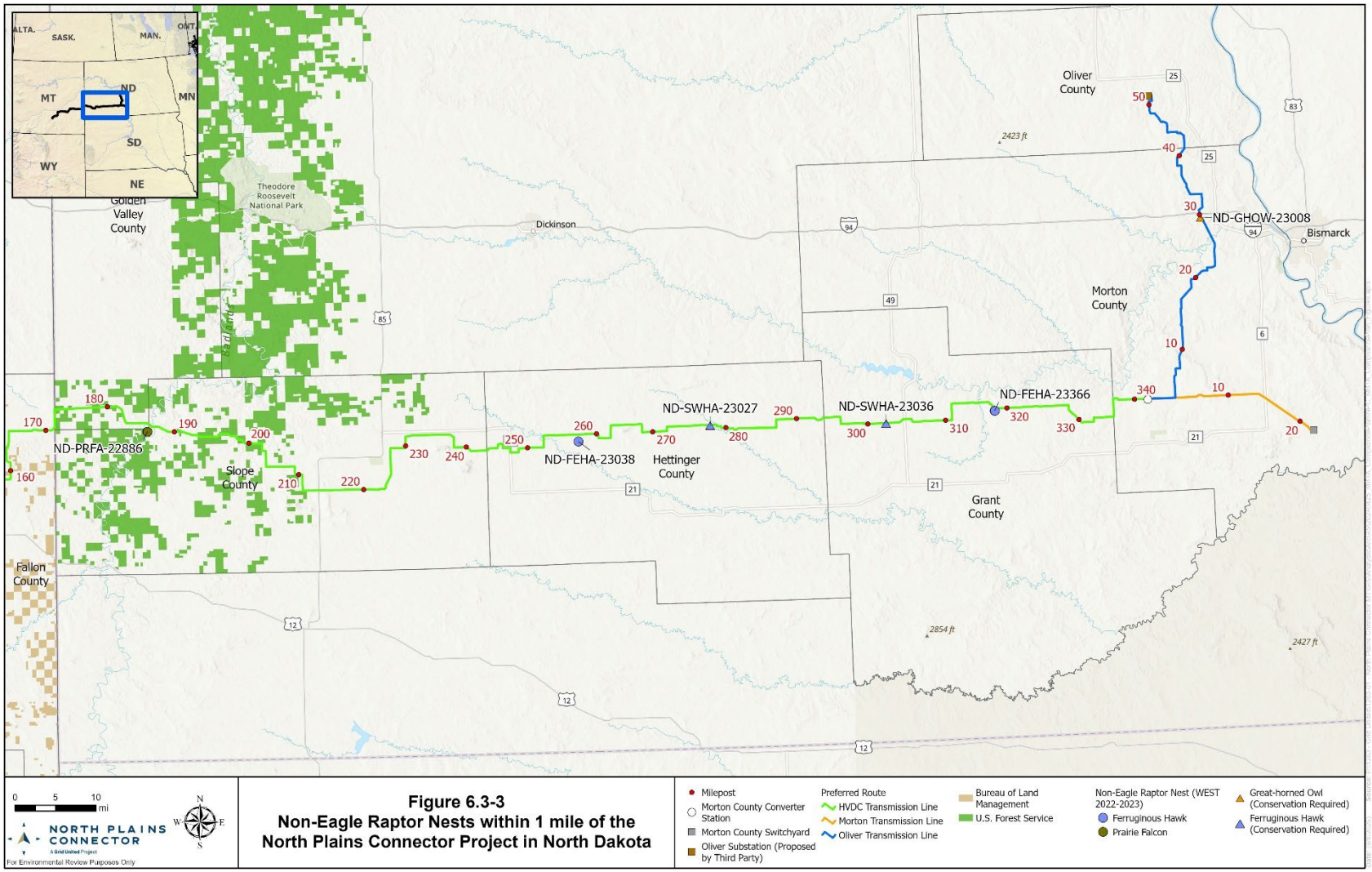


Figure 6.3-3
Non-Eagle Raptor Nests within 1 mile of the North Plains Connector Project in North Dakota

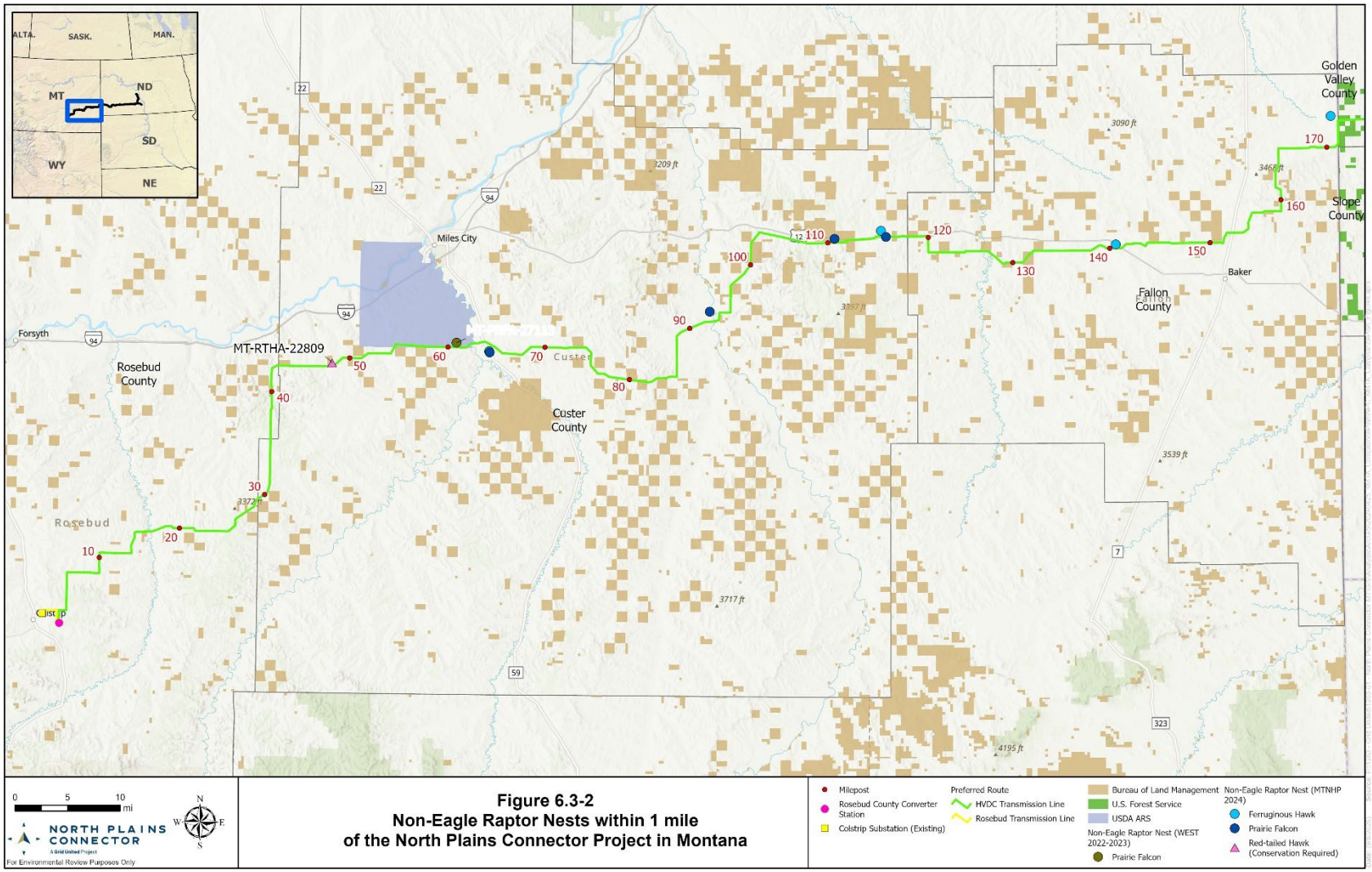


Figure 6.3-2
Non-Eagle Raptor Nests within 1 mile of the North Plains Connector Project in Montana

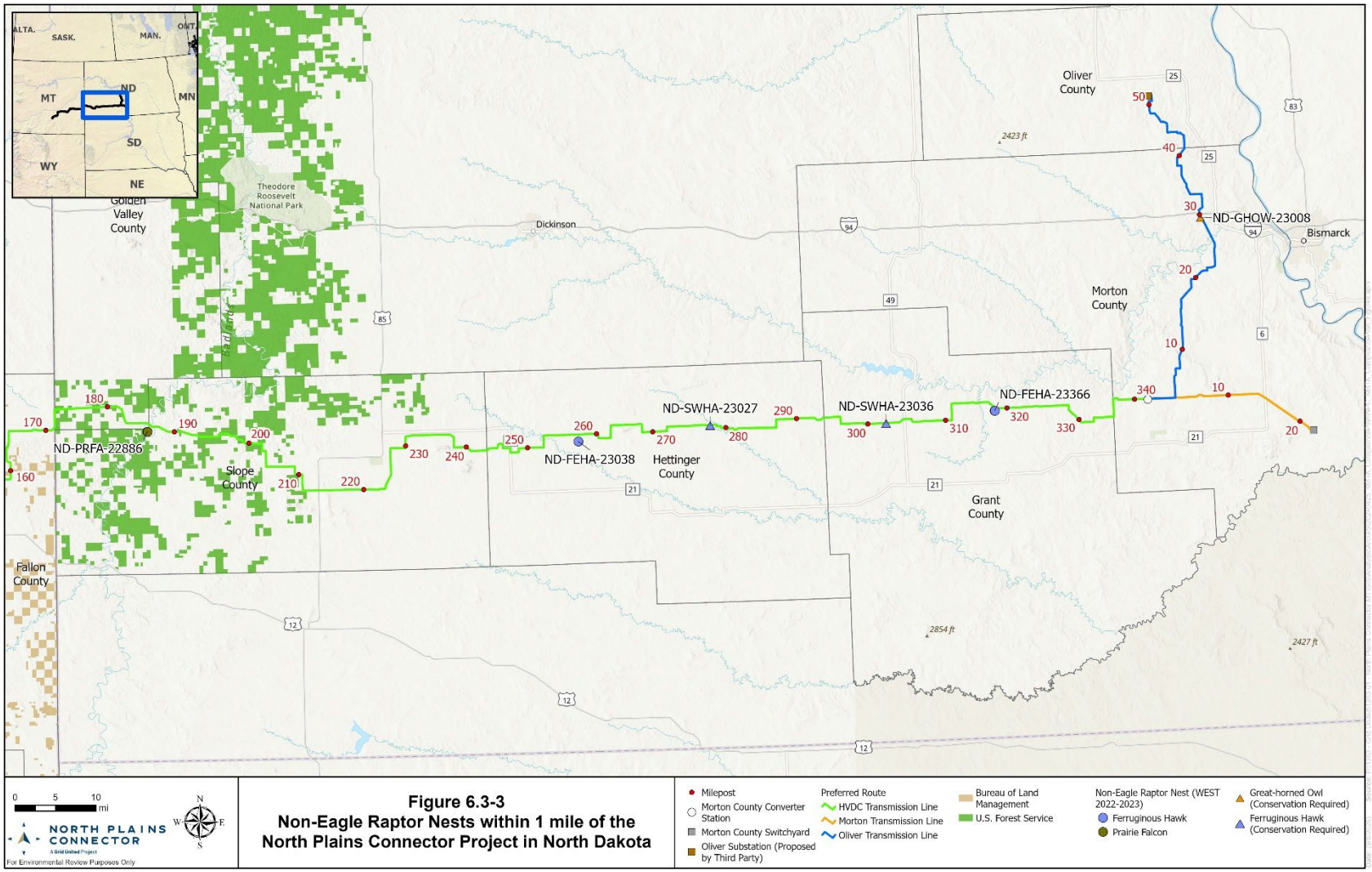


Figure 6.3-3
Non-Eagle Raptor Nests within 1 mile of the North Plains Connector Project in North Dakota

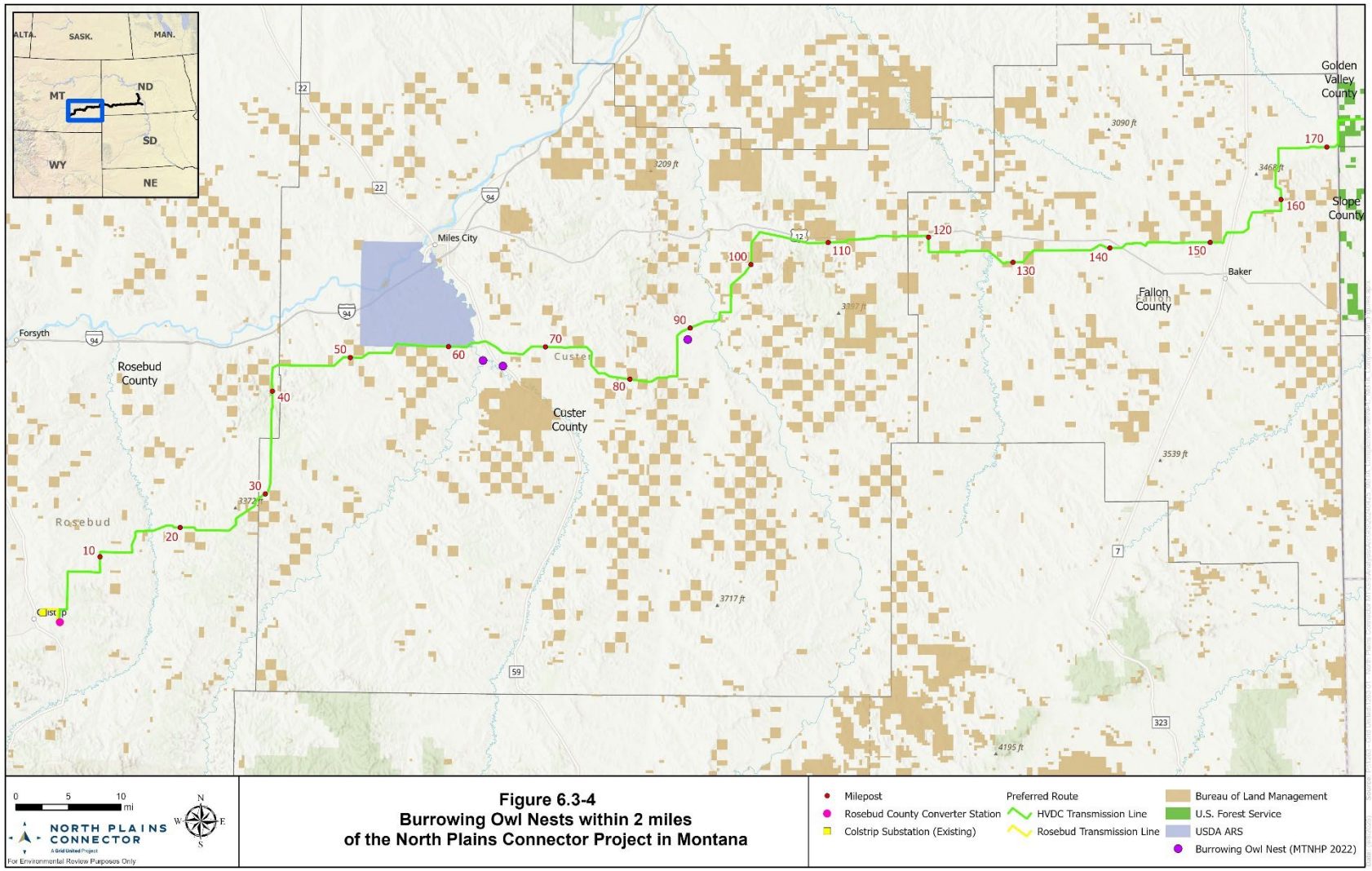


Figure 6.3-4
Burrowing Owl Nests within 2 miles of the North Plains Connector Project in Montana

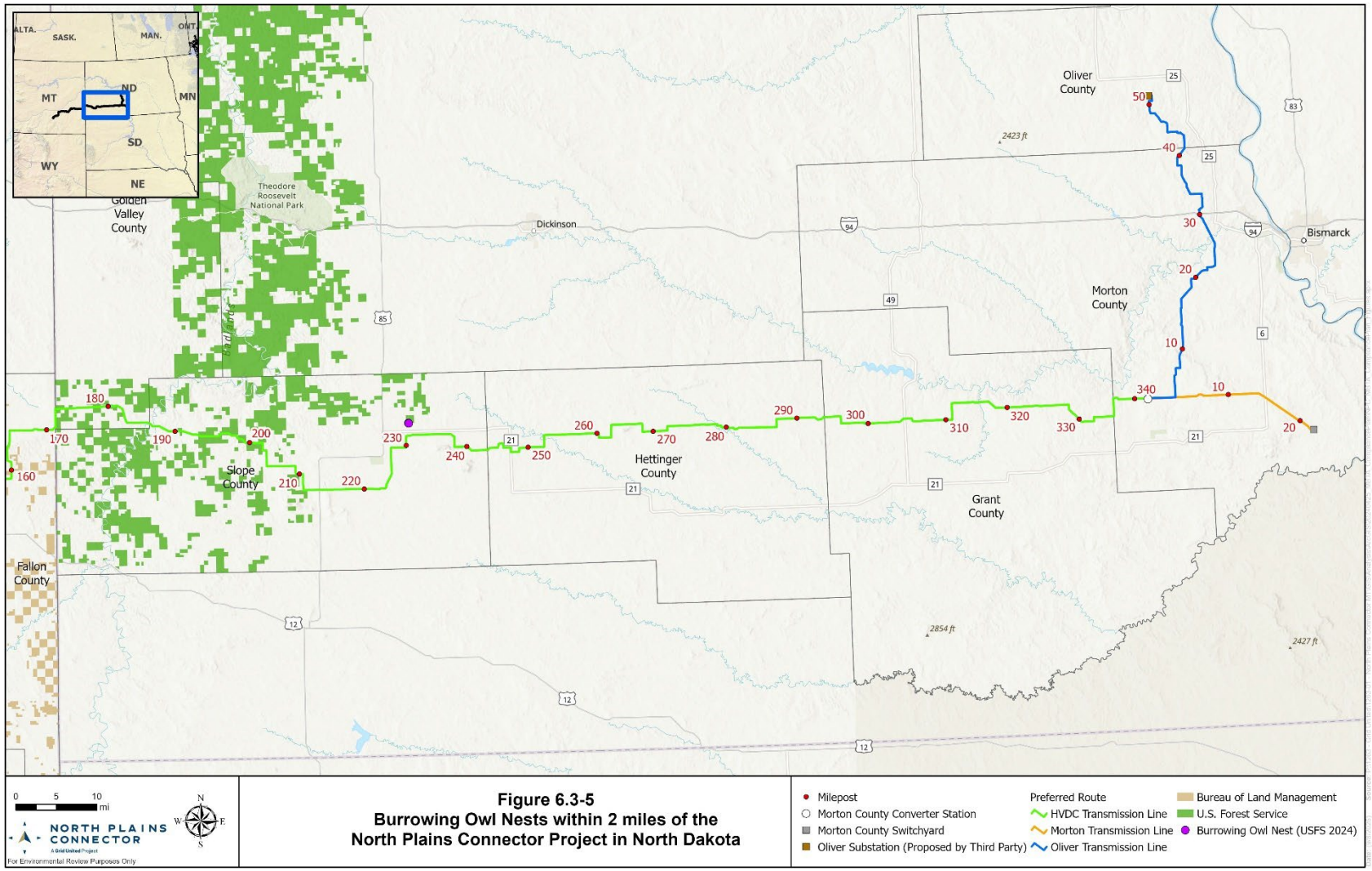


Figure 6.3-5
Burrowing Owl Nests within 2 miles of the North Plains Connector Project in North Dakota

6.3.3 Bald and Golden Eagle Nests

Bald and golden eagles are protected by the MBTA and BGEPA, in addition to being BLM-designated Sensitive Species. Eagle nest surveys occurred concurrently with raptor nest surveys in 2022 and 2023 along the proposed Project route at the time of survey and a 1.0-mile buffer; a 2.0-mile buffer was used in areas with higher predicted golden eagle nest density. During the raptor nest surveys, nests consistent in the size and structure of eagle nests were categorized as potential eagle nests. One bald eagle nest was documented within one mile of the current Project centerline, and 23 golden eagle or potential eagle nests were recorded within two miles of the current Project centerline during surveys (Table 6.3.3-1; and Figures 6.3-6 and 6.3-7). Known eagle nest locations were also requested from state agencies and incorporated in the Project survey effort.

Details about individual eagle nests and potential eagle nests are described in Appendix C and the Project's EMP.

TABLE 6.3.3-1
Eagle and Potential Eagle Nests Observed During Project Surveys in 2022 and 2023 along the North Plains Connector [a]

Species	Number of Occupied Nests Observed in Montana	Number of Occupied Nests Observed in North Dakota	Total Number of Occupied Nests Observed
Bald eagle (*Haliaeetus leucocephalus*)	1	0	**1**
Golden eagle (*Aquila chrysaetos*)	13	2	**15**
Ferruginous hawk (*Buteo regalis*) [b,c]	0	1	**1**
Red-tailed hawk (*Buteo jamaicensis*) [b]	1	0	**1**
Unidentified raptor species	5	1	**6**
Total	**20**	**4**	**24**

[a] Table includes occupied potential bald eagle nests within one mile of the current proposed centerline and occupied golden eagle and potential eagle nests within two miles of the current proposed workspace.
[b] Though nests were occupied by a non-eagle species during Project surveys, nests were consistent in size and structure with an eagle nest, and are therefore included if within two miles of the Project's centerline.
[c] This ferruginous hawk nest is also included in Table 6.3.2-1.
Notes: The survey areas in 2022 and 2023 consisted of a 1-mile buffer around the proposed centerline at the time of the survey, with a 2-mile buffer in areas with moderate-high to very high predicted golden eagle nest site density (U.S. Fish and Wildlife Service 2019).
Sources: Western EcoSystems Technology, Inc., 2023a, 2023b.

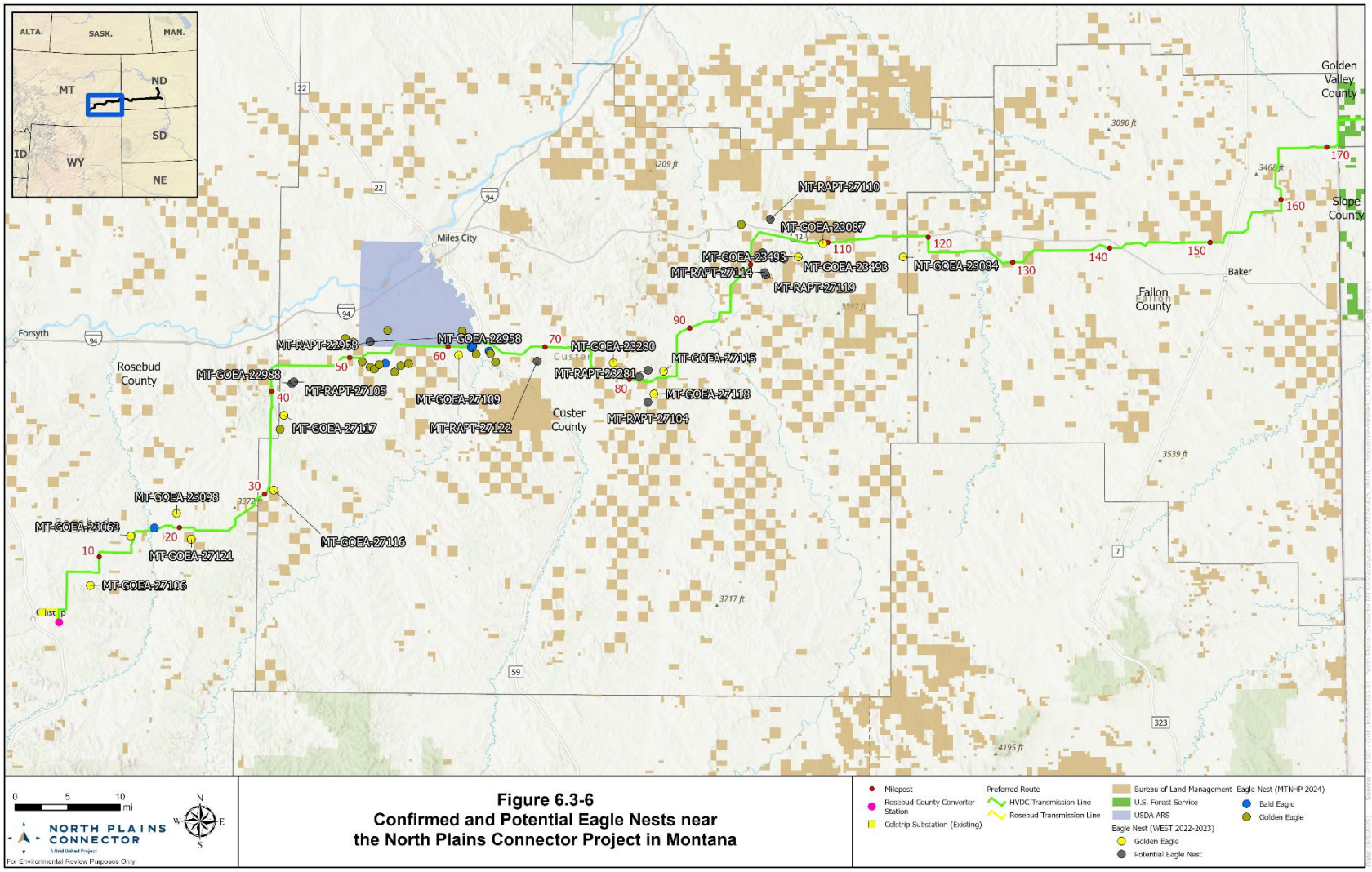


Figure 6.3-6
Confirmed and Potential Eagle Nests near the North Plains Connector Project in Montana

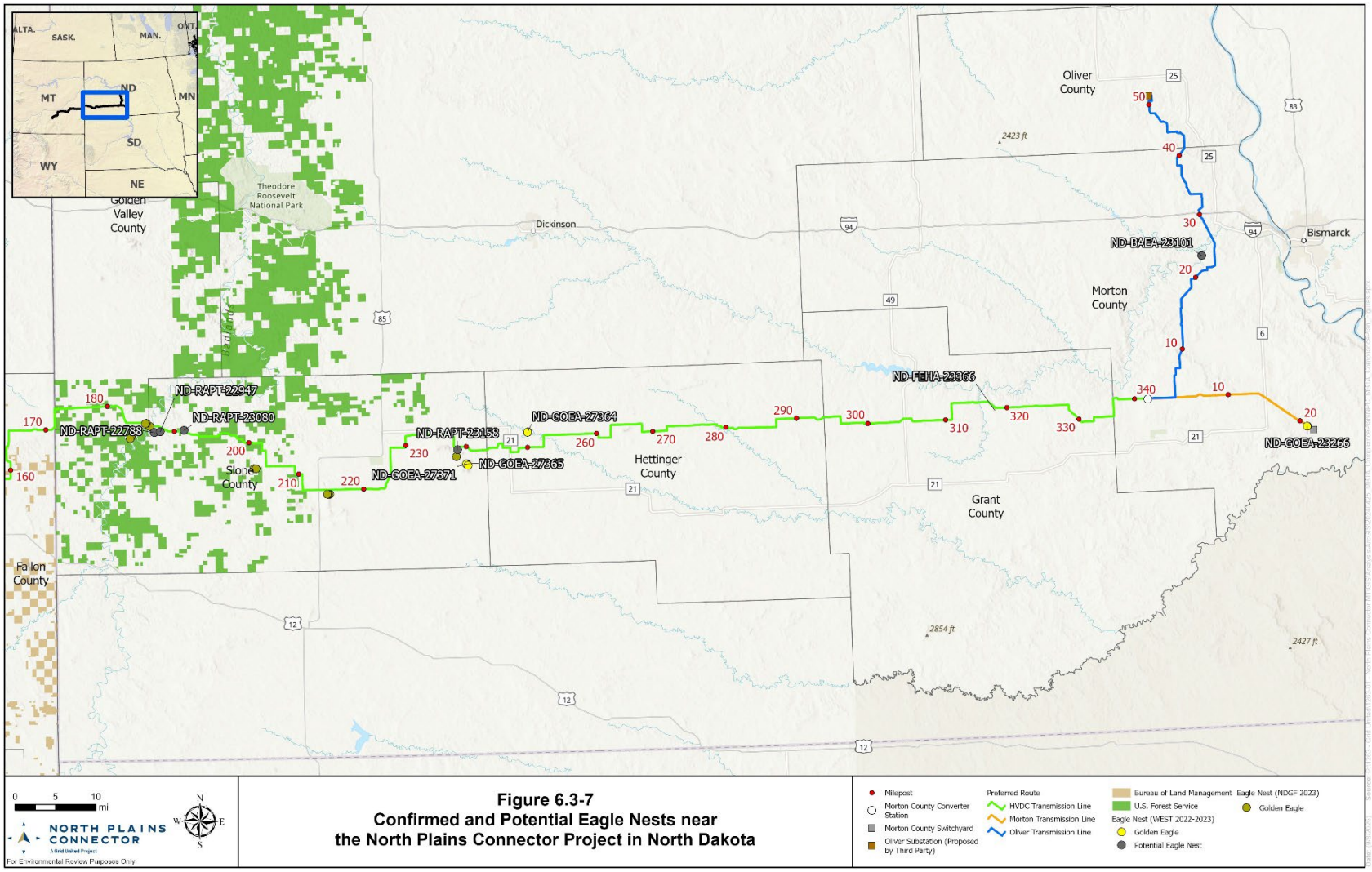


Figure 6.3-7
Confirmed and Potential Eagle Nests near the North Plains Connector Project in North Dakota

7.0 POTENTIAL IMPACTS ON MIGRATORY BIRDS

Project construction and operational activities could result in migratory bird nest disturbance, nest destruction, and bird injury or fatality, as described below.

7.1 CONSTRUCTION IMPACTS

The risk of migratory bird take due to construction activities would primarily occur during the breeding season, except where noted.

7.1.1 Physical Harm

Construction of the Project involves the use of heavy machinery and vehicles to fell trees, clear vegetation, excavation, transport equipment and supplies, and install transmission line structures and other facilities. These activities could physically harm or kill migratory birds, particularly recently fledged young, eggs, or nestlings that cannot readily leave the nest. Burrowing owls would be at high risk whenever present because of their tendency to use burrows during the day, when they might be collapsed by Project activities and heavy machinery.

Collision with migratory birds on Project access roads during construction is also possible, especially if bird attractants (e.g., roadkill for raptors) occur near roadways.

Seasonal timing restrictions, nest buffers, and pre-construction nest clearance surveys during the migratory bird breeding season are planned to minimize this risk, along with measures to avoid impacts on active owl burrows (Section 8.3). Thoughtful planning, siting, and design strategies have also been implemented to reduce impacts (Sections 8.1 and 8.2).

7.1.2 Habitat Alteration and Degradation

The removal of vegetation and ground disturbance to prepare for Project construction can also impact migratory birds. Some habitat impacts are temporary and will be restored similar to pre-construction condition to avoid long term habitat loss, such as grasslands in temporary workspaces. In permanent workspaces, including permanent access roads, converter stations, and switchyards, vegetation will be removed and habitats permanently lost. Additionally, trees within the Project right-of-way will be cleared during construction and maintained during operations to prevent trees and tall shrubs from encroaching on the conductors; though these areas may be revegetated, they will be permanently converted to short shrubs and/or grassland. Noxious weeds introduced as a result of Project ground disturbance can also degrade bird habitat and available habitat for nests and foraging; thus, noxious weed management helps to preserve higher quality bird habitat.

Clearing and grading of workspaces near waterbodies could result in a temporary increase in sedimentation and turbidity within waterbodies in and adjacent to the Project workspace. These activities may cause temporary water quality reductions due to increased erosion, sedimentation, and turbidity, and could also result in an inadvertent release of chemical contaminants, such as fuel or lubricants (see Section 7.1.3).

Thoughtful planning, siting, and design strategies have also been implemented to reduce impacts related to habitat alteration (Sections 8.1 and 8.2). Seasonal timing restrictions, nest buffers, and pre-construction nest surveys during the migratory bird breeding season are planned to further

minimize these risks (Section 8.3). Measures will also be implemented during the reclamation phase to minimize habitat loss and degradation (Section 8.4).

7.1.3 Hazardous Materials and Spills

Small amounts of hazardous substances, primarily in the form of vehicle fuels and lubricants, will be present in equipment or storage containers at construction sites and material storage yards. Inadvertent spills or leaks of hazardous liquids during refueling, equipment operation or maintenance, or storage during Project construction have the potential to enter the water column and stream bed sediments and could cause illness or mortality in aquatic species and birds that prey upon them. These considerations are especially pertinent to waterfowl, waterbirds, and shorebirds, as well as songbirds that depend on riparian and wetland habitats. However, the limited volumes of hazardous substances present in any one location along the construction right-of-way would be unlikely to result in long-term effects, particularly in streams where spills would be diluted.

Spills and leaks of hazardous materials, including petroleum products, antifreeze, and herbicides, could also harm vegetation or wildlife, if present. Birds could be affected by equipment-related fluid spills through direct ingestion or contact with their pelage or plumage as well as inhalation. Contaminated water may be as a drinking source, or a place to nest or raise young. Over time, oil and other pollutants can collect in plants and animals (Nowak et al., 2019).

North Plains will implement multiple Project plans to address these concerns, as described in Sections 8.1 and 8.3.

7.1.4 Fire

The Project is located in a semiarid region prone to wildfires, especially during the drier summer months. The use of heavy machinery and vehicles during Project construction, as well as burning and blasting during construction, could increase the risk of unexpected fires at the Project. Wildfires pose an immediate danger to wildlife, and have the potential to destroy habitat and nests, injure or kill birds that cannot escape, and displace those that can.

North Plains will implement a Fire Prevention and Suppression Plan to address these concerns, as described in Sections 8.1 and 8.3.

7.1.5 Disturbance and Displacement

In areas adjacent to Project construction, noise and disturbance from human presence and construction activities such as blasting and the use of construction equipment, helicopters, and other vehicles during the breeding season could cause adult birds to abandon their nests and disrupt feeding and brooding behaviors, leading to the loss of young birds and eggs.

North Plains used available agency guidance and ongoing agency feedback to compile seasonal timing restrictions and avoidance buffers relevant to each state and to state and federal land-managing agencies. Tables 8.3-1 and 8.3-2 summarize these restrictions for non-eagle migratory birds and for eagles, respectively. Nest-specific avoidance and minimization measures pertaining to eagles are described in greater detail in the Project's EMP.

7.2 OPERATION AND MAINTENANCE IMPACTS

7.2.1 Maintenance

Transmission line and vegetation maintenance impacts would be similar to those that occur during construction but would occur intermittently. Vegetation maintenance in the right-of-way is expected to occur approximately once a year. Transmission line inspections would occur at least once a year and may involve the use of a helicopter or drones for aerial inspection, and vehicle access for ground inspection. Should maintenance or repair of the transmission line or structures be needed, impacts would be localized and temporary. Vegetation maintenance impacts would primarily involve noxious weed management, removing tall shrubs and tree saplings within the right-of-way, and limbing trees adjacent to the right-of-way for safety. As such, the potential for destruction of nests containing eggs or young would be minimal and would primarily affect ground- and shrub-nesting birds.

Seasonal timing restrictions, nest buffers, and nest surveys during the migratory bird breeding season are planned to minimize these risks (Section 8.3).

7.2.2 Electrocution

Power lines (conductors) and substations both have the potential to result in bird mortality through electrocution. Electrocution risk is related to both structural and biological variables (Avian Power Line Interaction Committee [APLIC], 2006). Electrocution from power lines occurs when a bird touches two energized conductors or an energized conductor and grounding wire simultaneously. However, the clearance distance between conductors and between conductors and grounding required by the National Electrical Safety Code for the size of transmission lines being used for the Project (i.e., greater than 230 kV) exceed the height and wingspans of large birds that occur in the Project region, including eagles. Therefore, the Project transmission lines will not present an electrocution risk to birds.

The Colstrip and Oliver County substations, however, do pose potential bird electrocution risks. Electrocutions can occur at substations via the same mechanism due to energized lines placed next to other structures and lines. Along with bird mortality, electrocutions can cause substation outages, loss of revenue, and damage to equipment. Bird electrocutions at substations can be frequent, affecting a variety of species including raptors (Dwyer, 2023). AltaLink, a transmission service provider in Alberta, Canada, has attributed approximately 20% of all substation outages to wildlife interactions with low voltage equipment, noting birds as a primary source (Heck and Sutherland, 2013). These substations will be owned and operated by third parties, and are beyond the purview of this Plan.

7.2.3 Perching and Nesting Opportunities

Predatory birds such as raptors and corvids (e.g., ravens and crows) will often perch on and hunt from the highest available vantage point, and the construction of new transmission lines may provide increased perching opportunities. Raptor and corvid nest site availability can also increase with the construction of above ground power infrastructure (Steenhof et al., 1993). This can result in concerns regarding raptor safety (i.e. electrocutions, see Section 7.2.2) or a potential increase in predation on species of concern, such as greater sage-grouse.

Historically, APLIC recommended perch deterrents to minimize bird electrocutions and fecal contamination of insulators by discouraging perching in at-risk areas on power line structures. Currently, perch deterrents are primarily used as redundant measures in high-electrocution risk locations on a structure and/or as perch management tools to minimize line operational issues (e.g., fecal contamination of insulators and potential flashovers; APLIC, 2006).

Studies assessing the effectiveness of deterrents in minimizing corvid and raptor perching have shown limited success. Lammers and Collopy (2005) found that while perch deterrents decreased raptor perch duration when compared to other perching surfaces, they did not prevent perching on structures with deterrents. Similarly, Dwyer and Doloughan (2013) reported that perch deterrents may reduce the frequency or duration of raptor perching on a structure, but did not prevent perching entirely. No commercially available perch deterrent designs are able to fully prevent bird perching; and it is virtually impossible to prevent perching on steel lattice structures. Additionally, some raptors and corvids (e.g., red-tailed hawk, common raven) readily perch on power line conductors or shield wires where perch deterrents cannot be installed, particularly on projects with larger transmission voltages.

Studies have also found that perch deterrents may increase nesting potential and/or directly facilitate nesting, depending on the type and design of the perch deterrent used (Messmer et al., 2013; Liguori, 2013; APLIC 2006). One long-term risk assessment (Liguori, 2013) documented increased perching and electrocution risks at structures with perch deterrents. A high rate of mechanical failure was also noted for installed deterrents, further lessening their effectiveness (Liguori, 2012).

Due to the documented lack of effectiveness and potential negative impacts of perch deterrents, North Plains does not intend to use perch deterrents on the Project. Instead, monopole structure designs, which generally minimize perching and nest-building opportunities, will be utilized to the extent practicable (see Section 8.2).

7.2.4 Collision

Operational risk to migratory birds due to collision with power lines varies across the landscape and is generally based on the design and voltage of power lines in proximity to bird species and habitats present. Important site-specific factors in assessing collision risk across the landscape include adjacent habitats, power line configuration and orientation to bird use areas, topography, weather, bird morphology, flight characteristics, and level of human influences (Olendorff and Lehman, 1986; Bevanger and Brøseth, 2001; Harness et al., 2003; APLIC, 2012; Bernardino et al., 2018). Based on a number of historical studies and observations, biological variables that influence a bird species' susceptibility to line collision include bird vision, behavior, size, maneuverability, and flight characteristics such as altitude and speed. The altitude of migrating birds during the spring and fall migrations is typically far greater than the height of even the largest transmission line structures in the United States (APLIC, 2012). Therefore, power line orientation to lower-altitude flights is more applicable in assessing collision risk to migratory bird use.

Lower-altitude flights are commonly associated with daily movement corridors where birds move between nesting, roosting, and foraging habitats. Where these corridors cross power lines, the risk of a potential line collision increases (APLIC, 2012). Line orientation and location in proximity to stopover habitats used by migratory birds (e.g., whooping cranes and sandhill cranes) may also increase avian collision risk or potential exposure (Bevanger, 1994; APLIC, 2012). Higher

risk areas include habitats that attract waterfowl or water birds, such as wetlands, lakes, playas, rivers, and grain fields.

Other factors, such as inclement weather and low-light conditions that are common during migration, can increase collision risk (Willard, 1978; Faanes, 1987; Morkill and Anderson, 1991; Heck, 2007; APLIC, 2012). Additionally, human activities (i.e., hunting) near power lines may affect bird collision rates. Roosting or foraging birds may flush from human presence and sudden activities, causing them to collide with transmission lines (James and Haak, 1979; APLIC, 2012; Heck et al., 2016).

Based on these factors, bird species with large wingspans and slower maneuverability, such as cranes, herons, swans, pelicans, and geese, have been shown to be more susceptible to power line collisions. Other susceptible species are smaller, heavy-bodied birds that are fast fliers with short, wide wings, such as ducks, rails, coots, and grebes (APLIC, 2012). Few studies have documented eagle and other raptor collisions with overhead power lines. Raptors are adept flyers and collision incidents with overhead lines occur with much less frequency than collision incidents involving other bird species (Bevanger, 1994). Raptors possess high-accuracy eyesight and are agile fliers; however, they may be more susceptible to power line collision when preoccupied or distracted (Olendorff and Lehman, 1986; Harness et al., 2003). Research has suggested bald eagle collisions are more likely to occur where lines intersect with commonly used movement corridors and where birds are flying at lower altitudes, such as near nest sites, winter concentration roosts, and along foraging areas (Olendorff and Lehman, 1986; Harness et al., 2003; Mojica et al., 2009, 2020).

The installation of bird flight diverters (BFDs) on transmission line overhead shield wires and/or optical power ground wires (OPGW)[5] increases a power line's visibility within high-use corridors for low-altitude flights and is an accepted approach to minimize avian collision risks for power lines in the United States (APLIC, 2012). Determining where to install BFDs to reduce potential avian collision risk depends on a number of Project-specific factors. See Sections 8.2 and 8.3 for details on the line marking and BFD installation proposed for the Project.

8.0 AVOIDANCE AND MINIMIZATION MEASURES

To comply with the MBTA, the Project will implement avoidance and minimization measures to reduce the risk of nest destruction and bird mortality or injury resulting from the Project activities. Though not directly required for MBTA compliance, several commitments will also reduce general Project impacts on migratory bird habitats. Avoidance and minimization measures related to Project siting and design have already been implemented by the Project; additional measures will be implemented during Project construction and reclamation, as described below.

Specific measures intended to reduce Project impacts on federally listed species and RFSS species are discussed in greater detail in the Project BA and USFS BE, respectively. Conservation measures implemented to protect these species and/or their habitat may also reduce Project impacts on migratory birds. Although eagles are included in this Plan, further details related to BGEPA compliance, including nest-specific conservation measures, are detailed in the Project EMP.

[5] North Plains is proposing to use OPGW for the shield wires on the Project, which combines the functions of shielding and communications.

North Plains will implement the measures described in this Plan to minimize or avoid impacts on birds protected under the MBTA.

8.1 PROJECT PLANNING

In addition to the APP and EMP already discussed in this document, North Plains has developed and will implement a variety of Project-specific plans to document commitments and agency guidance relevant to Project construction, reclamation, and operation.

The list below includes a subset of these plans relevant to migratory birds and their habitats:

- The **Blasting Plan** outlines the standard procedures that North Plains will implement during blasting, including safety precautions and notification procedures.

- The **Fire Prevention and Suppression Plan** describes the safety measures that North Plains will implement during construction activities to prevent fires, and the emergency procedures North Plains will implement in the event of a fire.

- The **CMRP** describes construction procedures and mitigation that North Plains will implement during construction to reduce potential impacts from Project activities. The CMRP also describes the restoration and reclamation process that North Plains will implement when construction is complete.

- The **Montana Greater Sage-Grouse Mitigation Plan** demonstrates North Plains' compliance with Montana Executive Orders 12-2015 and 21-2015, and the Montana Greater Sage-Grouse Stewardship Act of 2015. The Plan summarizes the steps North Plains will take to avoid and minimize potential Project impacts on greater sage-grouse in Montana.

- The **Hazardous Materials and Waste Management Plan** describes procedures that will be implemented during Project construction for handling, storing, and disposing of all solid and hazardous materials that are used or generated as a result of the Project.

- The **Invasive and Noxious Species Management Plan** includes both the Montana Noxious Weeds and Aquatic Invasive Species Management Plan and the North Dakota Noxious Weed Management Plan. These plans describe the applicable laws and management requirements specified by federal and state agencies, as well as measures North Plains will implement to prevent the spread of invasive and noxious species.

- The **Spill Prevention and Response Plan** (SPRP) describes the methods used to prevent, control, and respond to spills of hazardous substances that may affect surface waters. The SPRP also discusses proper storage and handling of hazardous substances.

- The **Stormwater Pollution Prevention Plan** (SWPPP) describes the Project's erosion prevention and sediment control measures. In addition, North Plains will

adhere to monitoring requirements to ensure compliance with water quality standards in Montana and North Dakota.

8.2 SITING AND DESIGN

During Project siting, North Plains implemented the following measures to avoid and minimize impacts on migratory birds and their habitats:

- The Project transmission line was co-located with existing infrastructure, such as transmission lines and roadways, where feasible.
- North Plains routed the Project outside protected areas that typically contain higher quality habitats that may serve as high-use bird habitats, including nature preserves, wildlife refuges, and WMAs.
- Transmission line structures and Project workspaces were sited to avoid impacts on waterbodies, wetlands, and floodplains, where possible, by spanning the conductors over wetlands and waterbodies. Where avoidance was not possible, North Plains has adjusted workspaces and/or revised the crossing methods to minimize impacts.
- Transmission structures and temporary workspaces were set back a minimum of 10 feet from the ordinary high-water mark of surface waterbodies, where possible, to reduce potential erosion, sedimentation, and turbidity concerns.
- When possible, the Project route and workspaces were adjusted to increase the distance between the Project LOD and sensitive features such as eagle nests and greater sage-grouse leks. Specifically, the Project attempted to keep workspaces at least 0.5-mile from golden eagle nests and 660 feet from bald eagle nests. Where possible, North Plains adjusted the route and access roads to avoid siting Project infrastructure within a 2-mile buffer of active greater sage-grouse leks and there are no active leks within 0.25-mile of the centerline.
- The Project also minimized the span length when crossing large rivers such as the Powder and Tongue rivers, by crossing at the narrowest practicable locations, as recommended by the USFWS Montana Field Office (USFWS, 2021b).
- Lighting at Project buildings such as converter stations, switchyards, and fiber repeater stations will be designed to reduce lighting at night. Downward reflecting shields will be added to limit attracting insects or migrating birds.

North Plains proposes the following design features to reduce operational impacts:

- Installation of tubular steel monopole structures to limit perching and nesting substrate for raptors and corvids (particularly within 2 miles of active greater sage-grouse leks) and to minimize the structure footprint, where practicable.
- Where monopole structures cannot be used, North Plains may instead use multi-pole or lattice structures. Construction constraints and design considerations that may require the use of non-monopole structures include, but are not limited to:

steep terrain, locations requiring longer spans, structures where the alignment changes direction by a substantial degree, and locations with difficult access for construction.

- The use of guy wires will be prohibited at Project structures.
- Long transmission line span lengths (up to approximately 1,200 feet) will be used to minimize the number of structures that can potentially be available for use as perches or nest surfaces by raptors and corvids.
- Vegetation removal will be limited as part of construction activities to the minimum area required by the Project for construction and/or operational maintenance. Where activities such as grading are not necessary, the North Plains will avoid ground disturbance.

In addition to the design features listed above, North Plains conducted an independent analysis to identify transmission line segments that may have a higher bird collision risk than the rest of the Project. These segments will be marked by installing appropriately sized and designed BFD on the OPGW to increase line visibility to birds and reduce the potential for bird collisions, in accordance with APLIC (2012) guidance. Energized conductors at the Project's high voltage level are larger and more visible than the OPGW and cannot be marked due to potential operational issues.

Priority spans for line marking (the process of BFD installation) were identified based on the multiple criteria and related supporting data. Line segments were assigned risk rankings based on their location relative to federal or state wildlife refuges, location within whooping crane migration corridors in North Dakota, presence of bisecting or adjacent grain croplands, proximity to prominent surface water resources, presence of waterbird or waterfowl concentrations documented in area, and presence of eagle nests within two miles combined with suitable eagle habitat along the Project centerline. Calculation methods and data sources used for this analysis are discussed in more detail in the Project's Avian Collision Risk Assessment (Western EcoSystems Technology, Inc., 2025).

Priority spans for line marking are presented in Figure 8.2-1. In Montana, spans with higher risk rankings reflected a variety of risk parameters and were distributed throughout the state. Open water, emergent wetlands, documented species occurrences, and the presence of grain crops resulted in elevated bird collision risk in the following proposed line marking areas along the HVDC Transmission Line in Montana:

- Approximate mileposts (MPs) 115.0 to 117.0 (2.2 miles) near Highway 12 – ranked high due to bald eagle, American white pelican (*Pelecanus erythrorhynchos*), and snow goose (*Anser caerulescens*) presence, as well as a small lake.
- Approximate MPs 112.0 to 113.5 (1.5 miles) near Highway 12 – ranked high due to sharp-tailed grouse (*Tympanuchus phasianellus*) and great blue heron presence, as well as open water and wetlands.
- Approximate MPs 91.5 to 93.0 (1.5 miles) near Powder River – ranked high due to the presence of grain crops and emergent wetlands.

- Approximate MPs 62.5 to 63.0 (0.5 miles) near Tongue River – ranked high due to bald eagle and waterbird occurrences associated with the nearby river, as well as the presence of grain crops.

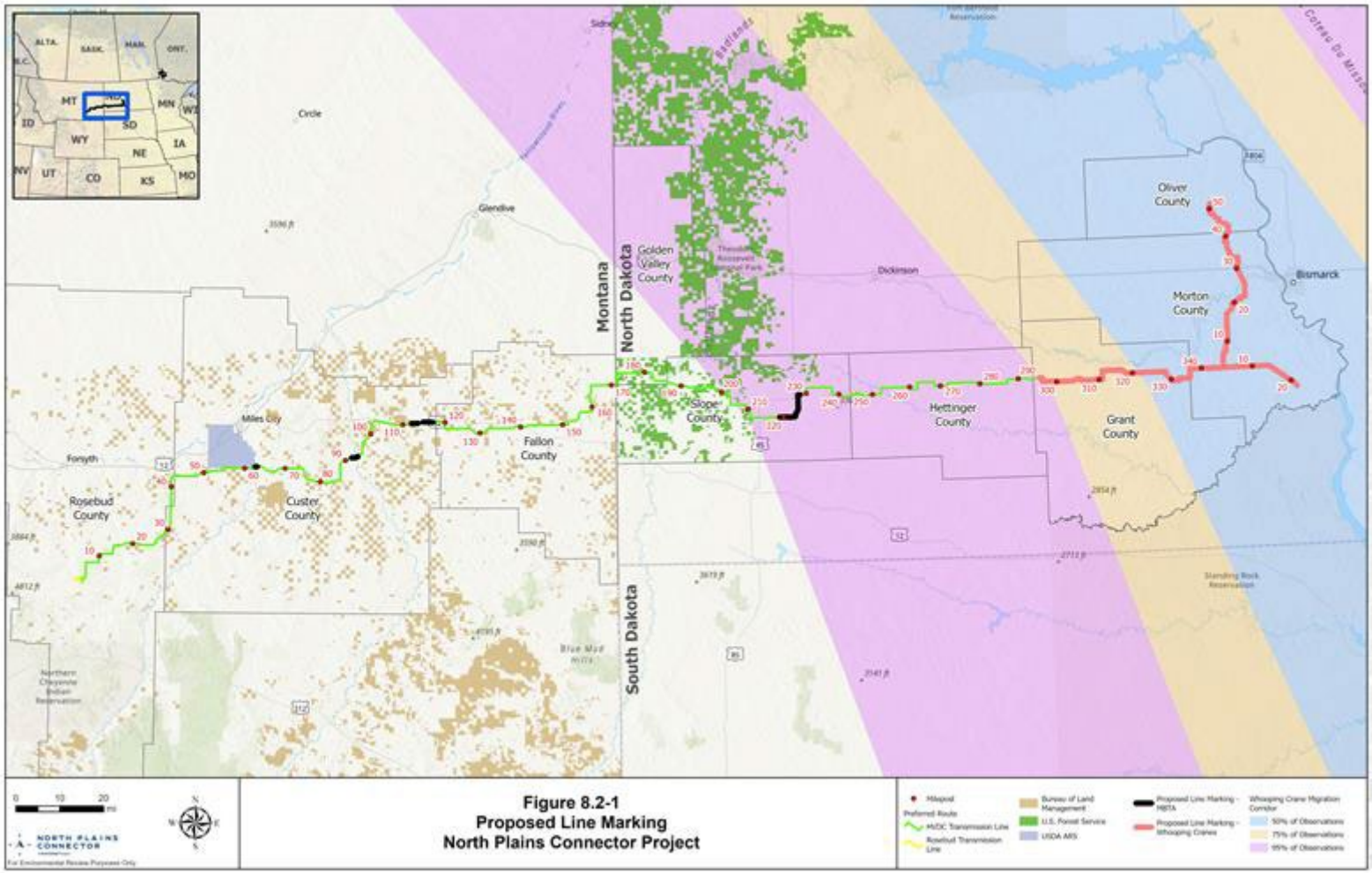
In North Dakota, spans with higher risk rankings primarily reflected the Project's location within the whooping crane migration corridor, though other species observations and the presence of wildlife areas, waterbodies, and wetlands were also key factors. The most prominent high-risk area in North Dakota was associated with White Lake NWR. Proposed line marking areas along the Project in North Dakota include the following:

- Along the Oliver Transmission Line:
    - Approximate MPs 48.0 to 52.0 (3.7 miles) – near Wilber Bolt State WMA ranked high due to whooping crane occurrence, the presence of grain crops, and a large lake.
    - Approximate MPs 27.0 (0.3 miles) near Heart River crossing – ranked high due to whooping crane and bald eagle occurrence and the presence of grain crops.
    - Approximate MPs 22.0 to 24.0 (2.0 miles) south of Heart River – ranked high due to whooping crane, great blue heron, and bald eagle occurrences and the presence of grain crops, a small lake, and wetlands.
- Along the HVDC Transmission Line:
    - Approximate MPs 219.0 to 228.0 (9.2 miles) near White Lake NWR – ranked highly due to the whooping crane and waterbird occurrences associated with the nearby lake, as well as the presence of grain crops.

North Plains will also install BFDs throughout the 75 percent and 50 percent bands of the whooping crane migration corridor in North Dakota to minimize the likelihood of collision with OPGW during Project operation; this line marking area overlaps several of the priority segments listed above in North Dakota.

In total, approximately 15 miles of Project transmission line are recommended for marking (3.5% of the Project) to minimize general avian collision risk in both Montana and western North Dakota, and an additional approximately 120 miles of Project transmission line in eastern North Dakota are recommended for marking to minimize risk for whooping crane or other bird collisions (28% of the Project). BFDs will be installed with 50-foot spacing and staggered where multiple shield wires are present to increase the line visibility from a horizontal plane.

North Plains will finalize the type of BFD to be installed prior to Project construction, and will avoid BFDs known to cause operational issues, including voiding the OPGW warranty or abrading the aluminum conductor per APLIC recommendations (2012). North Plains may consider multiple installation methods, including helicopter, drone-assisted robot, and/or direct drone installations, as necessary (see Appendix D).


Montana
North Dakota
South Dakota
Golden Valley County
Slope County
Hettinger County
Grant County
Oliver County
Morton County
Bismarck
Dickinson
Fallon County
Custer County
Rosebud County
Miles City
Forsyth
Glendive
Circle
Figure 8.2-1
Proposed Line Marking
North Plains Connector Project

8.3 CONSTRUCTION

During Project construction, North Plains will implement various measures to minimize impacts on migratory birds and habitats from Project activities.

North Plains will require all Project staff and contractors working on-site to participation in an environmental awareness training program. EIs and/or biological monitors will be present on-site during construction to review Project activities daily for compliance with federal, state, and local regulatory requirements.

General measures for construction activities include the following:

- Stake the boundaries of the Project workspace to keep construction activities within the approved Project workspace.
- Use signage to mark areas outside of construction workspaces and identify sensitive resource areas such as wetland boundaries and other protected habitats.
- Minimize ground disturbance within temporary workspaces (e.g., structure pads) during Project construction.
- Limit construction activities to the time period between dawn and dusk, and/or use down-shielding or directional lighting and motion or heat sensors to minimize light pollution in adjacent habitats to minimize disturbance and displacement of nesting and roosting birds. The use of low-intensity, energy-saving lighting will be prioritized, when possible.
- Implement measures such as speed limits and the use of water trucks, sprinklers, and chemical surfactants to reduce the creation of fugitive dust, which has the potential to reduce air quality and affect both the abundance of prey insects and health of vegetation necessary for foraging, roosting, and nesting of nearby birds.
- Cut or scrape vegetation at or slightly above the ground surface, leaving rootstock and the seed bank in place. Where proposed, construction matting will be placed over the cut vegetation, minimizing rutting and soil compaction while also preserving the intact root stock and facilitating regrowth of vegetation after construction.
- Install appropriately designed and sized BFD on the OPGW above the energized conductors in priority spans and within the whooping crane migration corridor, as described in Section 8.2.
- Report incidental migratory bird mortality to the USFWS Injury and Mortality Reporting System: https://www.fws.gov/media/3-202-17-annual-report-avian-injury-mortality. North Plains will not collect birds (live or dead) without a valid permit or USFWS approval.
- Comply with applicable federal and state laws in the use of rodenticides or pesticides.

- Use non-chemical rodent controls, when possible, to avoid secondary poisoning of raptors.

- North Plains will implement the SWPPP, SPRP, and Hazardous Materials and Waste Management Plan including:

    - applying sediment, erosion, and containment control measures to avoid and minimize impacts on waterbodies and wetlands; and

    - avoiding the following within a 100-foot buffer of wetlands and waterbodies: storing hazardous materials, chemicals, fuels, or lubricating oils; refueling (unless done in accordance with the SPRP); equipment and maintenance repairs; and parking. If refueling or use of other hazardous liquids must occur within a buffer area, an EI will be present to monitor the activity and will have spill response equipment onsite and readily available.

- North Plains will implement the Fire Prevention Plan including:

    - complying with all federal, state, county, and local fire regulations pertaining to the prevention of uncontrolled fires; and

    - implementing measures to reduce the potential for accidentally starting fires from cutting, grinding, and burning of brush or vegetative debris, vehicle use, or smoking during periods when fire risk is high.

- North Plains will implement the Blasting Plan including:

    - only using explosives within specified times and at specified distances from sensitive wildlife or surface waters, as established by the appropriate federal and state agencies.

- North Plains will implement the Invasive and Noxious Species Management Plans to avoid and minimize the spread of invasive or nuisance species along the Project, including:

    - minimizing herbicide and pesticide use and using hand application or vehicle-mounted treatments instead of aerial application; targeted application of herbicides will be completed in a manner that applies chemicals to a specific plant or group of plants while avoiding herbicides contacting off-target vegetation; and

    - using appropriately licensed applicators to apply herbicides and pesticides where required and applied only in accordance with label and application permit directions and stipulations for terrestrial and aquatic applications.

Measures specifically intended to avoid and minimize vehicle collision risk during Project construction include the following:

- Require speed limits of 25 miles per hour or less on all non-public Project access roads for construction equipment and personnel to reduce risk of bird-vehicle collisions.

- Keep the Project site clean of debris, garbage, and waste. Trash will be collected and stored in closed dumpsters to avoid attracting birds to potential food sources within the Project.

- If observed near the Project LOD during construction, remove roadkill carcasses to avoid attracting raptors to roadways where they are at risk for vehicular collisions. If removal is not possible, roadkill carcasses should be moved from the area immediately adjacent to the road. If the carcass is located along a public road, contractors may instead notify county personnel to seek carcass removal.

Measures specifically intended to avoid or minimize impacts on birds, including eggs, nestlings, and fledglings, and take of occupied or otherwise protected nests during Project construction include the following:

- Implement seasonal activity restrictions within set buffer distances around active non-eagle raptor nests to minimize Project disturbance during sensitive breeding periods; these buffers will be determined by species or species group (i.e., raptors) and landownership, where appropriate. Seasonal restrictions and distances are based on applicable agency recommendations and Project-specific coordination (Table 8.3-1).

- Implement appropriate seasonal restrictions and disturbance buffers for bald eagles and golden eagles during the breeding season, as detailed in Table 8.3-2, to the maximum extent practicable. National breeding season dates will be used, as they encompass the breeding season dates provided by the other agencies (USFWS, 2024a). North Plains will also develop a Project specific EMP that further describes measures applied to avoid and minimize impacts on bald and golden eagles.

- Conduct a pre-construction aerial raptor nest survey the same year as construction to identify new eagle and sensitive raptor nests built near the Project and install species- and location-specific avoidance buffers around any new nests found, as described above and in Tables 8.3-1 and 8.3-2.

- If an active nest is discovered outside of the seasonal restriction dates, avoidance buffers and minimization measures must still be implemented until the nest no longer contains eggs or young.

- Inactive (i.e., no eggs, young, or adults present) non-eagle nests and nests of species not protected under the ESA or BGEPA, or by the BLM or USFS on their managed lands, may be removed or destroyed, if needed (USFWS, 2015). Nest inactivity must be confirmed by an EI or biological monitor.

- Helicopters used for construction will allow a 1,000-foot buffer around raptor nests during the breeding season.

- Per the Project Blasting Plan, blasting must be conducted only during daylight hours. Project blasting will be avoided within 0.5-mile of bald and golden eagle nests during the nesting season to prevent disturbance to nesting eagles. Eagle disturbance permits may be obtained for select nests, if North Plains cannot avoid blasting during the breeding season. Blasting will also be avoided during the nesting season within the buffers specified in Table 8.3-1 for other sensitive raptor species nesting on federal lands.

- To the extent feasible, conduct ground- or vegetation-disturbing construction activities (e.g. vegetation clearing, tree trimming, overland travel, grading and excavation, etc.) within uncultivated or undeveloped habitats (e.g., grasslands, forests, and shrublands) between August 1 – April 14, to avoid Project impacts within the general migratory bird nesting season (April 15 – July 31; NDGFD, 2025; MacDonald et al., 2024; Appendix A).

- If ground- or vegetation-disturbing construction activities cannot occur outside of the general migratory bird nesting season, North Plains will conduct nest clearance surveys (i.e., nest searches) in the affected area no more than seven days prior to the ground- or vegetation-disturbing construction activities. The purpose of the nest clearance surveys will be to locate bird nests that contain nestlings or eggs in undisturbed vegetation where impacts are planned; these surveys will typically focus on ground and shrub-nesting birds. Nest clearance surveys will help to avoid nest destruction for several of the BCC species known to occur within the Project, many of which are ground-nesting passerines (Table 6.2.1-1).

    - When a nest is found, it will be marked with flagging and a buffer will be implemented to avoid nest destruction during construction.

    - Nests of most bird species will incur a six-foot avoidance buffer when the nest is active; avoidance buffers for ground-nesting raptors are larger and vary by species, see Table 8.3-1 for details.

    - On BLM-managed lands, nest clearance surveys will include a 300-foot buffer from the Project workspace, where possible, and survey summaries will be submitted to the BLM-Miles City Field Office, as recommended in the Miles City Office Approved Resource Management Plan (BLM, 2015).

- If a bird nest is discovered by Project staff during construction, the EI should be contacted to discuss measures needed to avoid bird mortality or nest abandonment.

North Plains will also implement species-specific avoidance and minimization measures to minimize potential effects to ESA-listed species, including whooping cranes, rufa red knot, and

piping plover. These measures are preliminary in the Project BA and will be updated in this Plan after consultation with USFWS is complete.

- If whooping cranes are sighted during construction or maintenance, avoid disturbance within 1 mile until the cranes have left the area and notify the USFWS of the sighting. The typical migration seasons include April to May for spring migration and September and October for fall migration; however, the conservation measure would apply year-round.

- During construction, lower or mark for visibility any equipment over 15 feet tall when not in use, at night, or during low visibility conditions.

- Ensure all Project staff and contractors working on-site participate in an environmental awareness training program that includes proper identification, response protocol, and reporting of whooping cranes. Additionally, provide pamphlets or identification guides to operations staff and contractors while conducting work on-site during the migration seasons.

- In the unlikely event piping plovers or rufa red knots are sighted during construction, North Plains will avoid disturbance within 0.6 mile of the sighting until the birds have left the area and will notify the USFWS of the sighting.

TABLE 8.3-1

Avoidance Buffers and Seasonal Timing Restrictions Proposed for Construction Activities Near Non-eagle Nests

Land Ownership/Group or Species	Recommended Buffer Distance	Seasonal Restriction Window (based on breeding season dates) [a]
PRIVATE LANDS - PROJECT-WIDE		
Migratory birds (non-eagle raptors) [b]	100 feet	February 1 – July 15, or as long as the nest is active (contains eggs, nestlings, or fledglings)
Migratory birds (non-raptors) [c]	6 feet	April 15 – July 31, or as long as the nest is active (contains eggs, nestlings, or fledglings)
BUREAU OF LAND MANAGEMENT - MONTANA [d]		
Raptors	0.25 mile; 0.5 mile (during timing stipulation)	March 1 – July 31
Colonial nesting waterbirds	0.5 mile	April 1 – July 15
Migratory birds	0.1 mile	April 15 – July 15
U.S. FOREST SERVICE - NORTH DAKOTA [e]		
Peregrine falcon	1.0 mile	February 1 – July 31
Prairie falcon [f]	0.25 mile	April 1 – July 31
Merlin	0.5 mile	April 1 – August 15
Ferruginous hawk [f]	0.5 mile	March 1 – July 31
Burrowing owl	0.25 mile	April 15 – August 31

[a] If an active nest for the respective species is found outside of its listed seasonal restriction window, avoidance buffers and minimization measures must still be implemented until the nest is no longer active.

[b] Restriction based on a recommendation from the U.S. Fish and Wildlife Service (USFWS) North Dakota Field office. The Project plans to implement this recommendation Project-wide (USFWS 2023b).

[c] Restriction proposed by the Project to be implemented for private lands and on U.S. Forest Service (USFS) land for species without designed agency-recommended buffers.

[d] Restrictions based on guidance in the Bureau of Land Management (BLM) Approved Resource Management Plan (BLM 2015).

[e] Restrictions based on guidance in the USFS Land Resource Management Plan for the Dakota Prairie Grasslands (USFS 2001).

[f] Indicates species is listed as a Bird of Conservation Concern.

Table 8.3-2

Agency-recommended buffers and breeding season dates for bald and golden eagles

Agency	Bald Eagle		Golden Eagle	
	Recommended Buffer Distance	Breeding Season Dates	Recommended Buffer Distance	Breeding Season Dates
FEDERAL AGENCIES				
U.S. Fish and Wildlife Service (USFWS) National Guidance	330 feet for non-visible activity; 660 feet for visible activity; 0.5 mile for blasting; 1,000 feet for helicopters [1]	Montana & North Dakota: January 15 – August 31 [2]	1.0 mile [3]	January 1 – August 31 [2, a]
USFWS – Montana Field Office	Follow MFWP [4] and National Bald Eagle Management Guidelines [1] for buffers and timing [5]		0.6 mile [6]	--
USFWS – North Dakota Field Office	Follow National Bald Eagle Management Guidelines [1] for buffers and timing [b]		0.5 mile for visible activity [7]	
Bureau of Land Management (BLM) [8, c]	0.5 mile	--	0.25 mile for surface occupancy and use; 0.5 mile for surface use during timing stipulation	March 1 – July 31
U.S. Forest Service (USFS) Dakota Prairie Grasslands (DPG) [9, d]	1.0 mile	February 1 – July 31	0.5 mile	February 1 – July 31
STATE AGENCY [e]				
Montana Fish Wildlife, and Parks (MFWP) [4]	0.5 mile for disturbing activities; 0.25 mile for construction of roads; 0.25 mile (horizontal distance) or 1,000 feet (vertical distance) for helicopters	February 1 – August 15 [f]	--	--

[a] National breeding season dates will be used, as they encompass the breeding season dates provided by the other agencies.

[b] The North Dakota Field Office recommends a nesting season of February 1 – July 15 and a golden eagle buffer distance of 660 ft for activities not visible from the nest, but the Project has opted to use a 0.5 mile buffer and the national nesting season dates to be more conservative.

[c] The buffer distances provided by the BLM are for bald and golden eagle nests active within the last 5 and 7 years, respectively. Timing stipulation provided by the BLM is a breeding season and denotes when surface use is prohibited on BLM-managed land near active nests.

[d] Buffer guidance and timing stipulations based on the Land Resource Management Plan for the DPG (USFS, 2001). Guidance is only applicable on USFS-managed lands.

[e] North Dakota Game and Fish Department does not provide specific guidance for eagle nest disturbance in North Dakota.

[f] This timing restriction does not apply to unoccupied nests, alternate nests, nests where eagles have fledged, failed nests, abandoned nests, or to nests where the associated eagles have demonstrated a tolerance to the activity (Montana Bald Eagle Working Group, 2010).

Sources: [1](USFWS, 2007); [2](USFWS, 2024b); [3](USFWS, 2024c); [4](Montana Bald Eagle Working Group, 2010); [5](USFWS, 2021b); [6](Grid United LLC, 2023); [7](USFWS, 2023a); [8](BLM, 2015); [9](USFS, 2024).

8.4 RECLAMATION

After construction is complete, North Plains will reclaim areas of native habitat that are temporarily disturbed during Project construction (e.g., temporary workspaces) in accordance with the Project's CMRP (see Section 8.1).

Applicable measures related to reclamation and restoration in the CMRP include:

- Restore native vegetation using certified weed-free seed mixes that include native plants with a high forb-to-grass ratio, developed in coordination with the Natural Resource Conservation Service and state- and federal land-managing agencies.
- Implement the Project's Noxious Weed and Aquatic Invasive Species Management Plan in Montana and Noxious Weed Management Plain in North Dakota to avoid and minimize the spread of invasive or nuisance species along the Project.
- Reclaim new Project access roads within 2 miles of active greater sage-grouse leks to two-tracks, if use is necessary during Project operation. Where new Project access roads within 2 miles of active greater sage-grouse leks cannot be reclaimed this way, gates will be installed to restrict public access.

8.5 OPERATIONS AND MAINTENANCE

North Plains will develop an APP to minimize impacts on migratory birds related to operations and maintenance for the life of the Project. The APP will address migratory bird concerns during vegetation clearing, including seasonal restrictions and avoidance buffers for certain non-emergency maintenance activities.

9.0 IMPLEMENTATION

North Plains is committed to the avoidance and minimization measures discussed in the Plan. To ensure that these measures are followed, North Plains will:

- Incorporate avoidance and minimization measures into construction documents (i.e., construction drawings and plans) for the Project.
- Require environmental training for North Plains staff and contractors on the planning, construction, and operations measures described in this document.
- Include environmental training for all construction and operations personnel and contractors prior to starting work.
- Periodically reevaluate whether measures described in this Plan are being followed and provide follow-up training when necessary.

10.0 PLAN REVISIONS

TABLE 10.0-1

Plan Revisions

Revision Number	Revision Type(s)	Revision Date
Rev 1	Initial draft Plan	October 2025

11.0 REFERENCES

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Appendix A. Birds of Conservation Concern with Potential to Occur within the North Plains Connector Project Limits-of-Disturbance

APPENDIX A

Birds of Conservation Concern (BCC) with Potential to Occur in the North Plains Connector Project Limits-of-Disturbance

Species [a]				Montana					North Dakota			
Common Name	**Scientific Name**	**Potential Breeding Habitat**	**Primary Nesting Season**	**Rosebud**	**Custer**	**Fallon**	**Golden Valley**	**Slope**	**Hettinger**	**Grant**	**Morton**	**Oliver**
Baird's Sparrow	*Centronyx bairdii*	Sparsely vegetated mixed-grass and fescue prairie with vegetation from previous growing seasons.	May 20 - Aug 15	X	X	X	X	X	X	X	X	X
Black-billed Cuckoo	*Coccyzus erythropthalmus*	Forest and wooded areas associated with water	May 15 - Oct 10	X	X	X	X	X	X	X	X	X
Black Tern	*Chlidonias niger*	Lakes, peat bogs, marshes, wetlands.	May 15 - Aug 20	X	X	X	X	X	X	X	X	X
Bobolink	*Dolichonyx oryzivorus*	tall-grass and mixed grass prairie, can nest in old hay pastures	May 20 - Jul 31	X	X	X	X	X	X	X	X	X
California Gull	*Larus californicus*	Islands on lakes, river, reservoirs. Will forage in natural and man-made open areas and water bodies, garbage dumps, and agricultural areas.	Mar 1 – Jul 31	X	X	X	X	X	X	X	X	X
Chestnut-collared Longspur	*Calcarius ornatus*	Short and mixed-grass prairie, grazed/mowed tallgrass prairie.	May 1 - Aug 10	X	X	X	X	X	X	X	X	X
Ferruginous Hawk	*Buteo regalis*	Flat or rolling grasslands, sparsely vegetated canyon areas.	Mar 15 - Aug 15	X	X	X	X	X	X	X	X	X
Franklin's Gull	*Leucophaeus pipixcan*	Floating mats on open water.	May 1 - Jul 31	X	X	X	X	X	X	X	X	X
Grasshopper Sparrow (Northern)	*Ammodramus savannarum*	Sparsely vegetated prairie.	June 1 - Aug 20	X	X	X	X	X	X	X	X	X
Lark Bunting	*Calamospiza melanocorys*	Grassland, shrub-steppe, and agricultural areas.	May 10 - Aug 15	X	X	X	X	X	X	X	X	X
Lesser Yellowlegs	*Tringa flavipes*	Non-breeding	NA	X	X	X	X	X	X	X	X	X
Lewis's Woodpecker	*Melanerpes lewis*	Open forested areas with a high density of trees with snags.	Apr 20 - Sep 30	X	X	X						

APPENDIX A

Birds of Conservation Concern (BCC) with Potential to Occur in the North Plains Connector Project Limits-of-Disturbance

Species [a]				Montana					North Dakota			
Common Name	**Scientific Name**	**Potential Breeding Habitat**	**Primary Nesting Season**	**Rosebud**	**Custer**	**Fallon**	**Golden Valley**	**Slope**	**Hettinger**	**Grant**	**Morton**	**Oliver**
Long-eared Owl	*Asio otus*	Densely wooded or brushy habitat adjacent to open habitat such as grassland.	Mar 1 - Jul 15	X	X	X	X	X	X	X	X	X
Marbled Godwit	*Limosa fedoa*	Short-grass prairie, sparsely vegetated areas associated with wetlands.	May 1 - Jul 31	X	X	X	X	X	X	X	X	X
Mountain Plover	*Charadrius montanus*	Short-grass prairie, grazing tall-grass prairie, can nest in agricultural areas if restricted	Apr 15 - Aug 15	X	X	X						
Northern Harrier	*Circus hudsonius*	Seasonal or semi-permanent wetlands, dry uplands.	Apr 1 - Sep 15	X	X	X	X	X	X	X	X	X
Pinyon Jay	*Gymnorhinus cyanocephalus*	Pinyon-juniper woodlands.	Feb 15 - Jul 15	X	X	X						
Prairie Falcon	*Falco mexicanus*	Open grasslands.	Mar 1 - Jul 31	X	X	X	X	X	X	X	X	X
Red-headed Woodpecker	*Melanerpes erythrocephalus*	Open forested areas with snags.	May 10 - Sep 10	X	X	X	X	X	X	X	X	X
Sprague's Pipit	*Anthus spragueii*	Grazed open native prairie.	May 10 - Aug 31	X	X	X	X	X	X	X	X	X
Thick-billed Longspur	*Rhynchophanes mccownii*	open and sparsely vegetated habitat in the semi-arid shortgrass steppe and in overgrazed pastures.	May 1 – Aug 15	X	X	X	X	X				
Western Grebe	*Aechmophorus occidentalis*	Fresh water lakes and marshes with open water and emergent vegetation.	Jun 1 - Aug 31	X	X	X	X	X	X	X	X	X
Willet	*Tringa semipalmata*	Shortgrass prairie, wetlands, croplands, alkali flats.	Apr 20 - Aug 5	X	X	X	X	X	X	X	X	X

[a] An Information for Planning and Conservation System review was used to identify the BCC with potential to occur in the Project LOD (U.S. Fish and Wildlife Service [USFWS] 2025a).

Source: Cornell Lab of Ornithology 2024; Montana Fish, Wildlife, and Parks 2024; North Dakota Game and Fish Department 2019; USFWS 2025a.

Appendix B. Conservation Measures for Occupied Non-eagle Raptor Nests on the North Plains Connector Project

APPENDIX B

Conservation Measures for Occupied Non-eagle Raptor Nests on the North Plains Connector Project

Transmission Line/State/ County/Milepost	Species	Unique ID	Land Ownership	Proposed Buffer	Proposed Construction Time-of-Year Restriction	Distance from Project Workspace (miles)	Project Workspace Within Recommended Buffer
HVDC TRANSMISSION LINE							
MONTANA							
CUSTER							
48.3	Red-tailed hawk	MT-RTHA-22809	Bureau of Land Management	0.5 mile	March 1 – July 31	0.3	Yes
NORTH DAKOTA							
HETTINGER							
277.7	Swainson's hawk	ND-SWHA-23027	Private Land	100 feet	February 1 – July 15	<0.1	Yes
GRANT							
302.3	Swainson's hawk	ND-SWHA-23036	Private Land	100 feet	February 1 – July 15	<0.1	Yes
OLIVER TRANSMISSION LINE							
NORTH DAKOTA							
MORTON							
29.7	Great horned owl	ND-GHOW-23008	Private Land	100 feet	February 1 – July 15	<0.1	Yes

ID = identification

Notes: This table shows expected conservation measures at nests recorded during Project aerial raptor nest surveys in 2022 and 2023. Table inclusion is based on distance from the Project workspace as of March 2025.

Sources: Western EcoSystems Technology, Inc., 2023a, 2023b.

Appendix C. Eagle and Potential Eagle Nests Observed at the North Plains Connector Project

APPENDIX C

Eagle and Potential Eagle Nests Observed at the North Plains Connector Project during raptor nest surveys 2022 and 2023.

Transmission Line/ State/County/ Milepost	Species	Unique ID	Land Ownership [a]	Distance (miles) [b] to Nearest Project Infrastructure/Workspace	Nearest Existing Infrastructure/ Anthropogenic Disturbance within Evaluation Buffers	Infrastructure Visible within Evaluation Buffers? (Y/N) [c]
HVDC TRANSMISSION LINE						
MONTANA						
ROSEBUD						
7.7	Golden Eagle	MT-GOEA-27106	Montana State Trust Lands	1.2 mi - Access Road - New, Temporary	Road (Surface Unknown) within 0.3 mi	N
15.2	Golden Eagle	MT-GOEA-23063	Private Land	0.3 mi - Pulling Site	Paved Road within 0.7 mi	Y
17.3	Bald Eagle	MT-BAEA-22967	Private Land	0.1 mi - Access Road - Existing, Needs Improvement	Unpaved Road within 0.1 mi (Project Infrastructure: Access Road - Existing, Needs Improvement)	Y
19.2	Golden Eagle	MT-GOEA-23098	Private Land	0.4 mi - Access Road - Existing, Needs Improvement	Unpaved Road within 0.4 mi (Project Infrastructure; Access Road - Existing, Needs Improvement)	Y
21.6	Golden Eagle	MT-GOEA-27121	Bureau of Land Management	0.9 mi - Pulling Site	Residence within 0.6 mi	Y
41.7	Unidentified Raptor	MT-RAPT-23185	Montana State Trust Lands	6.1 mi - Pulling Site	Road (Surface Unknown) within 0.3 mi	N
42.8	Bald Eagle	MT-BAEA-23181	Private Land	3.3 mi - Pulling Site	Agriculture within 0.1 mi	N
37.7	Golden Eagle	MT-GOEA-27117	Private Land	1.2 mi - Structure Pad	Unpaved Road within 0.2 mi	N
44.2	Golden Eagle	MT-GOEA-22988	Private Land	1.5 mi - Access Road - Existing, No Improvements Needed	None within 1.0 mi	N
CUSTER						
34.2	Bald Eagle	MT-BAEA-22992	Private Land	5.9 mi - Structure Pad	None within 1.0 mi	N
30.7	Golden Eagle	MT-GOEA-27116	Private Land	0.5 mi - Structure Pad	Unpaved Road within 0.5 mi	Y
44.4	Unidentified Raptor	MT-RAPT-27105	Private Land	1.5 mi - Access Road - Overland Travel	None within 1.0 mi	N
52.1	Golden Eagle	MT-GOEA-22958	U.S. Dept of Agriculture – Agriculture Research Service	1.0 mi - Pulling Site	Unpaved Road within 0.3 mi	Y
56.7	Golden Eagle	MT-GOEA-23032	Private Land	2.7 mi - Access Road - New, Permanent	Unpaved Road within 0.1 mi	N

APPENDIX C

Eagle and Potential Eagle Nests Observed at the North Plains Connector Project during raptor nest surveys 2022 and 2023.

Transmission Line/ State/County/ Milepost	Species	Unique ID	Land Ownership [a]	Distance (miles) [b] to Nearest Project Infrastructure/Workspace	Nearest Existing Infrastructure/ Anthropogenic Disturbance within Evaluation Buffers	Infrastructure Visible within Evaluation Buffers? (Y/N) [c]
58.0	Unidentified Raptor	MT-RAPT-27120	Bureau of Land Management	2.0 mi - Structure Pad	None within 1.0 mi	N
61.0	Golden Eagle	MT-GOEA-27109	Private Land	0.8 mi - Access Road - New, Temporary	Paved Road within 1.0 mi (Project Infrastructure; Access Road - Existing, No Improvements Needed)	Y
62.6	Bald Eagle	MT-BAEA-27112 [d]	Private Land	1.2 mi - Access Road – Existing No Improvement	Agriculture within 660 ft	N
61.8	Bald Eagle	MT-BAEA-23043 [d]	Private Land	1.7 mi - Access Road – Existing Needs Improvement	Agriculture within 660 ft	N
69.3	Unidentified Raptor	MT-RAPT-27122	Bureau of Land Management	1.3 mi - Access Road - New, Permanent	Structure (Other) within 0.7 mi	N
67.6	Golden Eagle	MT-GOEA-23142	Private Land	0.9 mi - Access Road - New, Permanent	Agriculture within 0.3 mi	Y
77.7	Golden Eagle	MT-GOEA-23280	Private Land	1.2 mi - Access Road - New, Permanent	Unpaved Road within 0.9 mi	N
80.9	Unidentified Raptor	MT-RAPT-27107	Private Land	0.3 mi - Access Road - New, Permanent	Unpaved Road within 660 ft	Y
81.8	Unidentified Raptor	MT-RAPT-27104	Private Land	0.6 mi - Access Road - New, Permanent	Road (Surface Unknown) within 0.2 mi	Y
82.4	Unidentified Raptor	MT-RAPT-23281	Montana State Trust Lands	0.8 mi - Access Road - New, Permanent	Road (Surface Unknown) within 660 ft	Y
82.0	Golden Eagle	MT-GOEA-27118	Private Land	0.7 mi - Access Road - New, Permanent	Unpaved Road within 0.2 mi	Y
83.4	Golden Eagle	MT-GOEA-27115	Private Land	0.6 mi - Structure Pad	None within 1.0 mi	Y
89.4	Unidentified Raptor	MT-RAPT-23058	Private Land	3.6 mi - Access Road - Existing, No Improvements Needed	None within 1.0 mi	N
97.7	Bald Eagle	MT-BAEA-23195	Private Land	4.3 mi - Pulling Site	Existing Transmission Line within 0.2 mi	N
101.2	Unidentified Raptor	MT-RAPT-23040	Bureau of Land Management	0.8 mi - Access Road - Existing, No Improvements Needed	Road (Surface Unknown) within 0.8 mi (Project Infrastructure; Access Road - Existing, No Improvements Needed)	Y

APPENDIX C

Eagle and Potential Eagle Nests Observed at the North Plains Connector Project during raptor nest surveys 2022 and 2023.

Transmission Line/ State/County/ Milepost	Species	Unique ID	Land Ownership [a]	Distance (miles) [b] to Nearest Project Infrastructure/Workspace	Nearest Existing Infrastructure/ Anthropogenic Disturbance within Evaluation Buffers	Infrastructure Visible within Evaluation Buffers? (Y/N) [c]
100.0	Unidentified Raptor	MT-RAPT-27114	Private Land	1.5 mi - Pulling Site	None within 1.0 mi	N
100.0	Unidentified Raptor	MT-RAPT-27119	Bureau of Land Management	1.7 mi - Pulling Site	None within 1.0 mi	N
104.2	Unidentified Raptor	MT-RAPT-27110	Private Land	1.2 mi - Access Road - Existing, No Improvements Needed	Paved Road (Highway) within 1.0 mi	N
106.3	Unidentified Raptor	MT-RAPT-23066	Private Land	N/A	N/A	N/A
107.5	Golden Eagle [e]	MT-GOEA-23493	Private Land	1.4 mi - Access Road - New, Permanent	None within 1.0 mi	N
109.5	Golden Eagle	MT-GOEA-23087	Private Land	0.1 mi - Structure Pad and Access Road – New, Temporary	Existing Transmission Line within 0.1 mi	Y
117.1	Golden Eagle	MT-GOEA-23084	Private Land	1.9 mi - Access Road - Overland Travel	Existing Transmission Line within 0.6 mi	N
NORTH DAKOTA						
GOLDEN VALLEY						
186.1	Golden Eagle	ND-GOEA-22789	Private Land	N/A	N/A	N/A
186.2	Golden Eagle	ND-GOEA-23168	Private Land	N/A	N/A	N/A
SLOPE						
184.2	Golden Eagle	GE238 [f]	Private Land	1.9 mi - Pulling Site	Unpaved Road within 660 ft.	N
184.3	Golden Eagle	GE239 [f]	U.S. Forest Service	1.7 mi - Pulling Site	Unpaved Road within 0.1 mi.	N
186.9	Golden Eagle	ND-GOEA-22887	Private Land	N/A	N/A	N/A
187.4	Unidentified Raptor	ND-RAPT-22788	Private Land	0.6 mi - Access Road – Overland Travel	Agriculture within 660 ft	Y
188.4	Unidentified Raptor	ND-RAPT-22947	Private Land	0.5 mi - Structure Pad	Road (Surface Unknown) within 0.4 mi	Y
191.2	Unidentified Raptor [g]	ND-RAPT-23080	Private Land	0.2 mi - Structure Pad	Paved Road within 0.4 mi	Y
201.6	Golden Eagle	ND-GOEA-23457 [f]	U.S. Forest Service	2.3 mi - Pulling Site	Unpaved Road within 0.4 mi	N
201.6	Golden Eagle	ND-GOEA-27363 [f]	U.S. Forest Service	3.0 mi - Pulling Site	Unpaved Road within 0.2 mi	N
201.6	Golden Eagle	ND-GOEA-27368 [f]	U.S. Forest Service	3.0 mi - Pulling Site	Unpaved Road within 0.2 mi	N
208.6	Golden Eagle	ND-GOEA-22782	Private Land	N/A	N/A	N/A

APPENDIX C

Eagle and Potential Eagle Nests Observed at the North Plains Connector Project during raptor nest surveys 2022 and 2023.

Transmission Line/ State/County/ Milepost	Species	Unique ID	Land Ownership [a]	Distance (miles) [b] to Nearest Project Infrastructure/Workspace	Nearest Existing Infrastructure/ Anthropogenic Disturbance within Evaluation Buffers	Infrastructure Visible within Evaluation Buffers? (Y/N) [c]
205.1	Golden Eagle	GE387 [f]	Private Land	1.4 mi - Pulling Site	Unpaved Road (65 St SW) within 0.5 mi.	N
205.1	Golden Eagle	GE589 [f]	Private Land	1.1 mi - Pulling Site	Unpaved Road (65 St SW) within 0.3 mi.	N
215.5	Golden Eagle	GE504 [f, h]	Private Land	0.5 mi - Access Road – New, Temporary	Road (Surface Unknown) within 0.5 mi	Y
215.6	Golden Eagle	GE503 [f, h]	Private Land	0.5 mi - Structure Pad	Road (Surface Unknown) within 0.3 mi	Y
215.8	Golden Eagle	GE020 [f, h]	Private Land	0.5 mi - Structure Pad	Road (Surface Unknown) within 0.2 mi	Y
215.8	Golden Eagle	GE021 [f]	Private Land	2.0 mi - Structure Pad	Road (Surface Unknown) within 0.3 mi	N
238.8	Golden Eagle	ND-GOEA-27370	Private Land	N/A	N/A	N/A
238.9	Unidentified Raptor [i]	ND-RAPT-23158	Private Land	0.3 mi - Structure Pad	Agriculture within 660 ft	Y
240.8	Golden Eagle	ND-GOEA-27371 [f]	Private Land	1.6 mi - Pulling Site	Paved Road within 0.2 mi	N
240.8	Golden Eagle	ND-GOEA-27365	Private Land	1.6 mi - Pulling Site	Paved Road within 0.2 mi	N
240.8	Golden Eagle	ND-GOEA-27367 [f]	Private Land	1.7 mi - Pulling Site	Structure (Residence) within 0.3 mi	N
HETTINGER						
250.1	Golden Eagle	ND-GOEA-27364 [f]	Private Land	1.8 mi - Pulling Site	Agriculture within 660 ft	N
GRANT						
315.0	Bald Eagle	BE216	Private Land	1.5 mi - Structure Pad	Unpaved Road (59th St SW) within 660 ft	N
318.6	Ferruginous Hawk [j]	ND-FEHA-23366	Private Land	0.2 mi - Pulling Site	Agriculture within 660 ft	Y
OLIVER TRANSMISSION LINE						
NORTH DAKOTA						
MORTON						
19.4	Bald Eagle	ND-BAEA-23103 [k]	Private Land	1.8 mi - Pulling Site	Agriculture within 660 ft	N
19.4	Bald Eagle	ND-BAEA-27366	Private Land	1.8 mi - Pulling Site	Agriculture within 660 ft	N

APPENDIX C

Eagle and Potential Eagle Nests Observed at the North Plains Connector Project during raptor nest surveys 2022 and 2023.

Transmission Line/ State/County/ Milepost	Species	Unique ID	Land Ownership [a]	Distance (miles) [b] to Nearest Project Infrastructure/Workspace	Nearest Existing Infrastructure/ Anthropogenic Disturbance within Evaluation Buffers	Infrastructure Visible within Evaluation Buffers? (Y/N) [c]
24.5	Bald Eagle	ND-BAEA-23101 [k]	Private Land	1.6 mi - Access Road – New, Temporary mi - Existing, Needs Improvement	Agriculture within 660 ft	N
27.0	Bald Eagle	ND-BAEA-22839 [k]	Private Land	1.2 mi - Structure Pad	Agriculture within 660 ft	N
MORTON TRANSMISSION LINE						
NORTH DAKOTA						
MORTON						
21.1	Golden Eagle	ND-GOEA-23266 [f]	Private Land	N/A	N/A	N/A

[a] If necessary, for eagle nests located on Bureau of Land Management (BLM), U.S. Forest Service, or other federally or state-managed lands, additional coordination between North Plains, U.S. Fish and Wildlife Service, and the appropriate agency will occur. For eagle nests located on BLM-managed lands in Montana, a 0.5 mile buffer will be used to evaluate whether additional coordination with the BLM will occur; all other evaluation buffers are only dependent upon eagle species and state, as outlined in Section 6.0. No Project infrastructure is located within 660 feet of nests; therefore, that buffer is not included in the table.

[b] Distances are based on Project route as of March 2025. In some instances, nearest Project infrastructure/workspace may be located beyond an evaluation buffer but rounded to the buffer distance.

[c] N = no; Y = yes

[d] Historic bald eagle nest, per Montana Natural Heritage Program nest data.

[e] Species changed from golden eagle to red-tailed hawk in 2023.

[f] Historic golden eagle nest, per North Dakota Game and Fish Department (NDGFD) nest data (2023, 2025).

[g] Species changed from unidentified raptor to Canada goose in 2023.

[h] NDGFD nest record, as of April 2025; not yet field-verified through Project-specific surveys.

[i] Swainson's hawk seen near nest, but nest not consistent with size and structure of a Swainson's hawk nest.

[j] Ferruginous hawk nest consistent in size and structure with an eagle nest.

[k] Historic bald eagle nest, per NDGFD nest data.

ID = identification; N/A = not applicable

Sources: NDGFD (2023). Eagle Nest Data. Provided April 19, 2023; NDGFD (2025). Eagle Nest Data. Provided April 1, 2025.

Appendix D. Preferred Bird Flight Diverter Models for the North Plains Connector Project

Appendix D has been omitted from this document pending final model selection.

NORTH PLAINS CONNECTOR PROJECT

ATTACHMENT H

Paleontological Resources Management and Mitigation Plan

NORTH PLAINS CONNECTOR

A Grid United Project

Draft Paleontological Resources Monitoring and Mitigation Plan

DRAFT

Submitted by:

North Plains Connector LLC

GRID UNITED

January 2026

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ACRONYMS AND ABBREVIATIONS

ARS	Agricultural Research Service
BLM	Bureau of Land Management
CFR	Code of Federal Regulations
CMRP	Construction Mitigation and Reclamation Plan
Contractor	construction contractor
EI	Environmental Inspector
Grid United	Grid United LLC
KLJ	KLJ Engineering
North Plains	North Plains Connector LLC
PFYC	Potential Fossil Yield Classification
PI	Principal Investigator
Plan	Draft Paleontological Resources Monitoring and Mitigation Plan
PLSS	Public Land Survey System
Project	North Plains Connector Project
SVP	Society of Vertebrate Paleontology
USDA	U.S. Department of Agriculture
USFS	U.S. Forest Service

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1.0 INTRODUCTION

North Plains Connector LLC (North Plains), a Delaware limited liability company formed pursuant to Section 18-201 of the Delaware Limited Liability Company Act, has prepared this Draft Paleontological Resources Monitoring and Mitigation Plan (Plan) for the North Plains Connector Project (Project), a proposed interregional electric connector line. North Plains, an affiliate of Grid United LLC (Grid United), is a Houston, Texas-based company developing next generation energy infrastructure to power the future. Grid United is focused on the infrastructure needed to make the United States' power grid more modern, efficient, reliable, and secure.

The proposed transmission line and access roads cross lands administered by the U.S. Department of Agriculture (USDA) Agricultural Research Service (ARS), Bureau of Land Management (BLM), U.S. Forest Service (USFS), State of Montana, State of North Dakota, and privately-owned lands, as shown on the maps in Appendix A.

2.0 PLAN PURPOSE

KLJ Engineering (KLJ) prepared this Plan based on the results of geologic maps reviews, literature searches, previous locality searches, and the results of paleontological field surveys completed in 2023 and 2024 for the Project. This Plan will be implemented to fulfill the federal and state requirements for protecting paleontological resources and mitigating potential effects of Project construction.

Construction ground disturbing activities can potentially impact surficial and subsurface paleontological resources. Prior to these activities, paleontological resource surveys are performed within defined Project areas to document these resources and recommend clearance, avoidance, or mitigation measures for scientifically significant specimens. After review, these recommendations can include required spot-checking or full-time monitoring of subsurface (bedrock) disturbance to mitigate the loss of significant resources. Multiple federal agencies adhere to the guidelines set forth by the BLM to define the potential for paleontological resources in geologic formations. From these guidelines, a Potential Fossil Yield Classification (PFYC) of high (4) potential may require a pedestrian survey and recommendation for monitoring based on paleontological resources identified during the survey. A PFYC classification of very high (5) requires both pedestrian survey and subsequent full-time monitoring for all subsurface ground disturbance activities.

The following sections of the Plan present the paleontological resource requirements and recommendations for the Project. This plan details the procedures pertinent to mitigate impacts to paleontological resources during Project construction. North Plains has also developed a Construction Mitigation and Reclamation Plan (CMRP), which describes the construction procedures and mitigation measures North Plains will implement to reduce potential Project-related impacts. This Plan references the CMRP where additional guidance is provided therein.

3.0 REGULATORY COMPLIANCE

The Project is subject to federal environmental laws governing paleontological resources as it crosses BLM, USDA, and USFS-managed lands, requiring federal permits. These federal laws and regulations include:

- Antiquities Act of 1906, (16 U.S. Code 431-433, chapter 3060, §2, 34 Stat. 225 or 16 U.S.C. 431, et seq. 54 U.S.C. §§320301-320303, P.L. 113-287.

- The National Environmental Policy Act of 1969, as amended (P. L. 91-190, 42 U.S.C. 4321-4347, January 1, 1970, as amended by P. L. 94-52, July 3, 1975, P. L. 94-83, August 9, 1975, and P. L. 97-258 § 4(b), Sept. 13, 1982).

- Federal Land Policy and Management Act of 1976, (43 U.S. Code 1712[c], 1732[b]); sec. 2, Federal Land Management and Policy Act of 1962 [30 U.S.C. 611]; Subpart 3631.0 et seq.), Federal Register Vol. 47, No. 159, 1982.

- Paleontological Resources Preservation Act, Title VI, Subtitle D in the Omnibus Public Land Management Act of 2009, P. L. 111-011.

Along with federal lands, the Project is required to comply with state laws as the Project is partially sited over state lands in North Dakota and Montana. State laws include:

- Paleontological Resource Protection and Geological Survey Paleontological Resource Protection, North Dakota State Century and Administrative Codes NDCC § 54-17.3; NDAC § 43-04 (State of North Dakota, 1990, 2016).

- Paleontological Resource Protection, Montana Code Annotated § 22-3

- Montana Major Facility Siting Act of the Montana Department of Environmental Quality, Montana Code Annotated 75-20-102. Chapter 20 of Title 75.

The BLM has set forth guidelines for the management of paleontological resources (BLM, 2008; BLM, 2015; BLM, 2016; BLM, 2022). This monitoring plan complies with these guidelines as well as professional standards set forth by the Society of Vertebrate Paleontology (SVP) (2010) and the paper “Best Practices in Mitigation Paleontology” (Murphey et al., 2019).

3.1 PERMITS AND REPOSITORIES

All paleontological work on BLM lands will be approved and coordinated by the BLM Miles City Field Office. The paleontological Principal Investigator (PI) must have a current BLM Paleontological Resources Use Permit. All paleontological work on USDA lands will be approved and coordinated by the USDA ARS Fort Keough Livestock and Range Research Laboratory. All fossils collected from BLM and USDA lands must be reposited in a federally approved repository.

All paleontological work on Montana state lands will be approved and coordinated by the Department of Natural Resources and Conservation Archaeologist. The current designated repository for Montana state lands is the Museum of the Rockies in Bozeman, Montana.

All paleontological work on USFS lands will be approved and coordinated by the USFS Dakota Prairie Grasslands Dickinson Field Office. The PI must have a current USDA Forest Service Authorization to Conduct Paleontological Resources Research or Collection.

All paleontological work on North Dakota state lands will be approved and coordinated by the North Dakota Geologic Survey Paleontologist. All monitors must have a current North Dakota Paleontological Resource Collecting Permit. All fossils collected from USFS and North Dakota

state lands must be reposited in a federally approved repository. The current designated repository for North Dakota state lands is the North Dakota Heritage Center and State Museum in Bismarck, North Dakota.

3.2 SIGNIFICANCE AND SENSITIVITY OF PALEONTOLOGICAL RESOURCES

From Murphey and Daitch (2007): “Paleontology is a multidisciplinary science that combines elements of geology, biology, chemistry, and physics in an effort to understand the history of life on earth. Paleontological resources, or fossils, are the remains, imprints, or traces of once-living organisms preserved in rocks and sediments. These include mineralized, partially mineralized, or un-mineralized bones and teeth, soft tissues, shells, wood, leaf impressions, footprints, burrows, and microscopic remains. Paleontological resources include not only fossils themselves, but also the associated rocks or organic matter and the physical characteristics of the fossils’ associated sedimentary matrix”.

“The fossil record is the only evidence that life on earth has existed for more than 3.6 billion years. Fossils are considered non-renewable resources because the organisms they represent no longer exist. Thus, once destroyed, a fossil can never be replaced”.

Murphey and Daitch (2007) have determined that fossils are important scientific and educational resources and can be used to:

- study the phylogenetic relationships amongst extinct organisms, as well as their relationships to modern groups;
- elucidate the taphonomic, behavioral, temporal, and diagenetic pathways responsible for fossil preservation, including the biases inherent in the fossil record;
- econstruct ancient environments, climate change, and palaeoecological relationships;
- provide a measure of relative geologic dating which forms the basis for biochronology and biostratigraphy, and which is an independent and corroborating line of evidence for isotopic dating;
- study the geographic distribution of organisms and tectonic movements of land masses and ocean basins through time;
- study patterns and processes of evolution, extinction, and speciation; and
- identify past and potential future human-caused effects to global environments and climates

The BLM defines a significant paleontological resource as, “any paleontological resource that is considered to be of scientific interest, including most vertebrate fossil remains and traces, and certain rare or unusual invertebrate and plant fossils. A significant paleontological resource is considered to be scientifically important because it is a rare or previously unknown species, it is of high quality and well-preserved, it preserves a previously unknown anatomical or other

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characteristic, provides new information about the history of life on earth, or has identified educational or recreational value" (BLM, 2008).

As defined by the SVP, "significant paleontological resources are fossils and fossiliferous deposits, here defined as consisting of identifiable vertebrate fossils, large or small, uncommon invertebrate, plant, and trace fossils, and other data that provide taphonomic, taxonomic, phylogenetic, paleoecologic, stratigraphic, and/or biochronologic information. Paleontological resources are considered to be older than recorded human history and/or older than middle Holocene (i.e., older than about 5,000 radiocarbon years)" (SVP, 2010).

3.3 POTENTIAL FOSSIL YIELD CLASSIFICATION

Along with significance, the sensitivity of paleontological resources to adverse impacts has been classified. Under the Paleontological Resources Preservation Act, the highest federal standard and laws dictate the utilization of the unified PFYC system to rank the paleontological resources potential of geologic units on federal lands . Each geologic unit is given a class ranking (low [1] to very high [5]) dependent on the probability of significant fossil resources found therein (BLM, 2022). This classification system is summarized in Table 3.3-1. These rankings provide an initial cursory potential for significant fossil resources in geologic formations based on literature reviews, known fossil localities, and aerial surveillance of outcrop exposures. PFYC evaluations are included in Section 4.0 for each respective formation and member within the Project. These values also provide guidance to the need for monitoring ground disturbing activities that may impact surficial and subsurface bedrock.

Table 3.3-1

Summary of BLM Potential Fossil Yield Classification

Class	Potential	Description	Characteristics	Comments
1	Very Low	Geologic units unlikely to contain recognizable paleontological resources.	Geologic units that are Igneous or metamorphic (excluding air-fall and reworked volcanic ash units, or Precambrian in age.	Management concern for paleontological resources is negligible or not applicable. Assessment or mitigation is unnecessary or very rare except in isolated circumstances.
2	Low	Geologic units that are not likely to contain paleontological resources.	Field surveys have verified no significant paleontological resources present or are very rare, generally younger than 10,000 years before present, recent eolian deposits, and diagenetic alteration of sediments.	Management concern for paleontological resources is low and further assessment is usually unnecessary except in isolated instances. Mitigation where paleontological resources are known to exist. Determined on a case-by-case basis.
3	Moderate	Geologic units with fossil content being variable in significance, abundance, and predictability.	Paleontological resources may occur intermittently with low abundance, are widely scattered, of a marine origin with sporadic known occurrences, or surface impact is known to be low-to-moderate.	Management concern for paleontological resources is moderate. Ground disturbing activities may require a field survey by a qualified paleontologist. Considerations range from record searches to monitoring dependent on the proposed action.
4	High	Geologic units with a high occurrence of paleontological resources.	Significant paleontological resources previously documented but varying in occurrence and predictability, susceptible to adverse impacts from surface disturbing activities, rare fossils, and looting activities.	Management concern for paleontological resources is moderate to high. A field survey by a qualified paleontologist is often needed to assess paleontological resources and potential action impacts. On-site monitoring may be necessary during ground disturbing activities. Avoidance or resource preservation should be considered.

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Table 3.3-1

Summary of BLM Potential Fossil Yield Classification

Class	Potential	Description	Characteristics	Comments
5	Very High	Highly fossiliferous geologic units that regularly and predictably produce significant paleontological resources.	Significant paleontological resources previously documented and occur consistently, highly susceptible to adverse impacts from surface disturbing activities, and frequency of looting.	Management concern for paleontological resources is high to very high. A field survey by a qualified paleontologist is almost always needed prior to ground disturbing activities. On-site monitoring may be necessary during land use and ground disturbing activities. Avoidance or resource preservation should be considered.
U	Unknown	Geologic units cannot receive a PFYC assignment.	Often geologic units that have limited information due to lack of scientific literature, field study, or BLM has not yet verified or assessed the unit.	Management concern for paleontological resources is medium to high and field surveys are normally necessary to determine the resource potential.
W	Water	Any surface area mapped as water	Bodies of water do not normally contain paleontological resources. Shorelines should be carefully considered for uncovered or transported paleontological resources.	Reservoirs are a special concern because important paleontological resources are often exposed during low water intervals. In areas of karst sinkholes and cenotes may trap animals and contain paleontological resources. Dredging river systems may result in the disturbance of sediments that contain paleontological resources
I	Ice	Any surface area mapped as ice or snow	Receding glaciers, including exposed lateral and terminal moraines should be considered for their potential to reveal recently exposed paleontological resources	Other considerations include melting snow fields that may contain paleontological resources with possible soft-tissue preservation

Source: BLM, 2022

4.0 ROLES AND RESPONSIBILITIES

North Plains will select a third-party construction contractor to construct the Project. The construction contractor (Contractor) will be responsible for site preparation, installation of support structures, general Project construction, testing and commissioning, health and safety, and environmental compliance, including the contents of this Plan. However, North Plains is responsible for construction of all associated facilities.

For the duration of the Project construction, North Plains will implement and maintain the measures outlined in this Plan, the CMRP, and in all applicable Project permits.

4.1 ENVIRONMENTAL INSPECTION

North Plains will employ environmental inspectors (EIs) during the construction phase. Further information on EIs and their responsibilities is provided in the CMRP.

5.0 TRAINING

Before commencing construction, North Plains will organize environmental training sessions for relevant Project personnel. These training programs will cover relevant construction, restoration, and mitigation plans, including this Plan, along with any applicable permit conditions.

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Furthermore, North Plains will conduct large-group training sessions before each work crew begins construction, followed by periodic follow-up training for newly assigned personnel. Training will be documented, and training records will be saved with Project files.

6.0 SUMMARY OF EXISTING DATA AND FIELD SURVEY RESULTS

Although the Project crosses federal, state, and mostly private lands in Montana and North Dakota, only federal and state lands underwent pedestrian field surveys. Along with the field surveys, a paleontological assessment for the entire Project including a previous localities search, geologic map review, and a review of the relevant scientific literature was completed by KLJ (Lukens and Shaw, 2024; Shaw et al., 2024). Utilizing this information, the geology and paleontology of the Project were determined. This section summarizes the geologic and paleontological context, previously documented fossil localities, and fossil localities discovered during the field surveys.

6.1 GEOLOGIC AND PALEONTOLOGICAL CONTEXT

The Project in Montana is directly underlain by the Paleocene Fort Union Formation (PFYC 4); the Cretaceous Hell Creek (PFYC 5), Fox Hills (PFYC 4), and Pierre (PFYC 4) Formations; and Quaternary deposits (PFYC 2, U) (Vuke et al., 2001a, b, c, d; Vuke and Colton, 2003; Vuke et al., 2003; BLM, 2022). In North Dakota, the Project is directly underlain by the Oligocene/Eocene White River Group (PFYC 4-5); the Eocene Golden Valley Formation (PFYC 4); the Paleocene Fort Union Group (PFYC 4); the Cretaceous Hell Creek Formation (PFYC 5); and Quaternary deposits (PFYC 2, U) (Clayton et. al, 1980; Carlson, 1982; Carlson, 1983; BLM, 2022) (see Figure 6.1.1-1 and Appendix B).

Most of the Project is directly underlain by the Fort Union Formation/Group. The Fort Union Formation/Group is separated into the following members/formations: Tullock, Lebo, Ludlow, Tongue River, Sentinel Butte, and Cannonball.

Paleontologically, all the geologic units underlying the Project have a high to very high fossil potential (except the Quaternary deposits) and preserve diverse vertebrate, invertebrate, and plant taxa in localized deposits (see Table 6.1.1). Additional information regarding the geologic units and their paleontological resources can be found in the field survey reports (Lukens and Shaw, 2024; Shaw et al., 2024).

Table 6.1-1

Summary of Geologic Units in the Project with PFYC and Paleontological Resources

Series	Geologic Unit	PFYC	Location	Typical Paleontological Resources
Quaternary	Quaternary Deposits (terrace gravels, alluvium, and colluvium	2, U	ND, MT	None or Unknown
Eocene/ Oligocene	White River Group	4-5	ND	Vertebrate taxa include fish, amphibians, reptiles, birds, and a wide variety of mammals. Invertebrate taxa include gastropods and ostracods.
Eocene	Golden Valley Formation	4	ND	Vertebrate taxa are less common and include fish, amphibians, reptiles, birds, and mammals. Invertebrate taxa and plants are common and include gastropods, bivalves, leaves, and pollen.

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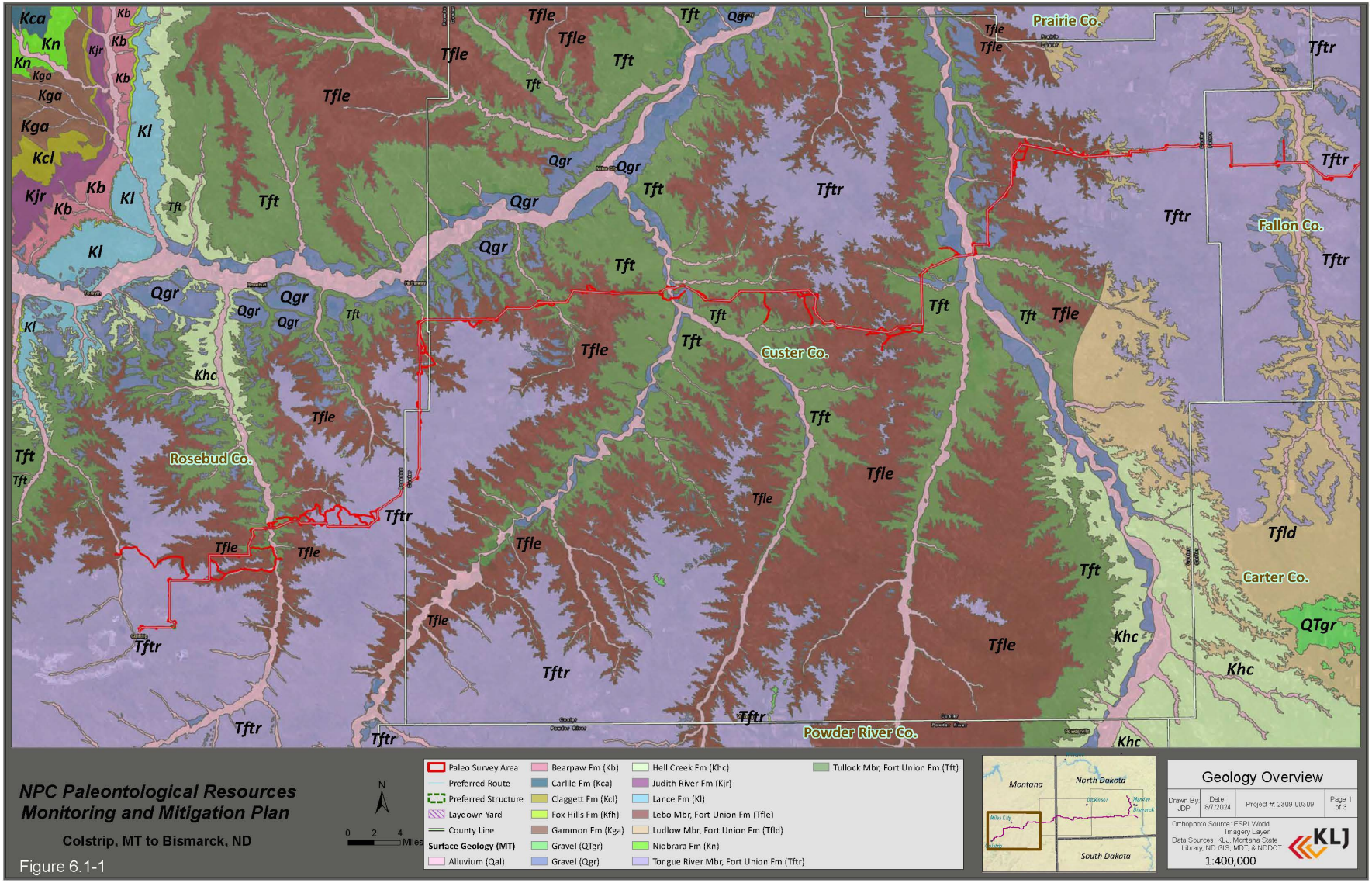
Table 6.1-1

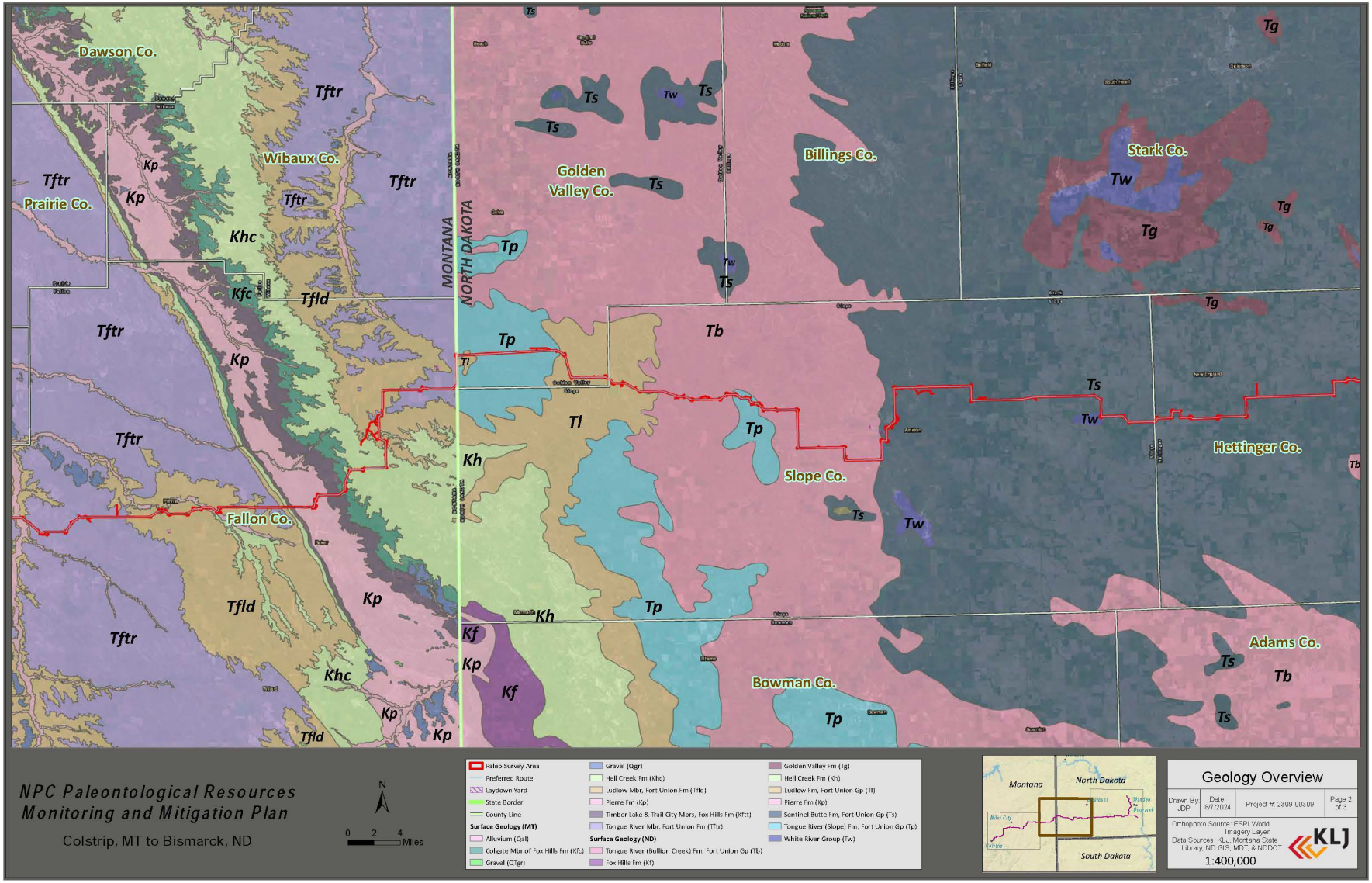
Summary of Geologic Units in the Project with PFYC and Paleontological Resources

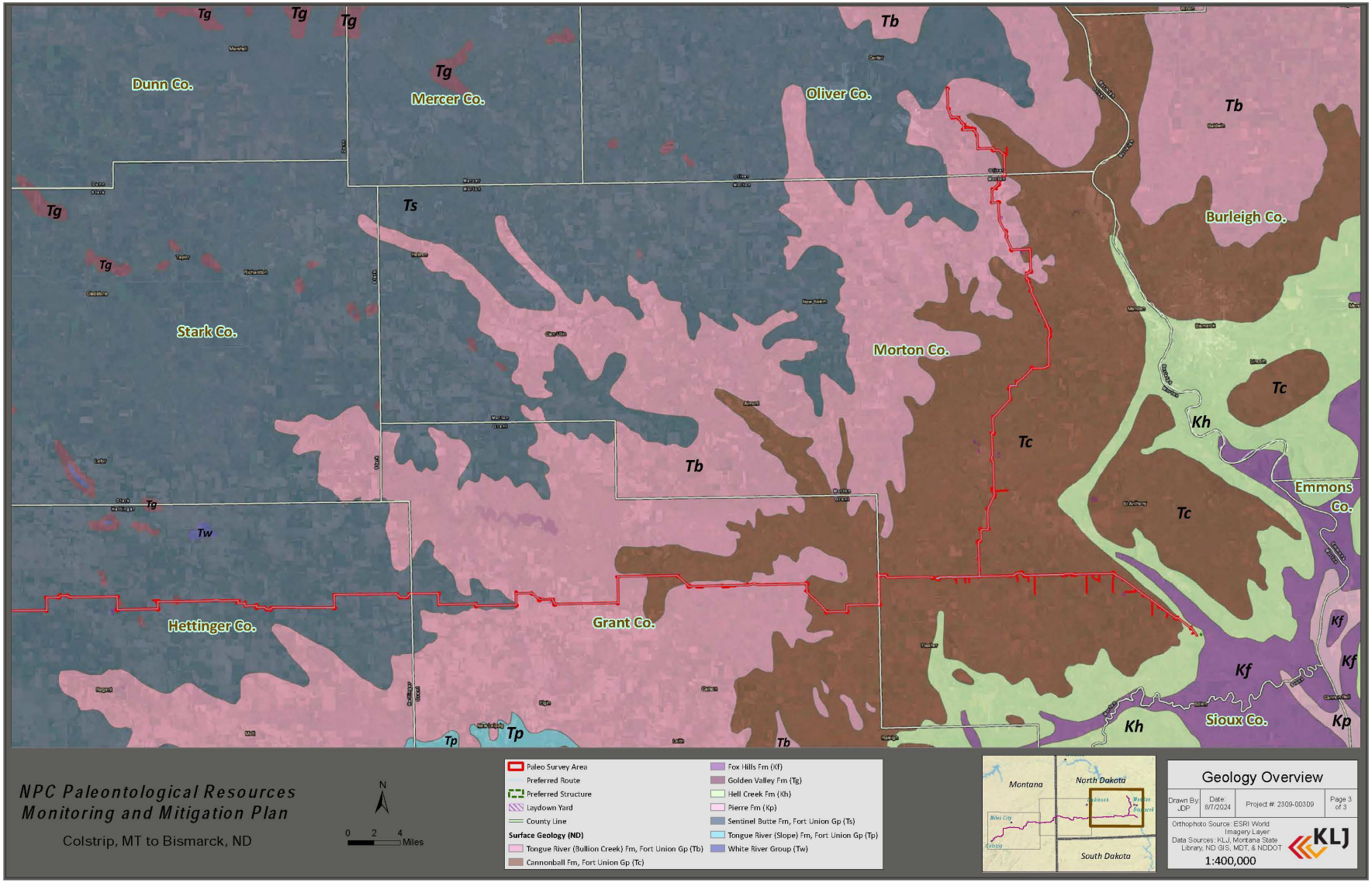
Series	Geologic Unit	PFYC	Location	Typical Paleontological Resources
Paleocene	Fort Union Formation/Group			
	Sentinel Butte	4	ND	Vertebrate taxa are rare and include fish, salamanders, reptiles, birds, and mammals. Invertebrate taxa are common and include bivalves and gastropods. Plants are common and include leaves, seeds, fruits, logs, and stumps.
	Tongue River	4	ND, MT	Vertebrate taxa recovered are rare and include fish, salamanders, reptiles, birds, and mammals. Invertebrate taxa and plants are very common and include bivalves and gastropods along with many leaves, seeds, fruits, and pollen.
	Lebo	4	MT	Vertebrate taxa recovered include amphibian, bird, reptile and a wide variety of mammals. Invertebrate taxa and plants are very common and include bivalves and gastropods along with many leaf impressions.
	Cannonball	4	ND	Vertebrate taxa are rare and include sharks, rays, bony fish, turtles, crocodilians, and champsosaurs. Invertebrates are common and include bivalves, gastropods, foraminfera, crabs, lobsters, corals, ostracodes, bryozoans, and echinoids.
	Ludlow	4	ND, MT	Vertebrate taxa are rare and include amphibian, bird, reptile, and mammals. Invertebrate taxa and plants are the most common and include bivalves, gastropods, leaves, seeds, fruits, flowers, cones, and pollen.
	Tullock	4	MT	Vertebrate taxa are rare and include amphibian, bird, reptile, and mammals.
Cretaceous	Hell Creek Formation	5	ND, MT	Vertebrate taxa recovered include sharks, rays, bony fishes, amphibians, turtles, crocodilians, pterosaurs, a diverse dinosaur assemblage, birds, and mammals. Invertebrate taxa include insects, bivalves, gastropods, and rare ammonites. Plants are known from leaves, seeds, flowers, cones, roots and fruits.
	Fox Hills Formation	4	MT	Vertebrate taxa recovered include sharks, amphibians, mosasaurs, other marine reptiles, and birds. Common invertebrate taxa include pelecypods, bryozoans, and rare crabs.
	Pierre Shale	4	MT	Vertebrate taxa recovered include bony fishes, sharks, turtles, crocodilians, mosasaurs, plesiosaurs, rare dinosaurs, pterosaurs, and birds. Invertebrate fossils are very common and include bivalves, cephalopods, gastropods, echinoderms, arthropods, corals, bryozoans, and brachiopods.

Source: BLM, 2015; BLM, 2022

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NPC Paleontological Resources Monitoring and Mitigation Plan
Colstrip, MT to Bismarck, ND
Prairie Co.
Fallon Co.
Custer Co.
Rosebud Co.
Carter Co.
Powder River Co.
Paleo Survey Area
Preferred Route
Preferred Structure
Laydown Yard
County Line
Surface Geology (MT)
Alluvium (Qal)
Bearpaw Fm (Kb)
Carlile Fm (Kca)
Claggett Fm (Kcl)
Fox Hills Fm (Kfh)
Gammon Fm (Kga)
Gravel (QTgr)
Gravel (Qgr)
Hell Creek Fm (Khc)
Judith River Fm (Kjr)
Lance Fm (Kl)
Lebo Mbr, Fort Union Fm (Tfle)
Ludlow Mbr, Fort Union Fm (Tfld)
Niobrara Fm (Kn)
Tongue River Mbr, Fort Union Fm (Tftr)
Tullock Mbr, Fort Union Fm (Tft)
Montana
North Dakota
South Dakota
Geology Overview
1:400,000
KLJ
Figure 6.1-1


Dawson Co.
Prairie Co.
Wibaux Co.
Fallon Co.
Golden Valley Co.
Billings Co.
Stark Co.
Slope Co.
Hettinger Co.
Adams Co.
Bowman Co.
MONTANA
NORTH DAKOTA
Tftr
Kp
Khc
Kfc
Tfld
Tp
Tb
Tl
Kh
Kf
Ts
Tw
Tg
NPC Paleontological Resources Monitoring and Mitigation Plan
Colstrip, MT to Bismarck, ND
N
0 2 4 Miles
Paleo Survey Area
Preferred Route
Laydown Yard
State Border
County Line
Surface Geology (MT)
Alluvium (Qal)
Colgate Mbr of Fox Hills Fm (Kfc)
Gravel (QTgr)
Gravel (Qgr)
Hell Creek Fm (Khc)
Ludlow Mbr, Fort Union Fm (Tfld)
Pierre Fm (Kp)
Timber Lake & Trail City Mbrs, Fox Hills Fm (Kftt)
Tongue River Mbr, Fort Union Fm (Tftr)
Surface Geology (ND)
Tongue River (Bullion Creek) Fm, Fort Union Gp (Tb)
Fox Hills Fm (Kf)
Golden Valley Fm (Tg)
Hell Creek Fm (Kh)
Ludlow Fm, Fort Union Gp (Tl)
Pierre Fm (Kp)
Sentinel Butte Fm, Fort Union Gp (Ts)
Tongue River (Slope) Fm, Fort Union Gp (Tp)
White River Group (Tw)
Montana
North Dakota
South Dakota
Geology Overview
Drawn By: JDF
Date: 8/7/2024
Project #: 2309-00309
Page 2 of 3
Orthophoto Source: ESRI World Imagery Layer
Data Sources: KLJ, Montana State Library, ND GIS, MDT, & NDDOT
1:400,000
KLJ


Tg
Tb
Ts
Tc
Kh
Kf
Kp
Tp
Tw
Dunn Co.
Mercer Co.
Oliver Co.
Burleigh Co.
Stark Co.
Morton Co.
Emmons Co.
Hettinger Co.
Grant Co.
Sioux Co.
NPC Paleontological Resources Monitoring and Mitigation Plan
Colstrip, MT to Bismarck, ND
N
0 2 4 Miles
Paleo Survey Area
Preferred Route
Preferred Structure
Laydown Yard
County Line
Surface Geology (ND)
Tongue River (Bullion Creek) Fm, Fort Union Gp (Tb)
Cannonball Fm, Fort Union Gp (Tc)
Fox Hills Fm (Kf)
Golden Valley Fm (Tg)
Hell Creek Fm (Kh)
Pierre Fm (Kp)
Sentinel Butte Fm, Fort Union Gp (Ts)
Tongue River (Slope) Fm, Fort Union Gp (Tp)
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Orthophoto Source: ESRI World Imagery Layer
Data Sources: KLJ, Montana State Library, ND GIS, MDT, & NDDOT
1:400,000
KLJ

6.2 PREVIOUSLY DOCUMENTED FOSSIL LOCALITIES

Previously documented locality searches were conducted for the Project during the field surveys. The locality searches encompassed all proposed areas of the Project right-of-way plus a one-mile buffer with a focus on where the Project crosses lands managed by the BLM, USFS, USDA ARS, in addition to Montana and North Dakota State lands. Public Land Survey System (PLSS) information for these parcels was submitted for analysis to respective agencies, repositories, and databases to find previously studied or published localities. Online databases, mindat.org (Hudson Institute of Mineralogy, 2024), University of California Museum of Paleontology (2024), and the Yale Peabody Museum (2024), were also searched for known localities. More than 50 localities were identified across the Project right-of-way and one-mile buffer in the Fort Union, Hell Creek, Fox Hills, and Pierre Shale Formations. The previous localities consisted of a variety of vertebrate, invertebrate, and plant taxa.

A complete listing is available in the field survey reports (Lukens and Shaw, 2024; Shaw et al., 2024).

6.3 FIELD SURVEY FOSSIL LOCALITIES

During the field surveys, vertebrate, invertebrate, and plant fossil localities were found. In 2023, a total of 82 fossil localities were documented with 17 localities representing vertebrates, one locality representing invertebrates, and 64 localities representing plants (Lukens and Shaw, 2024).

The vertebrate fossils range from solitary turtle shell fragments to partial turtle carapaces and plastrons, and crocodilian dermal ossicles, skeletal elements, and a tooth. Most of these fossils, exhibiting rounding from transportation prior to burial, were found as float and are weathered. The one invertebrate locality is found within a road cut that exposed a yellow-tan, medium to coarse-grained, cross-bedded sandstone channel deposit. Both Unionidae (freshwater clams) and Gastropoda (snail) shells are found within the channel on cross-bedding surfaces. The valves and shells are highly weathered with the shells delaminating. Trionychidae carapace fragments, a crocodilian tooth, and several unidentifiable bone fragments were also found in this deposit.

The plant localities ranged from well-preserved leaves that exhibit first and second order venation with well-defined margins to partial silicified logs that exhibit poor to excellent preservation and carbonized plant hash found within thinly laminated, light grey siltstones. Notably, two logs found on USDA ARS-administered Ft. Keogh exhibit excellent preservation tentatively identified as cf. Ginkgo. In the Project area, leaf and vegetative impressions were found on the surfaces of red-to-orange, iron concretionary material largely within sandstones and siltstones, and on parting surfaces of the thinly bedded carbonaceous shales occurring adjacent to and within the lignites. Several silicified stumps were discovered and documented during the survey. More detailed information is available in the field survey reports (Lukens and Shaw, 2024; Shaw et al., 2024).

In 2024, an additional 28 localities were documented with 10 localities representing vertebrates, seven localities representing invertebrates, 10 localities representing plants, and one locality representing a trace fossil (Shaw et al., 2024).

7.0 MONITORING PLAN

All paleontological work during construction will be overseen by a Paleontological Principal Investigator (PI or paleontologist). The PI will be contracted to implement and direct paleontological monitoring activities described by this Plan. A qualified PI is an individual with a graduate degree in paleontology or geology and is proficient and experienced in recognizing, identifying, documenting, and collecting fossils in the field (BLM, 2008; SVP, 2010). Construction monitoring will be performed by the PI and/or Paleontological Resource Monitors who also are qualified to operate under the PI's Paleontological Resource Use Permit. Full-time inspection, or monitoring, is defined as having a paleontologist on-site during any ground disturbing activities to monitor for potential paleontological resources and collect scientifically significant fossils during construction.

7.1 GENERAL GUIDELINES FOR MONITORING

The results of the Project's paleontological assessments and field surveys define standard paleontological resource recommendations that include clearance, avoidance, fossil recovery, sampling, and monitoring. Definitions of these recommendations are provided in detail in Table 7.1-1.

TABLE 7.1-1

Standard Paleontological Mitigation Categories.

Category	Mitigation Recommendation
Clearance	Based on the desktop review and/or field survey or monitoring results, if adverse impacts on paleontological resources are anticipated to be non-existent or below the level of significance for a given surface-disturbing action in a given area, and no further consideration of paleontological resources is deemed necessary, immediate paleontological clearance is recommended. A clearance recommendation can be made for an entire project area or any portion thereof (including surface and/or subsurface), depending on paleontological potential.
Avoidance	If the cost of fossil recovery or other mitigation options is determined to be too high, or permanent damage to the resource caused by surface disturbance is considered to be unavoidable, it may be necessary to "avoid" or "reroute" the portion of the project that intersects the fossil locality in order to prevent adverse impacts on the resource. Avoidance should also be considered if a known fossil locality appears to contain critical scientific information that should be left undisturbed for subsequent scientific evaluation. Avoidance for later scientific research is the typical mitigation recommendation made for scientifically significant extensive paleontological discoveries.
Fossil Recovery	If isolated small, medium- or large-sized fossils are discovered within a project area during field surveys or construction monitoring, and they are determined to be scientifically significant, they should be recovered. Fossil recovery may involve simply collecting a fully exposed fossil from the ground surface, or may involve a systematic excavation, depending upon the size and complexity of the fossil discovery. Fossil excavations should be designed in such a way as to minimize construction delays while properly collecting the fossil and associated data according to professional paleontological standards.
Sampling	Scientifically significant microfossils (vertebrate, invertebrate, plant, or trace fossils) may be identified in rock matrix during surveys or monitoring, or, if they are known to occur elsewhere in the same geologic unit or type of deposit in the general area, a determination of their presence or absence may require the use of test sampling of rock matrix for screen-washing in a paleontological laboratory. In some cases, depending upon the rock unit involved, test sampling may be appropriate even if microfossils are not visible in the field. The fossils found, if any, will then be inspected and evaluated to determine their significance and whether additional mitigation recommendations are necessary. Mitigation may include collection of additional matrix for screen-washing. The decision to sample may not be made until monitoring is occurring, because it is usually triggered by conditions in the field.
Monitoring	If significant (well-preserved, uncommon, and/or identifiable) paleontological resources are known to be present in an area, or if there is a high likelihood that subsurface fossils are present in geologic formations or members thereof within a given project area based on prior field surveys, museum records, or scientific or technical literature, paleontological monitoring of construction excavations would be recommended. Monitoring involves systematic inspections of graded cut slopes, trench sidewalls, spoils piles, and other types of construction excavations for the presence of fossils, and the fossil recovery and documentation of these fossils before they are destroyed by further ground-disturbing actions.

TABLE 7.1-1 **Standard Paleontological Mitigation Categories.**	
Category	Mitigation Recommendation
	Standard monitoring is typically used in the most paleontologically sensitive geographic areas/geologic units (PFYC 4 and 5); while spot- check monitoring is typically used in geographic areas/geologic units of moderate or unknown paleontological sensitivity (PFYC 3 or PFYC U). The goal of monitoring is to identify scientifically significant subsurface fossils as soon as they are unearthed in order to minimize damage to them and remove them and associated contextual data from the area of ground disturbance, thereby resulting in subsurface paleontological clearance. Microfossil sampling, macrofossil recovery, and avoidance of fossils may all occur during any monitoring program.

7.2 CONSTRUCTION TRAINING

Prior to earthmoving activities, all construction personnel will be briefed about the types of fossils that they could encounter and the steps to take if fossils are uncovered during construction within the Project area. The instruction will include a notification protocol for all personnel to follow if fossils are discovered and a paleontologist is not present. Instruction will stress the non-renewable nature of paleontological resources; the restrictions of fossil collection on federal, state, and private lands; the consequences of illegal collecting; and why fossils are significant to science and humanity. This training will be accomplished at the pre-construction kick-off meeting and conducted by the paleontologist.

7.3 MONITORING LOCATIONS

The Project is located primarily in areas of high and very high fossil potential (White River Group [PFYC 5], Golden Valley [PFYC 4], Fort Union [PFYC 4], Hell Creek [PFYC 5], Fox Hills [PFYC 4], and Pierre [PFYC 4] Formations) with numerous exposed bedrock outcrops. The paleontological resources within these geologic units tend to occur mainly in localized deposits. For this reason, it is difficult to determine where fossils will occur prior to construction except in locations where previous or new fossil localities are known. Pre-construction, pedestrian paleontological resource surveys document and define the significance of the fossil resources found within the survey area. These surveys, as mentioned in Section 5.1, can provide recommendations for surface activities. Multiple fossils were discovered and documented during field surveys. These localities indicate the possible encounter of subsurface fossils at those locations. However, geological formations identified with high and very high potential, with no surficial finds, can still contain significant fossils within the subsurface.

All areas with exposed and subsurface PFYC 4 or 5 geologic units (White River Group, Golden Valley, Fort Union, Hell Creek, Fox Hills, and Pierre Formations) located on federal- and state-managed lands will be monitored by the paleontologist during ground disturbing construction activities. Fossils on private lands are not subject to federal survey or monitoring recommendations; however, North Plains will encourage construction personnel to monitor and report fossils and will implement applicable fossil monitoring and discovery procedures at the request of individual landowners.

Only geologic units with PFYC 4 or 5 on federal- and state-managed lands are required to be monitored by a paleontologist during ground disturbing activities. Federal and state agencies in consultation with the paleontologist will determine the extent and intensity of monitoring needed across their managed lands.

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It was previously determined by the USDA ARS that full-time monitoring will be required within the USDA ARS-managed tracts listed in Table 7.3-1 due to the high number of significant botanical and vertebrate localities identified during the 2023 field survey (Lukens and Shaw, 2024).

TABLE 7.3-1

PLSS List of Tracts Managed by the USDA ARS Requiring Full-Time Monitoring

Section	Township	Range
23	6N	46E
24	6N	46E
13	6N	46E
19	6N	47E
18	6N	47E
20	6N	47E
17	6N	47E

Areas with PFYC 2 or U geologic units (Quaternary deposits) will be spot-checked at the discretion of the paleontologist. Should fossils be encountered in PFYC 2 or U geologic units, the Unanticipated Discovery Plan (see Appendix C) will be implemented first. The paleontologist then will determine if further monitoring is necessary.

Following all Project safety requirements, monitoring will include visual inspections of foundation excavations and excavation sidewalls, graded surfaces, and spoil piles for evidence of fossils exposed during excavation. Inspecting/evaluating fossil discoveries should occur when conditions are safe. Prior to beginning monitoring work, the paleontologist, North Plains, and machinery operators should agree on procedures for brief work stoppages to allow for examination and collection of fossils. Along with the appropriate safety equipment, the paleontologist should also be equipped with flagging, survey stakes, and paleontology tools and supplies for fossil exploration and salvage.

Changes to monitoring efforts (increase, decrease, or cessation) will be based on observations made by the paleontologist and consultation and approval by North Plains, and relevant federal and state land managing agencies.

7.4 FOSSIL DISCOVERY AND SALVAGE

When fossils are discovered, the paleontologist will quickly explore and recover the fossil material and its scientific data to minimize construction delays. Paleontologists are expected and encouraged to signal and stop equipment operators to check suspected fossil discoveries. If a fossil is discovered by the paleontologist during monitoring, the Contractor will stop construction activities and immediately notify the Environmental Inspector (EI). The paleontologist will establish a protective buffer or flagging to demarcate the location and protect the fossils. An initial buffer of 100 feet surrounding the fossils should be allowed to adequately protect the fossils and paleontologists while construction activities resume outside the buffer. This buffer may be reduced following fossil evaluation and significance determination. The paleontologist and/or EI will notify North Plains in order to coordinate with the applicable land-managing agency to assist in evaluating and determining the significance of the discovery. Fossil salvage may require several minutes for small, isolated fossils; several hours for larger fossils; or possibly several days for extensive, complex localities.

Determination of significance and time needed to collect the discovered fossils may require consultation with North Plains, the relevant applicable land-managing agency, and the PI. Consultation could be required, for example, if the significant locality's surficial extent exceeds the Paleontological Resource Use Permit's limit of 1-square meter for collection.

Should the fossil locality become an extensive site on BLM land, the BLM will be notified immediately upon the discovery. A Locality-Specific Paleontological Mitigation Plan will be developed and submitted by the PI no more than 72 hours after the discovery and approved by the BLM within a reasonable review period. This plan will provide an explanation of the scientific significance of the paleontological resources, the methods to be used, and provisions for conservation, preparation, and curation. The draft Locality-Specific Paleontological Mitigation Plan will be submitted to consulting parties for a five-day working review, after which the comments and recommendations will be addressed by the PI, and a Final Locality-Specific Paleontological Mitigation Plan will be submitted. The mitigation plan for the extensive paleontological discovery will then be implemented by the Project.

Fossils should be collected when the determination of a fossil's significance is uncertain due to only a small portion of the fossil being visible. Significance may not be fully determined until additional preparation of the fossil is completed.

An unanticipated fossil discovery is defined as a discovery of paleontological resources in unexpected areas by construction personnel without the presence of a paleontologist. Upon discovery of fossil material by construction personnel, work will be temporarily halted within a 100-foot buffer and the Contractor will notify the EI to coordinate with the paleontologist to mobilize to the site for evaluation. The EI will establish a protective buffer or flagging to demarcate the location and protect the fossils until the arrival of the paleontologist. The procedures for the unanticipated discovery of fossils are described in the Unanticipated Discovery Plan (see Appendix C).

7.5 MICROFOSSILS

Microfossils (small to microscopic in size) consisting of vertebrates, invertebrates, plants, or trace fossils may be discovered during monitoring. Should significant microfossils be found, the paleontologist (with concurrence from North Plains and landowner or land-managing agency) will collect test samples for screening. If micro-vertebrate fossils are encountered during the screen testing, bulk matrix samples will be taken for offsite processing. In practice, the amount of matrix sampled will be dependent on the abundance or lack of fossil-rich matrix found.

7.6 LABORATORY WORK

All fossils collected from the Project will be removed to a secure paleontological laboratory for preparation, fossil identification, and pre-curation. Preparation will include 1) the removal of the surrounding matrix (rock) from the fossil material with hand tools, air scribes, and simple chemical methods and 2) the stabilization of the fossils by adhesives, consolidants, and supporting plaster jackets. Collected matrix will be screen-washed and dried for subsequent picking out of the remaining matrix under a microscope. Following preparation, fossils will be inventoried, identified to lowest taxon and element, locality forms created, and all relevant scientific data prepared for curation and then transported to a federal or state repository.

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7.7 REPORTING

Following completion of the lab work and curation, a draft paleontological monitoring report will be submitted to North Plains and applicable federal and state land-management agencies for review. Report contents will follow professional, federal, and state standards. The final report will include a complete geographic information system data package and confidential locality data. Data from relevant BLM-administered lands will be uploaded to the BLM database.

8.0 PLAN REVISIONS

Table 8.0-1

Plan Revisions

Revision Number	Revision Type(s)	Revision Date
Rev 0	Initial Plan draft.	February 2025
Rev 1	Updated language for consistency across all project plans.	August 2025

9.0 REFERENCES

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APPENDIX A

PROJECT-LANDOWNER OVERVIEW MAPS

T3N R41E

T3N R42E

T3N R43E

T2N R41E

T2N R42E

T2N R43E

Rosebud Co.

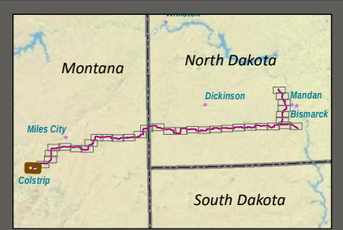
NPC Paleontological Resources Monitoring and Mitigation Plan

Colstrip, MT to Bismarck, ND

N

0 0.5 1 Miles

- Paleo Survey Area
- Preferred Route
- Preferred Access
- Preferred Structure
- PLSS Sections
- PLSS Townships
- Private
- BLM
- State
- USDA ARS Ft. Keogh
- USFS



Project-Landowner Overview

Drawn By: JDP	Date: 8/8/2024	Project #: 2309-00309	Page 1 of 34

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Data Sources: KLJ, Montana State Library, ND GIS, MDT, & NDDOT

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NPC Paleontological Resources Monitoring and Mitigation Plan

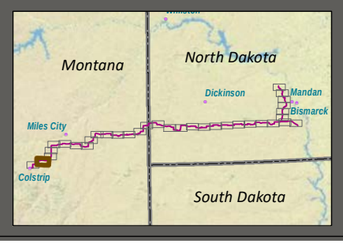
Colstrip, MT to Bismarck, ND

T3N R42E
T3N R43E
T3N R44E
T2N R42E
T2N R43E
T2N R44E
Rosebud Co.

N

0 0.5 1 Miles

- Paleo Survey Area
- Preferred Route
- Preferred Access
- Laydown Yard
- PLSS Sections
- PLSS Townships
- Private
- BLM
- State
- USDA ARS Ft. Keogh
- USFS



Project-Landowner Overview

Drawn By: JDP	Date: 8/8/2024	Project #: 2309-00309	Page 2 of 34

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NPC Paleontological Resources Monitoring and Mitigation Plan

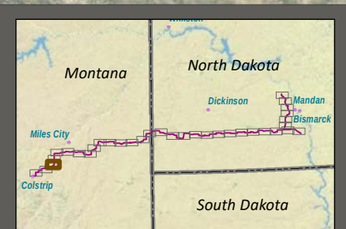
Colstrip, MT to Bismarck, ND

T4N R44E
T4N R45E
T4N R46E
T3N R44E
T3N R45E
T3N R46E
Rosebud Co.
Custer Co.

N

0 0.5 1 Miles

- Paleo Survey Area
- Preferred Route
- Preferred Access
- County Line
- PLSS Sections
- PLSS Townships
- Private
- BLM
- State
- USDA ARS Ft. Keogh
- USFS



Project-Landowner Overview

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Data Sources: KLJ, Montana State Library, ND GIS, MDT, & NDDOT

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T5N R43E

T5N R44E

T5N R45E

Rosebud Co.

Custer Co.

T4N R44E

T4N R45E

T4N R46E

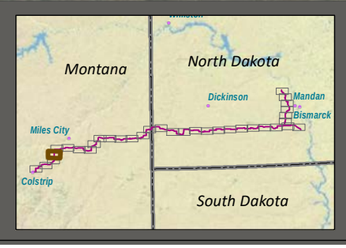
NPC Paleontological Resources Monitoring and Mitigation Plan

Colstrip, MT to Bismarck, ND

N

0 0.5 1 Miles

- Paleo Survey Area
- Preferred Route
- Preferred Access
- County Line
- PLSS Sections
- PLSS Townships
- Private
- BLM
- State
- USDA ARS Ft. Keogh
- USFS



Project-Landowner Overview

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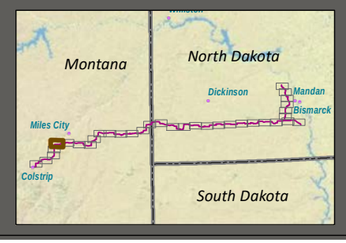
Colstrip, MT to Bismarck, ND

T6N R44E
T6N R45E
T6N R46E
T5N R44E
T5N R45E
T5N R46E
Rosebud Co.
Custer Co.

N

0 0.5 1 Miles

- Paleo Survey Area
- Preferred Route
- Preferred Access
- Laydown Yard
- County Line
- PLSS Sections
- PLSS Townships
- Private
- BLM
- State
- USDA ARS Ft. Keogh
- USFS



Project-Landowner Overview

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Data Sources: KLJ, Montana State Library, ND GIS, MDT, & NDDOT

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T7N R46E
T7N R47E
T7N R48E
T6N R46E
T6N R47E
T6N R48E
T5N R46E
T5N R47E
T5N R48E
Custer Co.

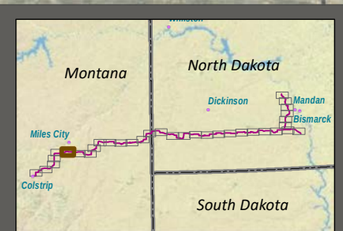
NPC Paleontological Resources Monitoring and Mitigation Plan

Colstrip, MT to Bismarck, ND

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0 0.5 1 Miles

- Paleo Survey Area
- Preferred Route
- Preferred Access
- PLSS Sections
- PLSS Townships
- Private
- BLM
- State
- USDA ARS Ft. Keogh
- USFS



Project-Landowner Overview

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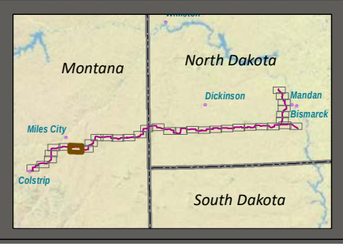
Colstrip, MT to Bismarck, ND

T6N R48E
T6N R49E
T6N R50E
T5N R48E
T5N R49E
T5N R50E
Custer Co.

N

0 0.5 1 Miles

- Paleo Survey Area
- Preferred Route
- Preferred Access
- PLSS Sections
- PLSS Townships
- Private
- BLM
- State
- USDA ARS Ft. Keogh
- USFS



Project-Landowner Overview

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Orthophoto Source: ESRI World Imagery Layer
Data Sources: KLJ, Montana State Library, ND GIS, MDT, & NDDOT

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T6N R50E

T6N R51E

T6N R52E

Custer Co.

T5N R50E

T5N R51E

T5N R52E

NPC Paleontological Resources Monitoring and Mitigation Plan

Colstrip, MT to Bismarck, ND

N

0 0.5 1 Miles

- Paleo Survey Area
- Preferred Route
- Preferred Access
- PLSS Sections
- PLSS Townships
- Private
- BLM
- State
- USDA ARS Ft. Keogh
- USFS



Project-Landowner Overview

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NPC Paleontological Resources Monitoring and Mitigation Plan

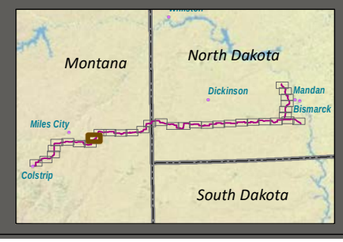
Colstrip, MT to Bismarck, ND

T7N R50E
T7N R51E
T7N R52E
T6N R50E
T6N R51E
T6N R52E
Custer Co.

N

0 0.5 1 Miles

- Paleo Survey Area
- Preferred Route
- Preferred Access
- PLSS Sections
- PLSS Townships
- Private
- BLM
- State
- USDA ARS Ft. Keogh
- USFS



Project-Landowner Overview

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Data Sources: KLJ, Montana State Library, ND GIS, MDT, & NDDOT

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T8N R51E

T8N R52E

T8N R53E

Custer Co.

T7N R51E

T7N R52E

T7N R53E

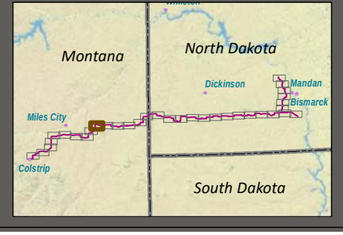
NPC Paleontological Resources Monitoring and Mitigation Plan

Colstrip, MT to Bismarck, ND

N

0 0.5 1 Miles

- Paleo Survey Area
- Preferred Route
- Preferred Access
- PLSS Sections
- PLSS Townships
- Private
- BLM
- State
- USDA ARS Ft. Keogh
- USFS



Project-Landowner Overview

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Data Sources: KLJ, Montana State Library, ND GIS, MDT, & NDDOT

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T8N R53E

T8N R54E

T8N R55E

Custer Co.

Fallon Co.

T7N R53E

T7N R54E

T7N R55E

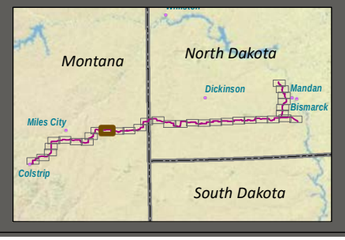
NPC Paleontological Resources Monitoring and Mitigation Plan

Colstrip, MT to Bismarck, ND

N

0 0.5 1 Miles

- Paleo Survey Area
- Preferred Route
- Preferred Access
- County Line
- PLSS Sections
- PLSS Townships
- Private
- BLM
- State
- USDA ARS Ft. Keogh
- USFS



Project-Landowner Overview

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T8N R55E

T8N R56E

T8N R57E

T7N R55E

T7N R56E

T7N R57E

Fallon Co.

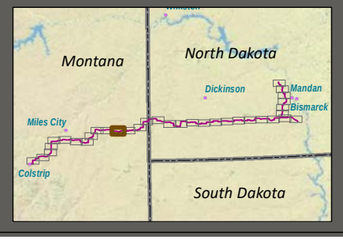
NPC Paleontological Resources Monitoring and Mitigation Plan

Colstrip, MT to Bismarck, ND

N

0 0.5 1 Miles

- Paleo Survey Area
- Preferred Route
- Preferred Access
- PLSS Sections
- PLSS Townships
- Private
- BLM
- State
- USDA ARS Ft. Keogh
- USFS



Project-Landowner Overview

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NPC Paleontological Resources Monitoring and Mitigation Plan

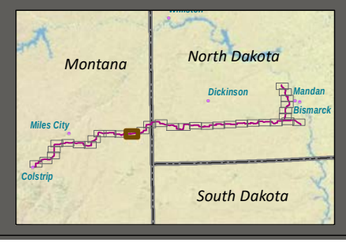
Colstrip, MT to Bismarck, ND

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T8N R58E
T8N R59E
T7N R57E
T7N R58E
T7N R59E
Fallon Co.

N

0 0.5 1 Miles

- Paleo Survey Area
- Preferred Route
- Preferred Access
- Laydown Yard
- PLSS Sections
- PLSS Townships
- Private
- BLM
- State
- USDA ARS Ft. Keogh
- USFS



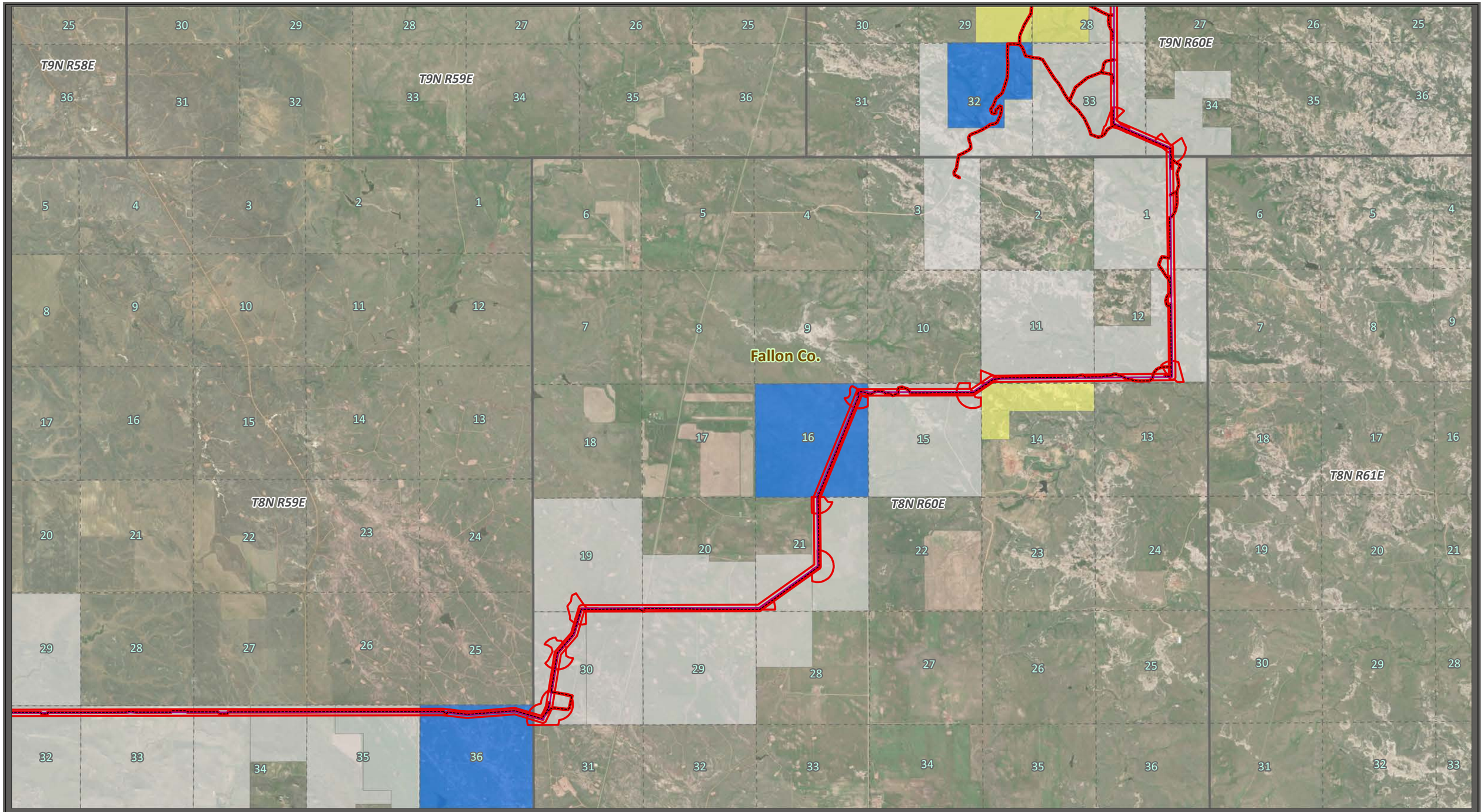
Project-Landowner Overview

Drawn By:	Date:	Project #:	Page
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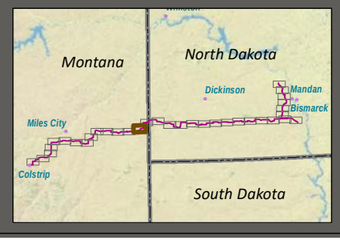
NPC Paleontological Resources Monitoring and Mitigation Plan

Colstrip, MT to Bismarck, ND

N

0 0.5 1 Miles

- Paleo Survey Area
- Preferred Route
- Preferred Access
- PLSS Sections
- PLSS Townships
- Private
- BLM
- State
- USDA ARS Ft. Keogh
- USFS



Project-Landowner Overview

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Orthophoto Source: ESRI World Imagery Layer
Data Sources: KLJ, Montana State Library, ND GIS, MDT, & NDDOT

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T10N R60E

T10N R61E

T136N R106W

Golden Valley Co.

T9N R60E

Fallon Co.

T9N R61E

MONTANA

NORTH DAKOTA

T135N R106W

Slope Co.

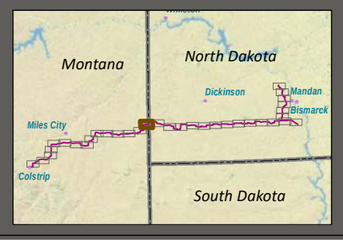
NPC Paleontological Resources Monitoring and Mitigation Plan

Colstrip, MT to Bismarck, ND

N

0 0.5 1 Miles

- Paleo Survey Area
- Preferred Route
- Preferred Access
- Laydown Yard
- State Border
- County Line
- PLSS Sections
- PLSS Townships
- Private
- BLM
- State
- USDA ARS Ft. Keogh
- USFS



Project-Landowner Overview

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NPC Paleontological Resources Monitoring and Mitigation Plan

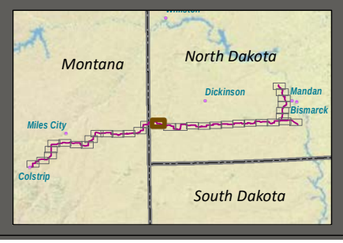
Colstrip, MT to Bismarck, ND

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T136N R105W
T136N R104W
T135N R106W
T135N R105W
T135N R104W
Golden Valley Co.
Slope Co.

N

0 0.5 1 Miles

- Paleo Survey Area
- Preferred Route
- Preferred Access
- County Line
- PLSS Sections
- PLSS Townships
- Private
- BLM
- State
- USDA ARS Ft. Keogh
- USFS



Project-Landowner Overview

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Orthophoto Source: ESRI World Imagery Layer
Data Sources: KLJ, Montana State Library, ND GIS, MDT, & NDDOT

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KLJ

T136N R103W
T136N R104W
T136N R102W
T135N R104W
T135N R103W
T135N R102W
T134N R104W
T134N R103W
T134N R102W
Slope Co.

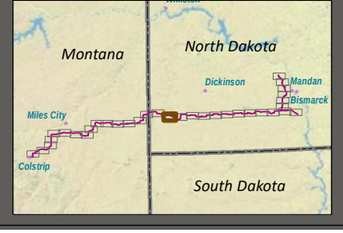
NPC Paleontological Resources Monitoring and Mitigation Plan

Colstrip, MT to Bismarck, ND

N

0 0.5 1 Miles

- Paleo Survey Area
- Preferred Route
- Preferred Access
- PLSS Sections
- PLSS Townships
- Private
- BLM
- State
- USDA ARS Ft. Keogh
- USFS



Project-Landowner Overview

Drawn By:	Date:	Project #:	Page
JDP	8/8/2024	2309-00309	17 of 34

Orthophoto Source: ESRI World Imagery Layer
Data Sources: KLJ, Montana State Library, ND GIS, MDT, & NDDOT

1:50,000

KLJ

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T136N R101W
T136N R100W
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T135N R101W
T135N R100W
T134N R102W
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Slope Co.

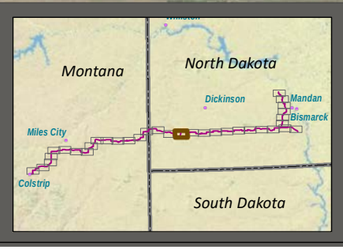
NPC Paleontological Resources Monitoring and Mitigation Plan

Colstrip, MT to Bismarck, ND

N

0 0.5 1 Miles

- Paleo Survey Area
- Preferred Route
- Preferred Access
- Laydown Yard
- PLSS Sections
- PLSS Townships
- Private
- BLM
- State
- USDA ARS Ft. Keogh
- USFS



Project-Landowner Overview

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JDP	8/8/2024	2309-00309	18 of 34

Orthophoto Source: ESRI World Imagery Layer
Data Sources: KLJ, Montana State Library, ND GIS, MDT, & NDDOT

1:50,000

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T136N R98W
T135N R100W
T135N R99W
T135N R98W
Slope Co.

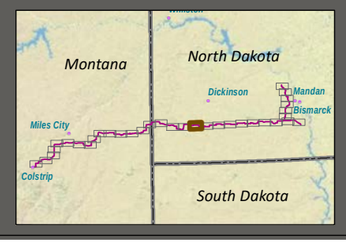
NPC Paleontological Resources Monitoring and Mitigation Plan

Colstrip, MT to Bismarck, ND

N

0 0.5 1 Miles

- Paleo Survey Area
- Preferred Route
- Preferred Access
- PLSS Sections
- PLSS Townships
- Private
- BLM
- State
- USDA ARS Ft. Keogh
- USFS



Project-Landowner Overview

Drawn By: JDP	Date: 8/8/2024	Project #: 2309-00309	Page 19 of 34

Orthophoto Source: ESRI World Imagery Layer
Data Sources: KLJ, Montana State Library, ND GIS, MDT, & NDDOT

1:50,000

KLJ

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T136N R97W
T136N R96W
Slope Co.
T135N R98W
T135N R97W
Hettinger Co.
T135N R96W
T134N R98W
T134N R97W
T134N R96W

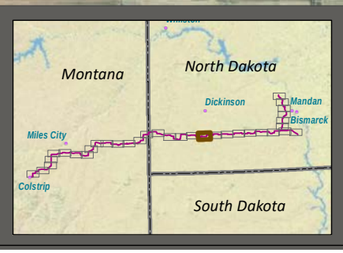
NPC Paleontological Resources Monitoring and Mitigation Plan

Colstrip, MT to Bismarck, ND

N

0 0.5 1 Miles

- Paleo Survey Area
- Preferred Route
- Preferred Access
- Laydown Yard
- County Line
- PLSS Sections
- PLSS Townships
- Private
- BLM
- State
- USDA ARS Ft. Keogh
- USFS



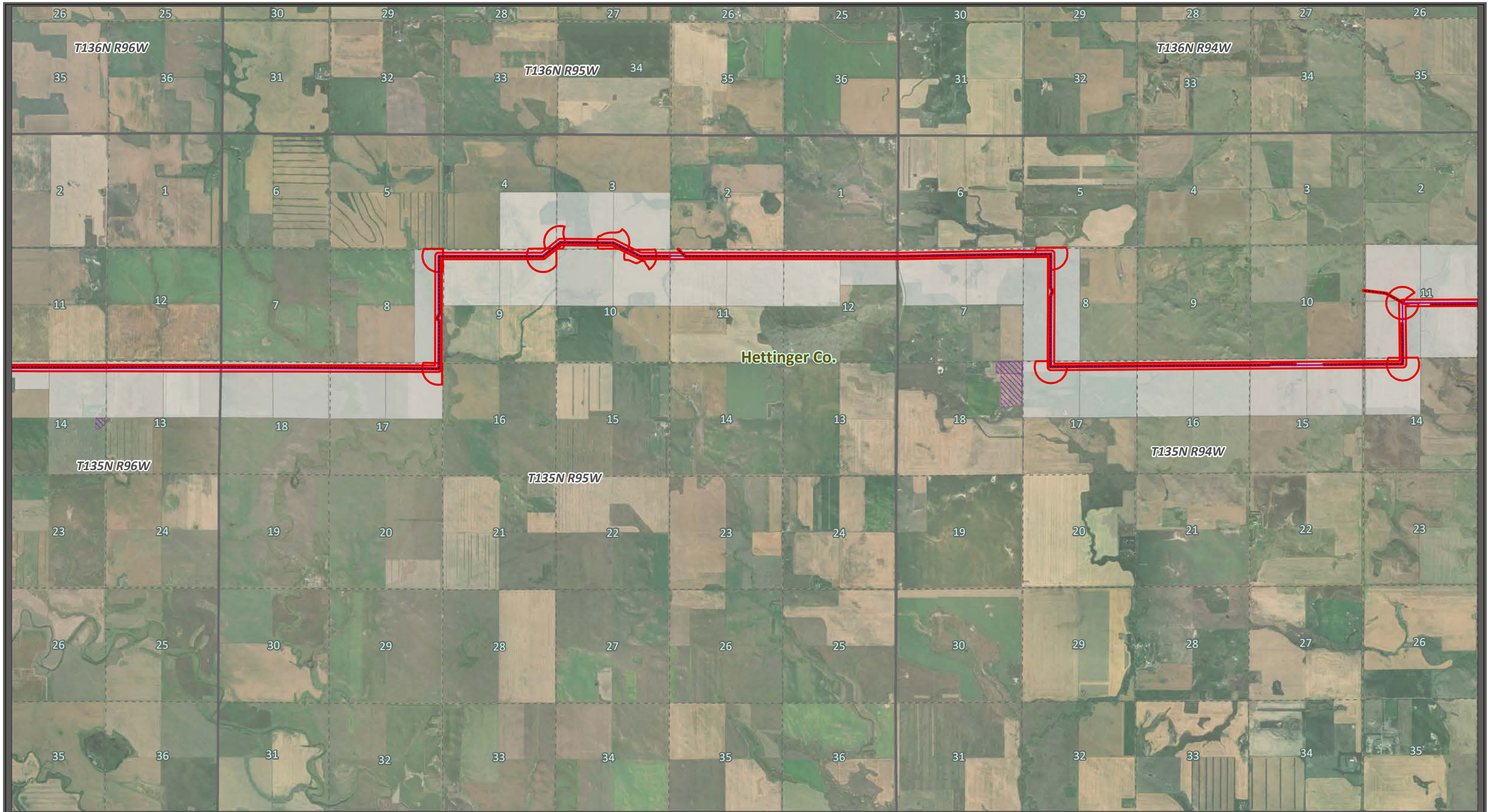
Project-Landowner Overview

Drawn By:	Date:	Project #:	Page
JDP	8/8/2024	2309-00309	20 of 34

Orthophoto Source: ESRI World Imagery Layer
Data Sources: KLJ, Montana State Library, ND GIS, MDT, & NDDOT

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KLJ



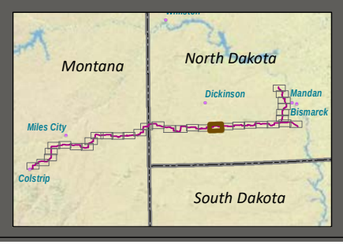
NPC Paleontological Resources Monitoring and Mitigation Plan

Colstrip, MT to Bismarck, ND

N

0 0.5 1 Miles

- Paleo Survey Area
- Preferred Route
- Preferred Access
- Laydown Yard
- PLSS Sections
- PLSS Townships
- Private
- BLM
- State
- USDA ARS Ft. Keogh
- USFS



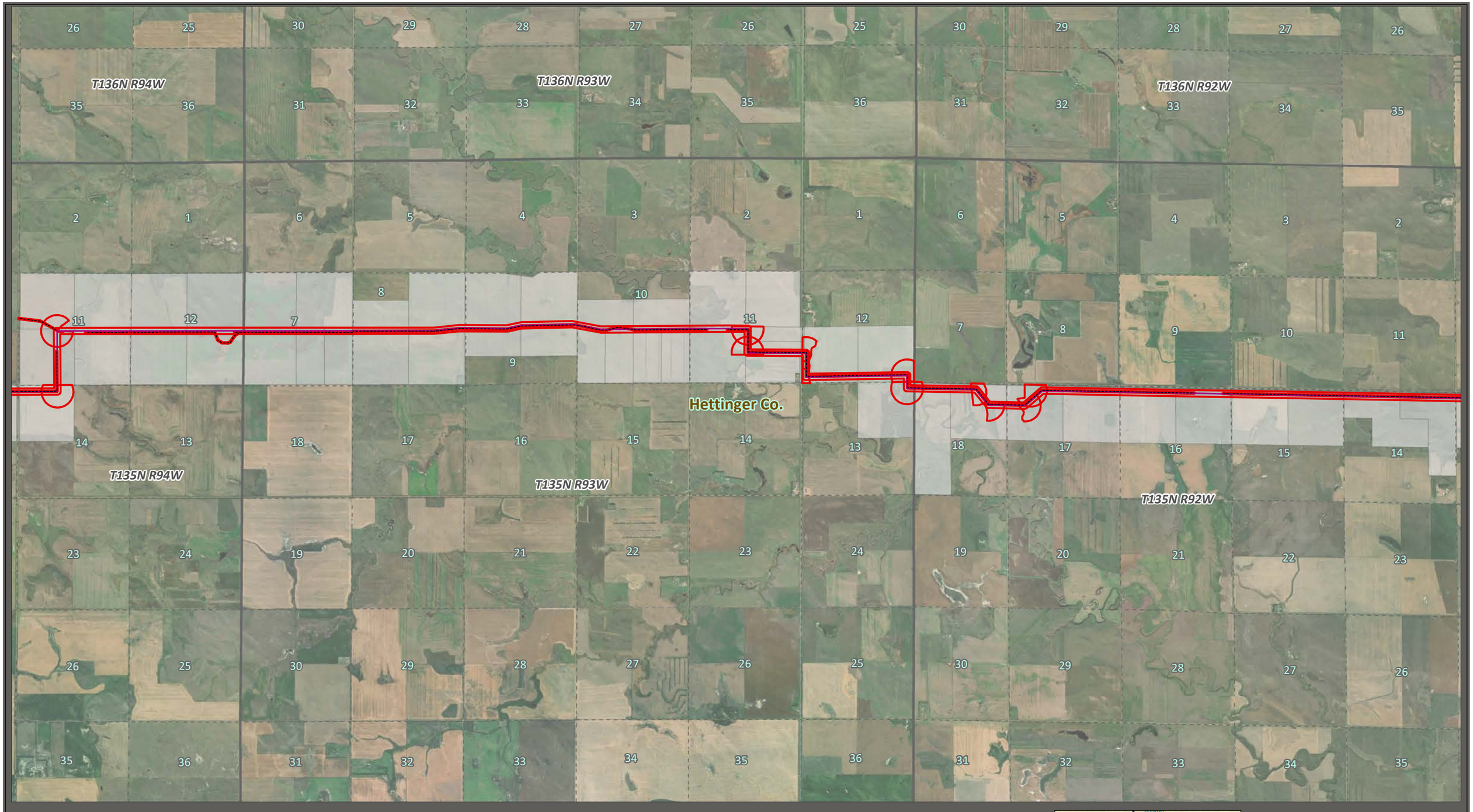
Project-Landowner Overview

Drawn By:	Date:	Project #:	Page
JDP	8/8/2024	2309-00309	21 of 34

Orthophoto Source: ESRI World Imagery Layer
Data Sources: KLJ, Montana State Library, ND GIS, MDT, & NDDOT

1:50,000

KLJ



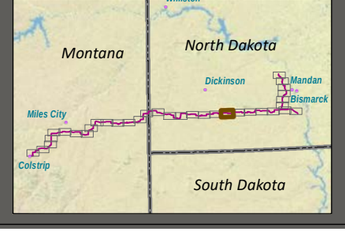
NPC Paleontological Resources Monitoring and Mitigation Plan

Colstrip, MT to Bismarck, ND

N

0 0.5 1 Miles

- Paleo Survey Area
- Preferred Route
- Preferred Access
- PLSS Sections
- PLSS Townships
- Private
- BLM
- State
- USDA ARS Ft. Keogh
- USFS



Project-Landowner Overview

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Orthophoto Source: ESRI World Imagery Layer
Data Sources: KLJ, Montana State Library, ND GIS, MDT, & NDDOT

1:50,000

KLJ

T136N R92W

T136N R91W

T136N R90W

Hettinger Co.

Grant Co.

T135N R92W

T135N R91W

T135N R90W

NPC Paleontological Resources Monitoring and Mitigation Plan

Colstrip, MT to Bismarck, ND

N

0 0.5 1 Miles

- Paleo Survey Area
- Preferred Route
- Preferred Access
- County Line
- PLSS Sections
- PLSS Townships
- Private
- BLM
- State
- USDA ARS Ft. Keogh
- USFS



Project-Landowner Overview

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Orthophoto Source: ESRI World Imagery Layer
Data Sources: KLJ, Montana State Library, ND GIS, MDT, & NDDOT

1:50,000

KLJ

T136N R90W
T136N R89W
T136N R88W
Grant Co.
T135N R89W
T135N R88W
T135N R90W

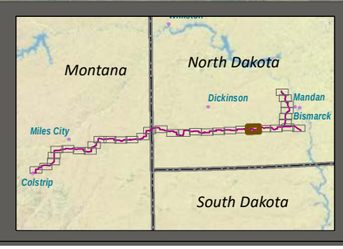
NPC Paleontological Resources Monitoring and Mitigation Plan

Colstrip, MT to Bismarck, ND

N

0 0.5 1 Miles

- Paleo Survey Area
- Preferred Route
- Preferred Access
- Laydown Yard
- PLSS Sections
- PLSS Townships
- Private
- BLM
- State
- USDA ARS Ft. Keogh
- USFS



Project-Landowner Overview

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Orthophoto Source: ESRI World Imagery Layer
Data Sources: KLJ, Montana State Library, ND GIS, MDT, & NDDOT

1:50,000

KLJ

T136N R88W

T136N R87W

T136N R86W

Grant Co.

T135N R88W

T135N R87W

T135N R86W

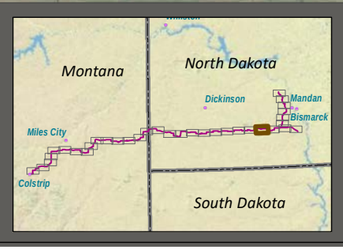
NPC Paleontological Resources Monitoring and Mitigation Plan

Colstrip, MT to Bismarck, ND

N

0 0.5 1 Miles

- Paleo Survey Area
- Preferred Route
- Preferred Access
- PLSS Sections
- PLSS Townships
- Private
- BLM
- State
- USDA ARS Ft. Keogh
- USFS



Project-Landowner Overview

Drawn By:	Date:	Project #:	Page
JDP	8/8/2024	2309-00309	25 of 34

Orthophoto Source: ESRI World Imagery Layer
Data Sources: KLJ, Montana State Library, ND GIS, MDT, & NDDOT

1:50,000

KLJ

T136N R86W
T136N R85W
T136N R84W
Grant Co.
Morton Co.
T135N R85W
T135N R86W
T135N R84W

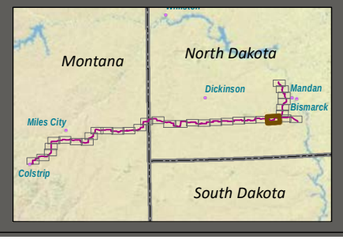
NPC Paleontological Resources Monitoring and Mitigation Plan

Colstrip, MT to Bismarck, ND

N

0 0.5 1 Miles

- Paleo Survey Area
- Preferred Route
- Preferred Access
- Preferred Structure
- Laydown Yard
- County Line
- PLSS Sections
- PLSS Townships
- Private
- BLM
- State
- USDA ARS Ft. Keogh
- USFS



Project-Landowner Overview

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Orthophoto Source: ESRI World Imagery Layer
Data Sources: KLJ, Montana State Library, ND GIS, MDT, & NDDOT

1:50,000

KLJ

T136N R84W

T136N R83W

T136N R82W

T135N R84W

T135N R83W

T135N R82W

Morton Co.

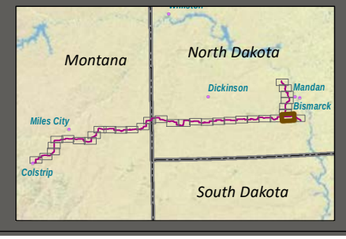
NPC Paleontological Resources Monitoring and Mitigation Plan

Colstrip, MT to Bismarck, ND

N

0 0.5 1 Miles

- Paleo Survey Area
- Preferred Route
- Preferred Access
- PLSS Sections
- PLSS Townships
- Private
- BLM
- State
- USDA ARS Ft. Keogh
- USFS



Project-Landowner Overview

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Orthophoto Source: ESRI World Imagery Layer
Data Sources: KLJ, Montana State Library, ND GIS, MDT, & NDDOT

1:50,000

KLJ

T136N R82W
T136N R81W
T136N R80W
T135N R81W
T135N R82W
T135N R80W
Morton Co.
T134N R82W
T134N R81W
T134N R80W

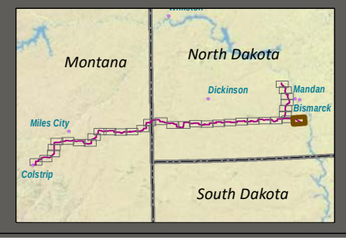
NPC Paleontological Resources Monitoring and Mitigation Plan

Colstrip, MT to Bismarck, ND

N

0 0.5 1 Miles

- Paleo Survey Area
- Preferred Route
- Preferred Access
- Preferred Structure
- Laydown Yard
- PLSS Sections
- PLSS Townships
- Private
- BLM
- State
- USDA ARS Ft. Keogh
- USFS



Project-Landowner Overview

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JDP	8/8/2024	2309-00309	28 of 34

Orthophoto Source: ESRI World Imagery Layer
Data Sources: KLJ, Montana State Library, ND GIS, MDT, & NDDOT

1:50,000

KLJ

T137N R84W

T137N R83W

T137N R82W

T136N R84W

T136N R83W

T136N R82W

Morton Co.

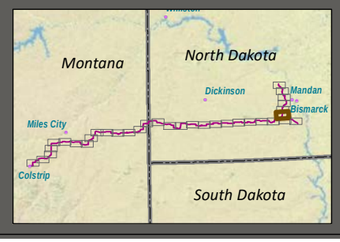
NPC Paleontological Resources Monitoring and Mitigation Plan

Colstrip, MT to Bismarck, ND

N

0 0.5 1 Miles

- Paleo Survey Area
- Preferred Route
- Preferred Access
- PLSS Sections
- PLSS Townships
- Private
- BLM
- State
- USDA ARS Ft. Keogh
- USFS



Project-Landowner Overview

Drawn By: JDP	Date: 8/8/2024	Project #: 2309-00309	Page 29 of 34

Orthophoto Source: ESRI World Imagery Layer
Data Sources: KLJ, Montana State Library, ND GIS, MDT, & NDDOT

1:50,000

KLJ

T138N R84W

T138N R83W

T138N R82W

T137N R84W

T137N R83W

T137N R82W

Morton Co.

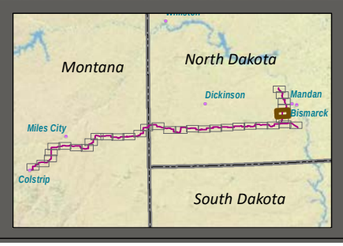
NPC Paleontological Resources Monitoring and Mitigation Plan

Colstrip, MT to Bismarck, ND

N

0 0.5 1 Miles

- Paleo Survey Area
- Preferred Route
- Preferred Access
- Laydown Yard
- PLSS Sections
- PLSS Townships
- Private
- BLM
- State
- USDA ARS Ft. Keogh
- USFS



Project-Landowner Overview

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Orthophoto Source: ESRI World Imagery Layer
Data Sources: KLJ, Montana State Library, ND GIS, MDT, & NDDOT

1:50,000

KLJ

T139N R83W
T139N R82W
T139N R81W
T138N R83W
T138N R82W
T138N R81W
Morton Co.

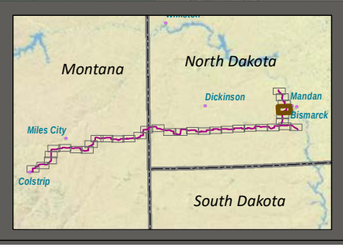
NPC Paleontological Resources Monitoring and Mitigation Plan

Colstrip, MT to Bismarck, ND

N

0 0.5 1 Miles

- Paleo Survey Area
- Preferred Route
- Preferred Access
- PLSS Sections
- PLSS Townships
- Private
- BLM
- State
- USDA ARS Ft. Keogh
- USFS



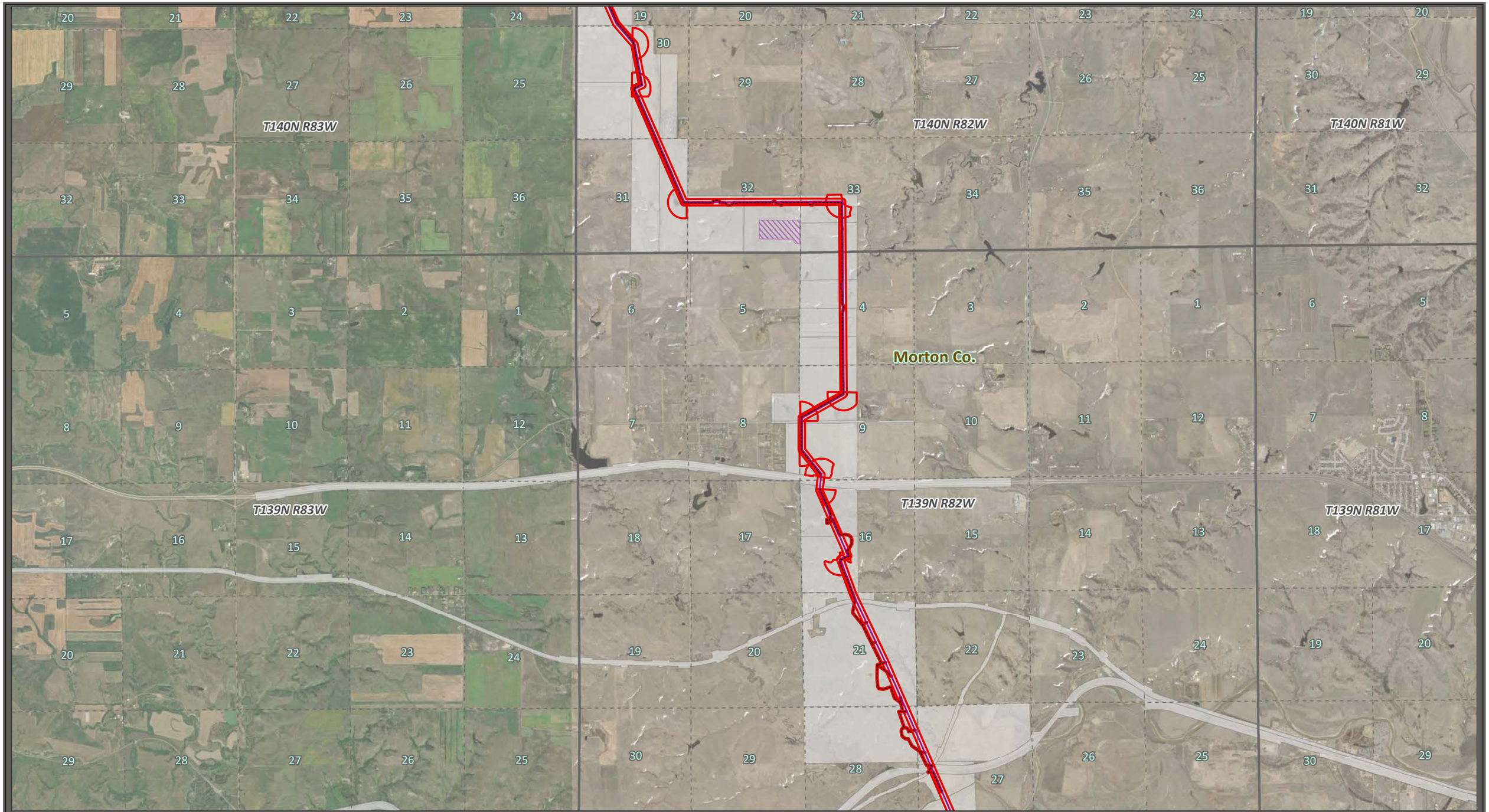
Project-Landowner Overview

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Data Sources: KLJ, Montana State Library, ND GIS, MDT, & NDDOT

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KLJ



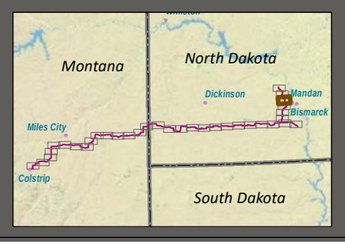
NPC Paleontological Resources Monitoring and Mitigation Plan

Colstrip, MT to Bismarck, ND

N

0 0.5 1 Miles

- Paleo Survey Area
- Preferred Route
- Preferred Access
- Laydown Yard
- PLSS Sections
- PLSS Townships
- Private
- BLM
- State
- USDA ARS Ft. Keogh
- USFS



Project-Landowner Overview

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Orthophoto Source: ESRI World Imagery Layer
Data Sources: KLJ, Montana State Library, ND GIS, MDT, & NDDOT

1:50,000

KLJ

T141N R83W

T141N R82W

T141N R81W

Oliver Co.

T140N R83W

T140N R82W

Morton Co.

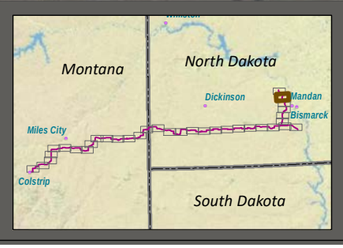
NPC Paleontological Resources Monitoring and Mitigation Plan

Colstrip, MT to Bismarck, ND

N

0 0.5 1 Miles

- Paleo Survey Area
- Preferred Route
- Preferred Access
- Laydown Yard
- County Line
- PLSS Sections
- PLSS Townships
- Private
- BLM
- State
- USDA ARS Ft. Keogh
- USFS



Project-Landowner Overview

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Orthophoto Source: ESRI World Imagery Layer
Data Sources: KLJ, Montana State Library, ND GIS, MDT, & NDDOT

1:50,000

KLJ

T142N R84W
T142N R83W
T142N R82W
T141N R84W
T141N R83W
T141N R82W
Oliver Co.

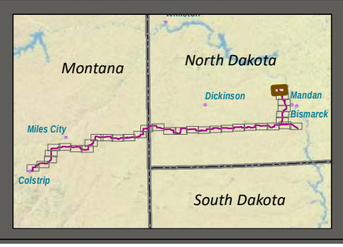
NPC Paleontological Resources Monitoring and Mitigation Plan

Colstrip, MT to Bismarck, ND

N

0 0.5 1 Miles

- Paleo Survey Area
- Preferred Route
- Preferred Access
- PLSS Sections
- PLSS Townships
- Private
- BLM
- State
- USDA ARS Ft. Keogh
- USFS



Project-Landowner Overview

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Orthophoto Source: ESRI World Imagery Layer
Data Sources: KLJ, Montana State Library, ND GIS, MDT, & NDDOT

1:50,000

KLJ

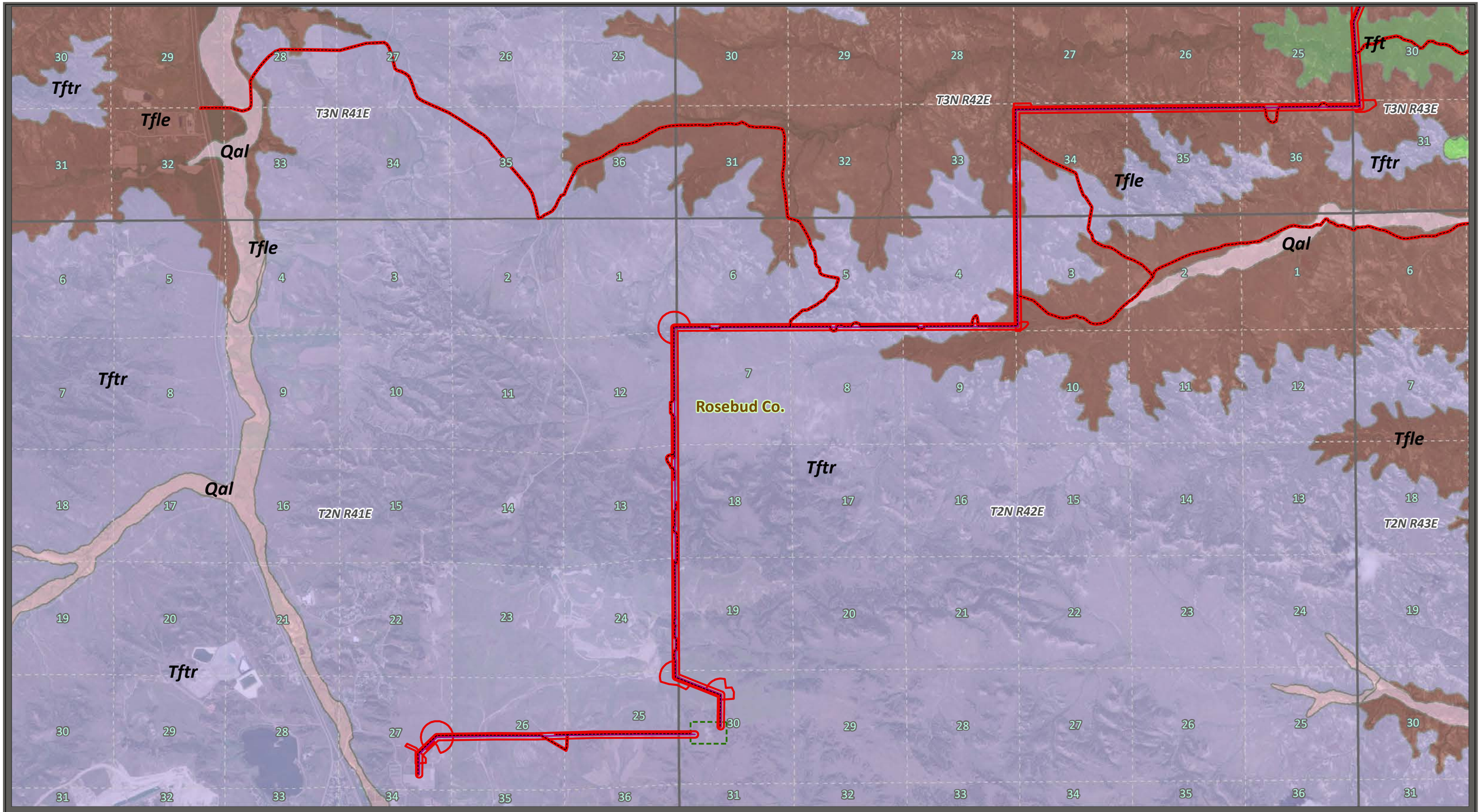
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ATTACHMENT B

GEOLOGY CLOSE-UP MAPS

NPC Paleontological Resources Monitoring and Mitigation Plan

Colstrip, MT to Bismarck, ND



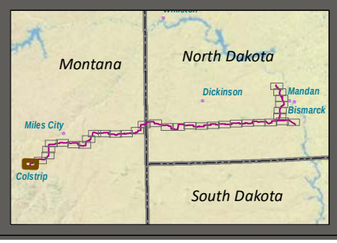
N

0 0.5 1 Miles

- Paleo Survey Area
- Preferred Route
- Preferred Access
- Preferred Structure
- PLSS Sections
- PLSS Townships

Surface Geology (MT)

- Alluvial terrace deposit (Qat)
- Alluvium (Qal)
- Lebo Mbr, Fort Union Fm (Tfle)
- Tongue River Mbr, Fort Union Fm (Tftr)
- Tullock Mbr, Fort Union Fm (Tft)



Geology Close-up

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Orthophoto Source: ESRI World Imagery Layer
Data Sources: KLJ, MT State Library, ND GIS, MDT, NDDOT, & MBMG

1:50,000

KLJ

NPC Paleontological Resources Monitoring and Mitigation Plan

Colstrip, MT to Bismarck, ND

Tft
Qal
Tfle
Tftr
T3N R42E
T3N R43E
T3N R44E
T2N R42E
T2N R43E
T2N R44E
Rosebud Co.

N

0 0.5 1 Miles

- Paleo Survey Area
- Preferred Route
- Preferred Access
- Laydown Yard
- PLSS Sections
- PLSS Townships

Surface Geology (MT)

- Alluvial terrace deposit (Qat)
- Alluvium (Qal)
- Lebo Mbr, Fort Union Fm (Tfle)
- Tongue River Mbr, Fort Union Fm (Tftr)
- Tullock Mbr, Fort Union Fm (Tft)



Geology Close-up

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Orthophoto Source: ESRI World Imagery Layer
Data Sources: KLJ, MT State Library, ND GIS, MDT, NDDOT, & MBMG

1:50,000

KLJ

Tfle
Qal
Tfle
T4N R44E
Rosebud Co.
Tftr
T4N R45E
Custer Co.
T4N R46E
Tfle
Tfle
Qal
Tft
Qal
Tfle
T3N R44E
T3N R45E
Tfle
T3N R46E
Qal
Tfle

NPC Paleontological Resources Monitoring and Mitigation Plan

Colstrip, MT to Bismarck, ND

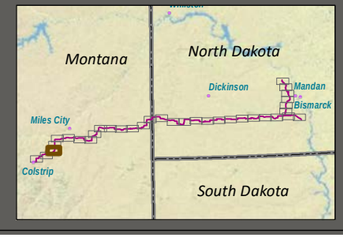
N

0 0.5 1 Miles

- Paleo Survey Area
- Preferred Route
- Preferred Access
- County Line
- PLSS Sections
- PLSS Townships

Surface Geology (MT)

- Alluvial terrace deposit (Qat)
- Alluvium of alluvial terrace deposit (QTat)
- Alluvium (Qal)
- Lebo Mbr, Fort Union Fm (Tfle)
- Tongue River Mbr, Fort Union Fm (Tftr)
- Tullock Mbr, Fort Union Fm (Tft)



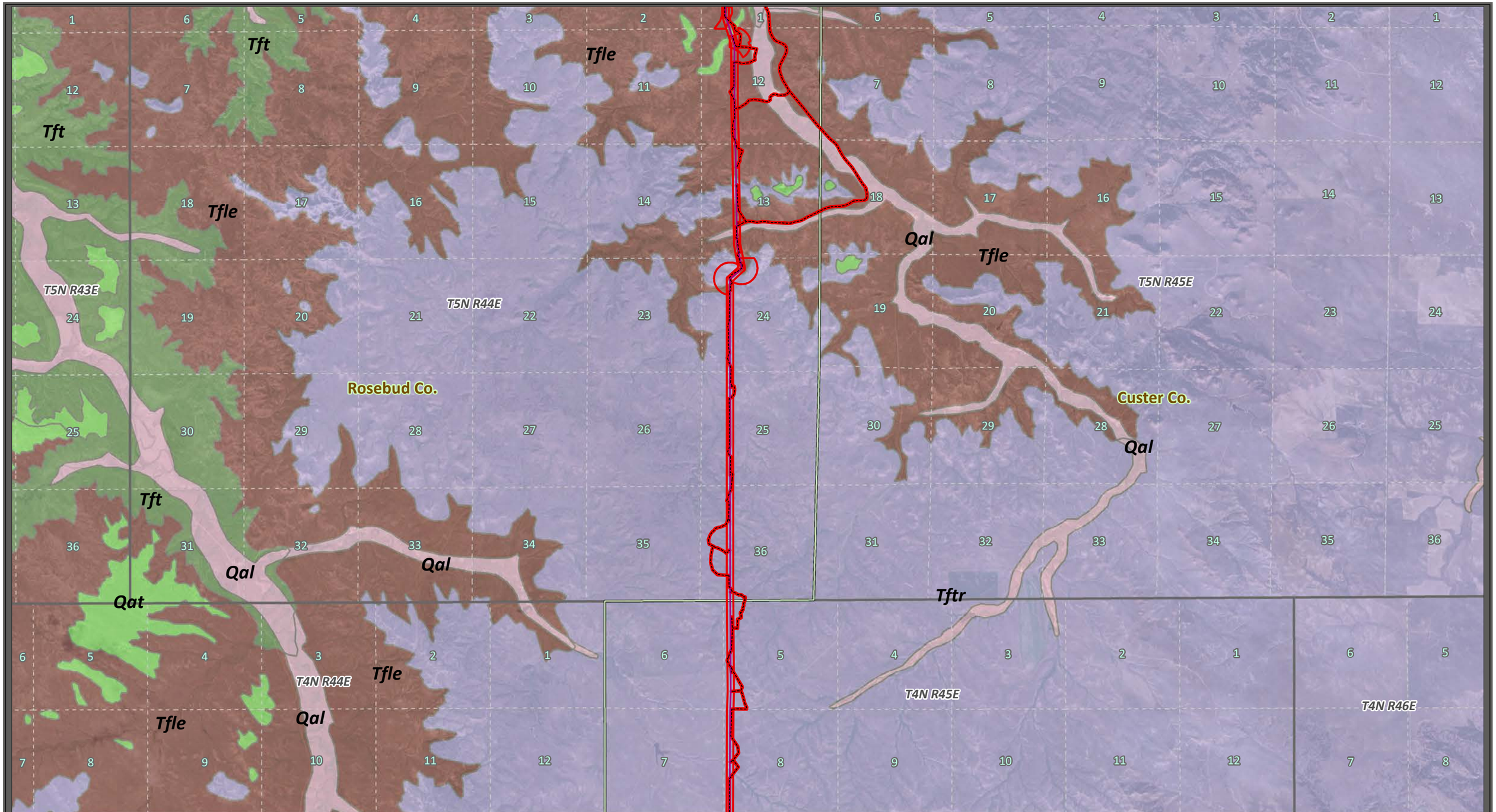
Geology Close-up

Drawn By:	Date:	Project #:	Page
JDP	8/8/2024	2309-00309	3 of 34

Orthophoto Source: ESRI World Imagery Layer
Data Sources: KLJ, MT State Library, ND GIS, MDT, NDDOT, & MBMG

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NPC Paleontological Resources Monitoring and Mitigation Plan

Colstrip, MT to Bismarck, ND

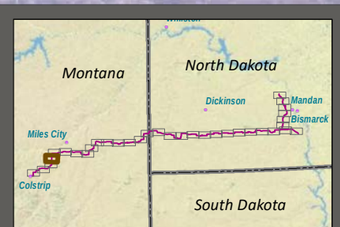
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- Paleo Survey Area
- Preferred Route
- Preferred Access
- County Line
- PLSS Sections
- PLSS Townships

Surface Geology (MT)

- Alluvial terrace deposit (Qat)
- Alluvium of alluvial terrace deposit (QTat)
- Alluvium (Qal)
- Lebo Mbr, Fort Union Fm (Tfle)
- Tongue River Mbr, Fort Union Fm (Tftr)
- Tullock Mbr, Fort Union Fm (Tft)



Geology Close-up

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JDP	8/8/2024	2309-00309	4 of 34

Orthophoto Source: ESRI World Imagery Layer
Data Sources: KLJ, MT State Library, ND GIS, MDT, NDDOT, & MBMG

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KLJ

NPC Paleontological Resources Monitoring and Mitigation Plan

Colstrip, MT to Bismarck, ND

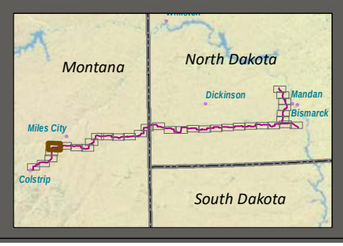
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- Paleo Survey Area
- Preferred Route
- Preferred Access
- Laydown Yard
- County Line
- PLSS Sections
- PLSS Townships

Surface Geology (MT)

- Alluvial terrace deposit (Qat)
- Alluvium (Qal)
- Lebo Mbr, Fort Union Fm (Tfle)
- Tongue River Mbr, Fort Union Fm (Tftr)
- Tullock Mbr, Fort Union Fm (Tft)



Geology Close-up

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Orthophoto Source: ESRI World Imagery Layer

Data Sources: KLJ, MT State Library, ND GIS, MDT, NDDOT, & MBMG

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KLJ

NPC Paleontological Resources Monitoring and Mitigation Plan

Colstrip, MT to Bismarck, ND

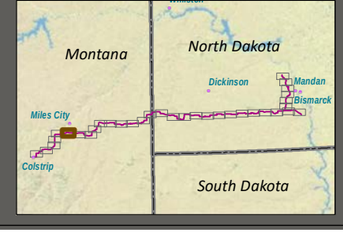
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0 0.5 1 Miles

- Paleo Survey Area
- Preferred Route
- Preferred Access
- PLSS Sections
- PLSS Townships

Surface Geology (MT)

- Alluvial terrace deposit (Qat)
- Alluvium (Qal)
- Lebo Mbr, Fort Union Fm (Tfle)
- Tongue River Mbr, Fort Union Fm (Tftr)
- Tullock Mbr, Fort Union Fm (Tft)



Geology Close-up

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Orthophoto Source: ESRI World Imagery Layer
Data Sources: KLJ, MT State Library, ND GIS, MDT, NDDOT, & MBMG

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KLJ

Tfle
Tft
Qal
Qat
Tft
T6N R48E
Tft
Qat
Tfle
T6N R49E
Tfle
Tftr
T6N R50E
Custer Co.
Qal
Tft
T5N R48E
Tfle
Tfle
Tft
T5N R49E
Tfle
T5N R50E

NPC Paleontological Resources Monitoring and Mitigation Plan

Colstrip, MT to Bismarck, ND

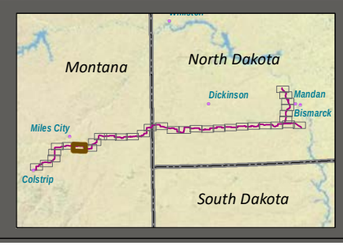
N

0 0.5 1 Miles

- Paleo Survey Area
- Preferred Route
- Preferred Access
- PLSS Sections
- PLSS Townships

Surface Geology (MT)

- Alluvial terrace deposit (Qat)
- Alluvium (Qal)
- Lebo Mbr, Fort Union Fm (Tfle)
- Tongue River Mbr, Fort Union Fm (Tftr)
- Tullock Mbr, Fort Union Fm (Tft)



Geology Close-up

Drawn By: JDP	Date: 8/8/2024	Project #: 2309-00309	Page 7 of 34

Orthophoto Source: ESRI World Imagery Layer
Data Sources: KLJ, MT State Library, ND GIS, MDT, NDDOT, & MBMG

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KLJ

NPC Paleontological Resources Monitoring and Mitigation Plan

Colstrip, MT to Bismarck, ND

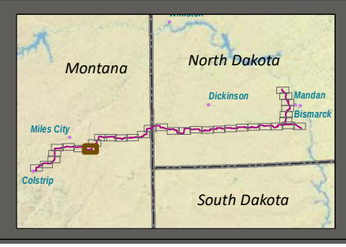
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0 0.5 1 Miles

Paleo Survey Area
Preferred Route
Preferred Access
PLSS Sections
PLSS Townships

Surface Geology (MT)

- Alluvial terrace deposit (Qat)
- Alluvium (Qal)
- Lebo Mbr, Fort Union Fm (Tfle)
- Tongue River Mbr, Fort Union Fm (Tftr)
- Tullock Mbr, Fort Union Fm (Tft)



Geology Close-up

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Orthophoto Source: ESRI World Imagery Layer
Data Sources: KLJ, MT State Library, ND GIS, MDT, NDDOT, & MBMG

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KLJ

NPC Paleontological Resources Monitoring and Mitigation Plan

Colstrip, MT to Bismarck, ND

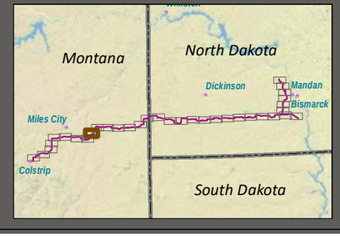
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0 0.5 1 Miles

Paleo Survey Area
Preferred Route
Preferred Access
PLSS Sections
PLSS Townships

Surface Geology (MT)

Alluvial terrace deposit (Qat)
Alluvium (Qal)
Lebo Mbr, Fort Union Fm (Tfle)
Tongue River Mbr, Fort Union Fm (Tftr)
Tullock Mbr, Fort Union Fm (Tft)



Geology Close-up

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Orthophoto Source: ESRI World Imagery Layer
Data Sources: KLJ, MT State Library, ND GIS, MDT, NDDOT, & MBMG

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KLJ

NPC Paleontological Resources Monitoring and Mitigation Plan

Colstrip, MT to Bismarck, ND

N

0 0.5 1 Miles

Surface Geology (MT)

- Alluvial terrace deposit (Qat)
- Alluvium (Qal)
- Lebo Mbr, Fort Union Fm (Tfle)
- Ludlow Mbr, Fort Union Fm (Tfld)
- Tongue River Mbr, Fort Union Fm (Tftr)
- Tullock Mbr, Fort Union Fm (Tft)

- Paleo Survey Area
- Preferred Route
- Preferred Access
- PLSS Sections
- PLSS Townships



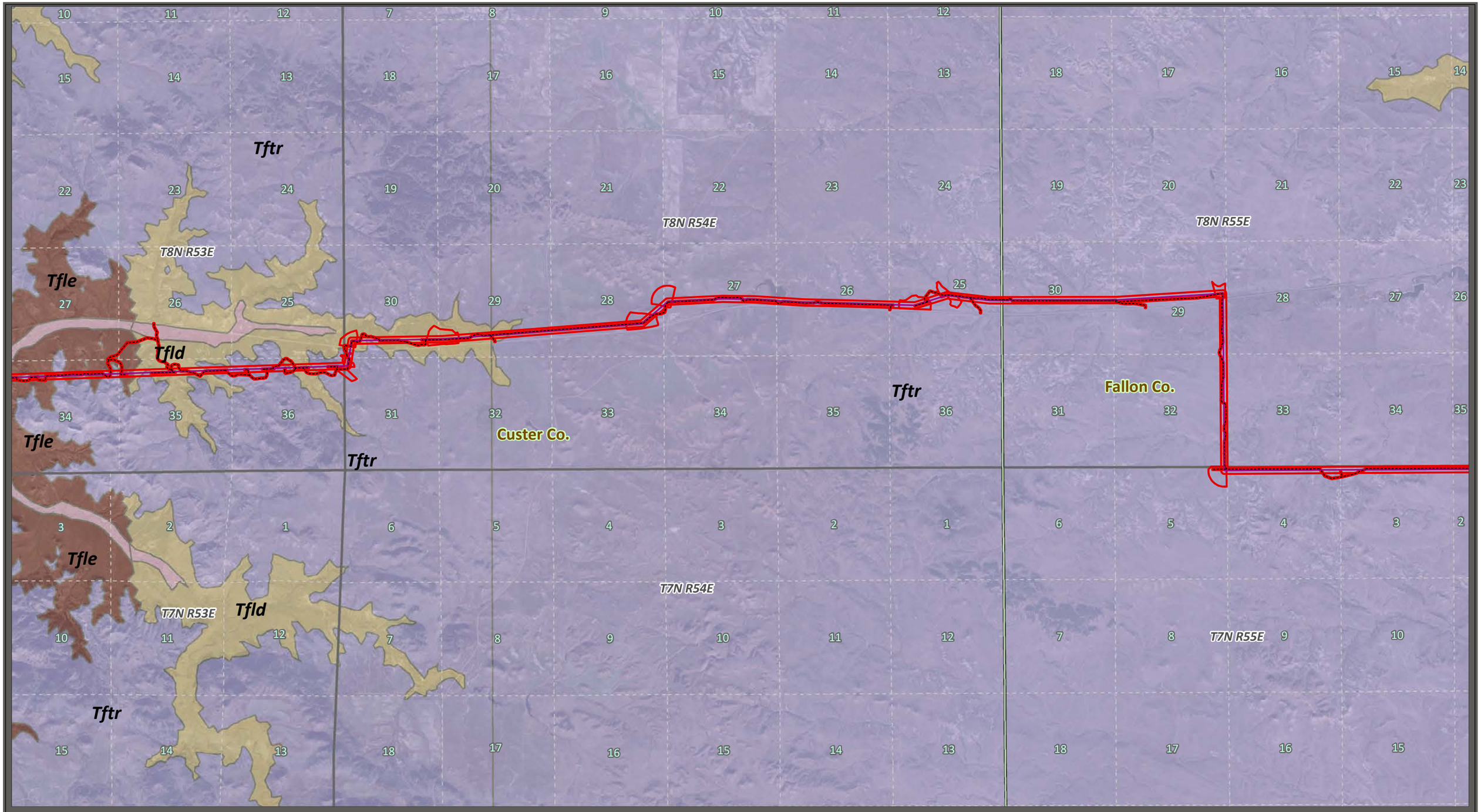
Geology Close-up

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Orthophoto Source: ESRI World Imagery Layer
Data Sources: KLJ, MT State Library, ND GIS, MDT, NDDOT, & MBMG

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KLJ



NPC Paleontological Resources Monitoring and Mitigation Plan

Colstrip, MT to Bismarck, ND

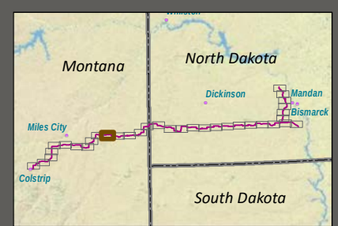
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0 0.5 1 Miles

- Paleo Survey Area
- Preferred Route
- Preferred Access
- County Line
- PLSS Sections
- PLSS Townships

Surface Geology (MT)

- Alluvium (Qal)
- Lebo Mbr, Fort Union Fm (Tfle)
- Ludlow Mbr, Fort Union Fm (Tfld)
- Tongue River Mbr, Fort Union Fm (Tftr)



Geology Close-up

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Orthophoto Source: ESRI World Imagery Layer
Data Sources: KLJ, MT State Library, ND GIS, MDT, NDDOT, & MBMG

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KLJ

Tfld
Qat
Qal
Tftr
T8N R55E
T8N R56E
T8N R57E
T7N R55E
T7N R56E
T7N R57E
Fallon Co.

NPC Paleontological Resources Monitoring and Mitigation Plan

Colstrip, MT to Bismarck, ND

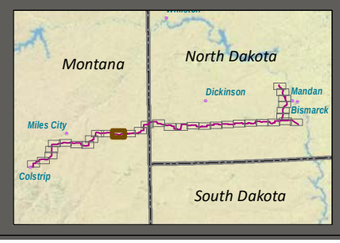
N

0 0.5 1 Miles

Paleo Survey Area
Preferred Route
Preferred Access
PLSS Sections
PLSS Townships

Surface Geology (MT)

Alluvial terrace deposit (Qat)
Alluvium (Qal)
Ludlow Mbr, Fort Union Fm (Tfld)
Tongue River Mbr, Fort Union Fm (Tftr)



Geology Close-up

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Orthophoto Source: ESRI World Imagery Layer
Data Sources: KLJ, MT State Library, ND GIS, MDT, NDDOT, & MBMG

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KLJ

NPC Paleontological Resources Monitoring and Mitigation Plan

Colstrip, MT to Bismarck, ND

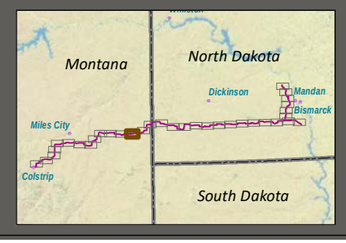
T8N R57E
T8N R58E
T8N R59E
T7N R57E
T7N R58E
T7N R59E
Fallon Co.
Tftr
Tfld
Qal
Khc

N

0 0.5 1 Miles

Surface Geology (MT)

- Paleo Survey Area
- Preferred Route
- Preferred Access
- Laydown Yard
- PLSS Sections
- PLSS Townships
- Alluvial terrace deposit (Qat)
- Alluvium (Qal)
- Hell Creek Formation (Khc)
- Ludlow Mbr, Fort Union Fm (Tfld)
- Pierre Shale (Kp)
- Timber Lake & Trail City Mbrs, Fox Hills Fm (Kftt)
- Tongue River Mbr, Fort Union Fm (Tftr)



Geology Close-up

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JDP	8/8/2024	2309-00309	13 of 34

Orthophoto Source: ESRI World Imagery Layer
Data Sources: KLJ, MT State Library, ND GIS, MDT, NDDOT, & MBMG

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KLJ

NPC Paleontological Resources Monitoring and Mitigation Plan

Colstrip, MT to Bismarck, ND

T9N R58E
T9N R59E
T9N R60E
T8N R59E
T8N R60E
T8N R61E
Fallon Co.
Khc
Kp
Qal
Kfc
Kftt
Tfld
Tftr

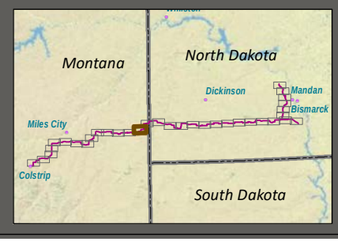
N

0 0.5 1 Miles

- Paleo Survey Area
- Preferred Route
- Preferred Access
- PLSS Sections
- PLSS Townships

Surface Geology (MT)

- Alluvium (Qal)
- Colgate Mbr, Fox Hills Fm (Kfc)
- Hell Creek Formation (Khc)
- Ludlow Mbr, Fort Union Fm (Tfld)
- Pierre Shale (Kp)
- Timber Lake & Trail City Mbrs, Fox Hills Fm (Kftt)
- Tongue River Mbr, Fort Union Fm (Tftr)



Geology Close-up

Drawn By:	Date:	Project #:	Page
JDP	8/8/2024	2309-00309	14 of 34

Orthophoto Source: ESRI World Imagery Layer
Data Sources: KLJ, MT State Library, ND GIS, MDT, NDDOT, & MBMG

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KLJ

NPC Paleontological Resources Monitoring and Mitigation Plan

Colstrip, MT to Bismarck, ND

T10N R60E
T10N R61E
T9N R60E
T9N R61E
T136N R106W
T135N R106W
Fallon Co.
Golden Valley Co.
Slope Co.
MONTANA
NORTH DAKOTA
Tftr
Tfld
Khc
Tl
Tp

N

0 0.5 1 Miles

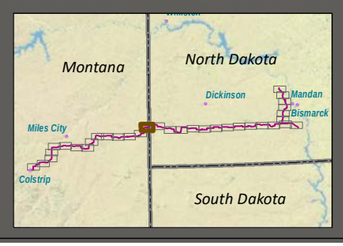
- Paleo Survey Area
- Preferred Route
- Preferred Access
- Laydown Yard
- State Border
- County Line
- PLSS Sections
- PLSS Townships

Surface Geology (MT)

- Alluvium (Qal)
- Hell Creek Formation (Khc)
- Ludlow Mbr, Fort Union Fm (Tfld)
- Tongue River Mbr, Fort Union Fm (Tftr)

Surface Geology (ND)

- Ludlow Fm, Fort Union Gp (Tl)
- Sentinel Butte Fm, Fort Union Gp (Ts)



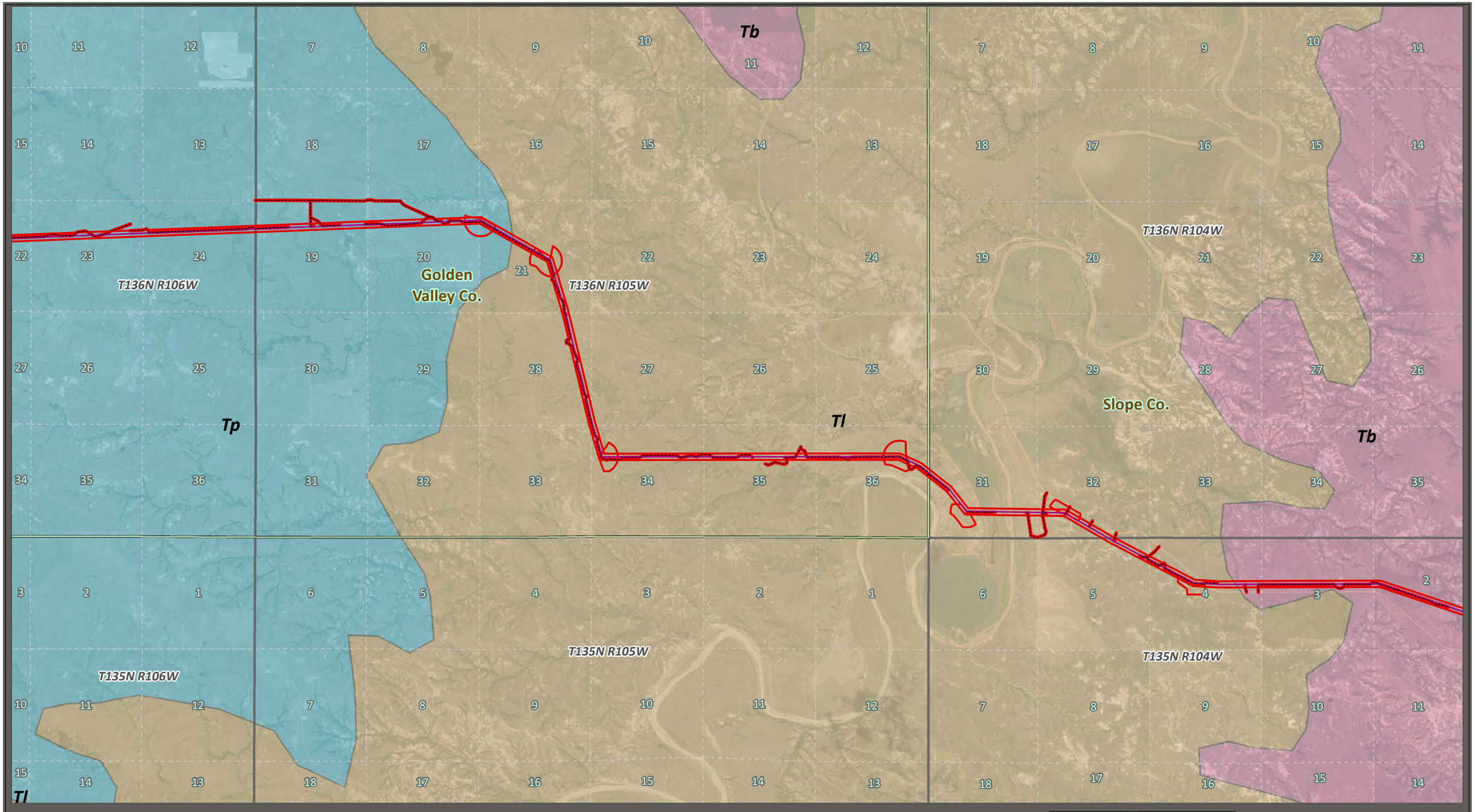
Geology Close-up

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Orthophoto Source: ESRI World Imagery Layer
Data Sources: KLJ, MT State Library, ND GIS, MDT, NDDOT, & MBMG

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KLJ



NPC Paleontological Resources Monitoring and Mitigation Plan

Colstrip, MT to Bismarck, ND

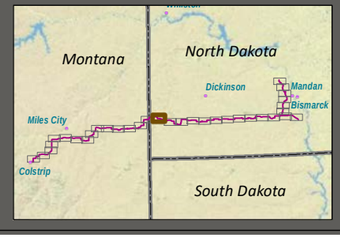
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0 0.5 1 Miles

- Paleo Survey Area
- Preferred Route
- Preferred Access
- County Line
- PLSS Sections
- PLSS Townships

Surface Geology (ND)

- Tongue River (Bullion Creek) Fm, Fort Union Gp (Tb)
- Ludlow Fm, Fort Union Gp (Tl)
- Sentinel Butte Fm, Fort Union Gp (Ts)



Geology Close-up

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Orthophoto Source: ESRI World Imagery Layer
Data Sources: KLJ, MT State Library, ND GIS, MDT, NDDOT, & MBMG

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KLJ

T136N R104W
T136N R103W
T136N R102W
T135N R104W
T135N R103W
T135N R102W
T134N R104W
T134N R103W
T134N R102W
Tl
Tb
Tp
Slope Co.

NPC Paleontological Resources Monitoring and Mitigation Plan

Colstrip, MT to Bismarck, ND

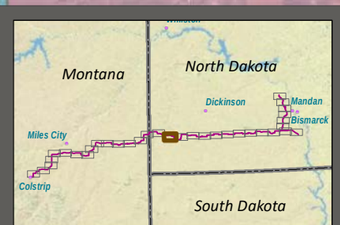
N

0 0.5 1 Miles

- Paleo Survey Area
- Preferred Route
- Preferred Access
- PLSS Sections
- PLSS Townships

Surface Geology (ND)

- Tongue River (Bullion Creek) Fm, Fort Union Gp (Tb)
- Ludlow Fm, Fort Union Gp (Tl)
- Sentinel Butte Fm, Fort Union Gp (Ts)



Geology Close-up

Drawn By:	Date:	Project #:	Page
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Orthophoto Source: ESRI World Imagery Layer
Data Sources: KLJ, MT State Library, ND GIS, MDT, NDDOT, & MBMG

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KLJ

T136N R102W
T136N R101W
T136N R100W
T135N R102W
T135N R101W
T135N R100W
T134N R102W
T134N R101W
T134N R100W
Slope Co.
Tb
Ts

NPC Paleontological Resources Monitoring and Mitigation Plan

Colstrip, MT to Bismarck, ND

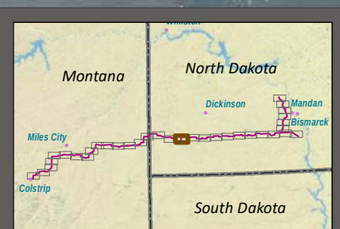
N

0 0.5 1 Miles

- Paleo Survey Area
- Preferred Route
- Preferred Access
- Laydown Yard
- PLSS Sections
- PLSS Townships

Surface Geology (ND)

- Tongue River (Bullion Creek) Fm, Fort Union Gp (Tb)
- Sentinel Butte Formation, Fort Union Gp (Ts)



Geology Close-up

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Orthophoto Source: ESRI World Imagery Layer
Data Sources: KLJ, MT State Library, ND GIS, MDT, NDDOT, & MBMG

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KLJ

T136N R100W

T136N R99W

T136N R98W

Slope Co.

Ts

T135N R99W

T135N R100W

T135N R98W

Tw

NPC Paleontological Resources Monitoring and Mitigation Plan

Colstrip, MT to Bismarck, ND

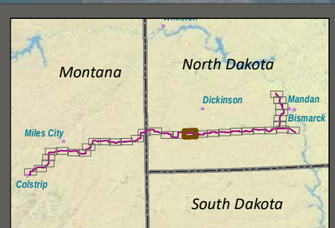
N

0 0.5 1 Miles

- Paleo Survey Area
- Preferred Route
- Preferred Access
- PLSS Sections
- PLSS Townships

Surface Geology (ND)

- Sentinel Butte Formation, Fort Union Gp (Ts)
- White River Group (Tw)



Geology Close-up

Drawn By:	Date:	Project #:	Page
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Orthophoto Source: ESRI World Imagery Layer

Data Sources: KLJ, MT State Library, ND GIS, MDT, NDDOT, & MBMG

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KLJ

T136N R98W

T136N R97W

T136N R96W

T135N R98W

T135N R97W

T135N R96W

T134N R98W

T134N R97W

T134N R96W

Slope Co.

Hettinger Co.

Ts

NPC Paleontological Resources Monitoring and Mitigation Plan

Colstrip, MT to Bismarck, ND

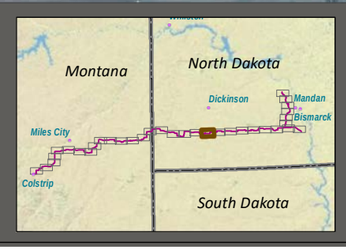
N

0 0.5 1 Miles

- Paleo Survey Area
- Preferred Route
- Preferred Access
- Laydown Yard
- County Line
- PLSS Sections
- PLSS Townships

Surface Geology (ND)

- Sentinel Butte Formation, Fort Union Gp (Ts)



Geology Close-up

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Orthophoto Source: ESRI World Imagery Layer
Data Sources: KLJ, MT State Library, ND GIS, MDT, NDDOT, & MBMG

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KLJ

T136N R96W

T136N R95W

T136N R94W

Tg

Tg

Tg

Ts

T135N R96W

T135N R95W

T135N R94W

Hettinger Co.

NPC Paleontological Resources Monitoring and Mitigation Plan

Colstrip, MT to Bismarck, ND

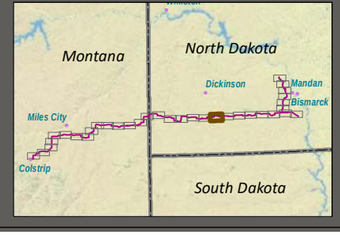
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- Paleo Survey Area
- Preferred Route
- Preferred Access
- Laydown Yard
- PLSS Sections
- PLSS Townships

Surface Geology (ND)

- Golden Valley Formation (Tg)
- Sentinel Butte Formation, Fort Union Gp (Ts)



Geology Close-up

Drawn By:	Date:	Project #:	Page
JDP	8/8/2024	2309-00309	21 of 34

Orthophoto Source: ESRI World Imagery Layer
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KLJ

T136N R94W

T136N R93W

T136N R92W

Tg

Hettinger Co.

Ts

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Tb

NPC Paleontological Resources Monitoring and Mitigation Plan

Colstrip, MT to Bismarck, ND

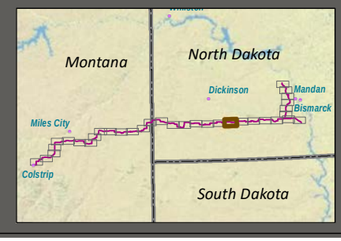
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- Paleo Survey Area
- Preferred Route
- Preferred Access
- PLSS Sections
- PLSS Townships

Surface Geology (ND)

- Tongue River (Bullion Creek) Fm, Fort Union Gp (Tb)
- Golden Valley Formation (Tg)
- Sentinel Butte Formation, Fort Union Gp (Ts)



Geology Close-up

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T135N R92W
T135N R91W
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Grant Co.

NPC Paleontological Resources Monitoring and Mitigation Plan

Colstrip, MT to Bismarck, ND

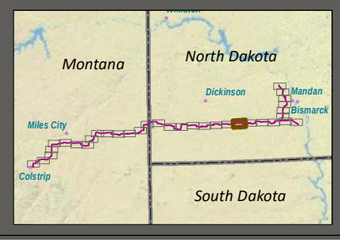
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- Preferred Route
- Preferred Access
- County Line
- PLSS Sections
- PLSS Townships

Surface Geology (ND)

- Tongue River (Bullion Creek) Fm, Fort Union Gp (Tb)
- Sentinel Butte Formation, Fort Union Gp (Ts)



Geology Close-up

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JDP	8/8/2024	2309-00309	23 of 34

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T136N R89W

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Grant Co.

NPC Paleontological Resources Monitoring and Mitigation Plan

Colstrip, MT to Bismarck, ND

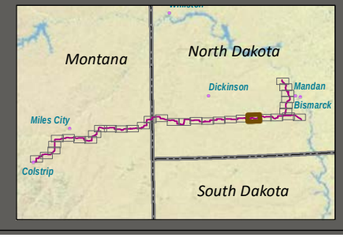
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- Paleo Survey Area
- Preferred Route
- Preferred Access
- Laydown Yard
- PLSS Sections
- PLSS Townships

Surface Geology (ND)

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- Cannonball Fm, Fort Union Gp (Tc)
- Sentinel Butte Formation, Fort Union Gp (Ts)



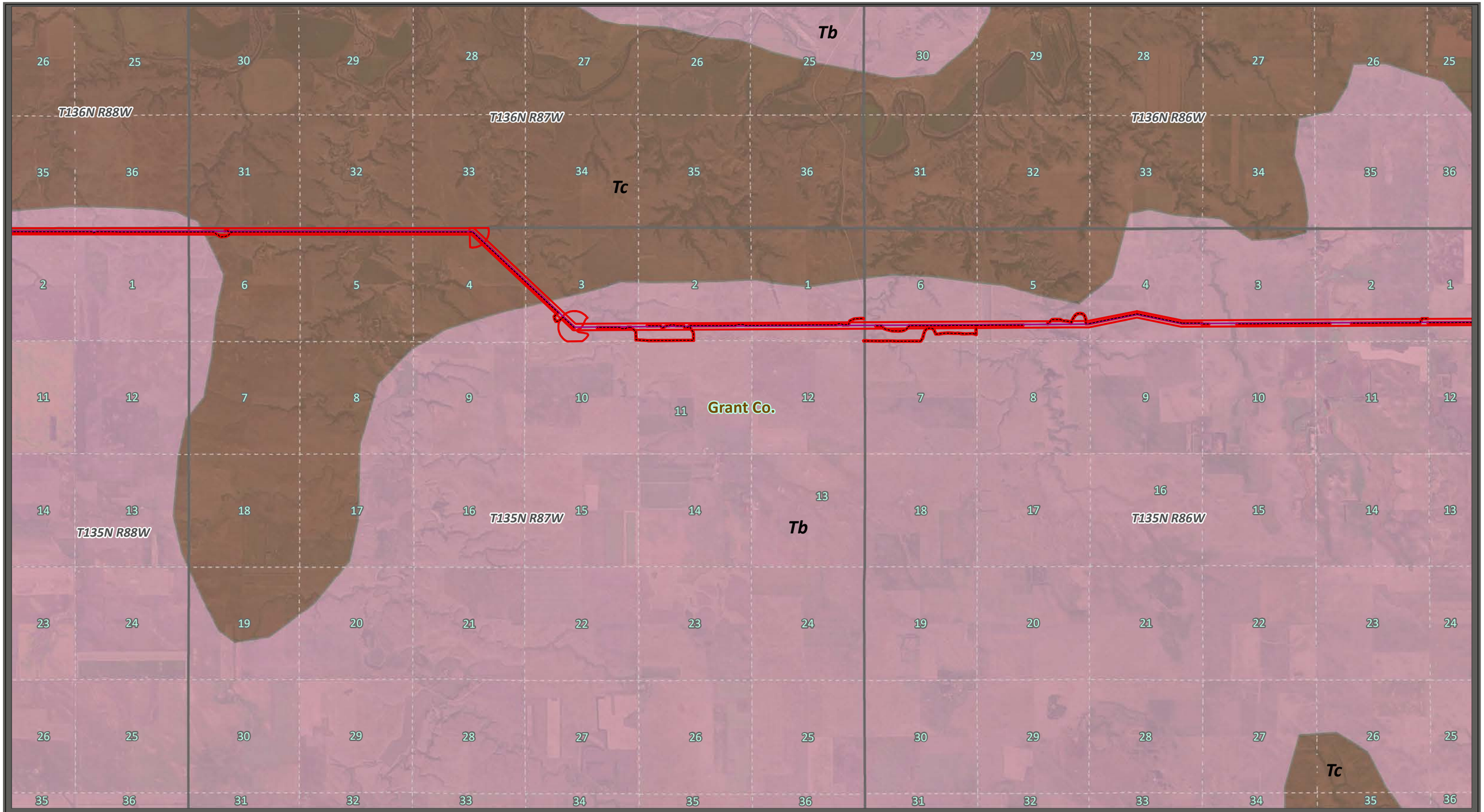
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KLJ



NPC Paleontological Resources Monitoring and Mitigation Plan

Colstrip, MT to Bismarck, ND

N

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- Paleo Survey Area
- Preferred Route
- Preferred Access
- PLSS Sections
- PLSS Townships

Surface Geology (ND)

- Tongue River (Bullion Creek) Fm, Fort Union Gp (Tb)
- Cannonball Fm, Fort Union Gp (Tc)

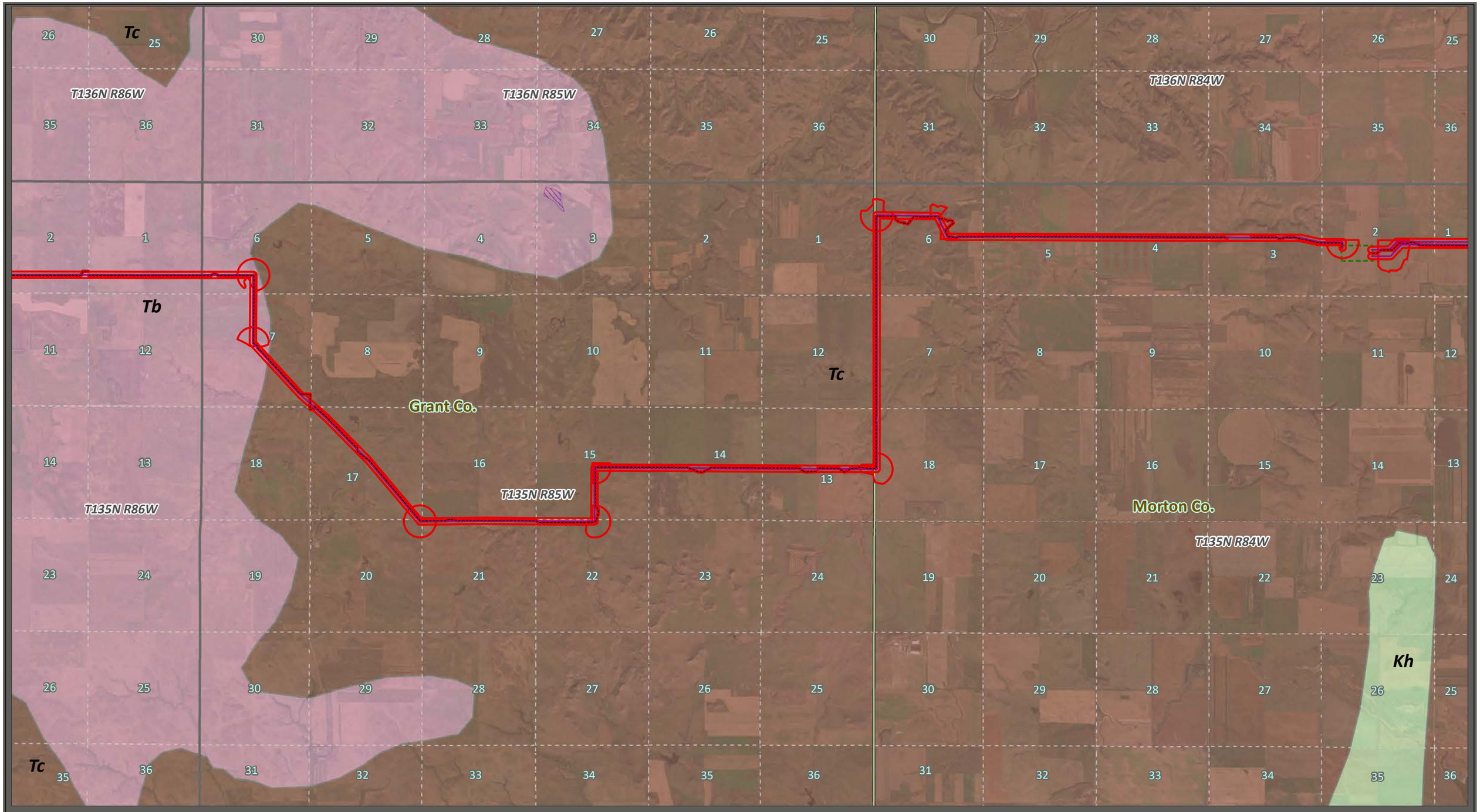
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NPC Paleontological Resources Monitoring and Mitigation Plan

Colstrip, MT to Bismarck, ND

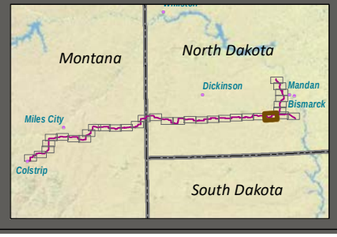
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- Paleo Survey Area
- Preferred Route
- Preferred Access
- Preferred Structure
- Laydown Yard
- County Line
- PLSS Sections
- PLSS Townships

Surface Geology (ND)

- Hell Creek Formation (Kh)
- Tongue River (Bullion Creek) Fm, Fort Union Gp (Tb)
- Cannonball Fm, Fort Union Gp (Tc)



Geology Close-up

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Data Sources: KLJ, MT State Library, ND GIS, MDT, NDDOT, & MBMG

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KLJ

T136N R84W

T136N R83W

T136N R82W

T135N R84W

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Morton Co.

Tc

Kh

Kh

NPC Paleontological Resources Monitoring and Mitigation Plan

Colstrip, MT to Bismarck, ND

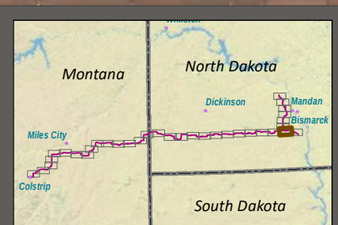
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- Paleo Survey Area
- Preferred Route
- Preferred Access
- PLSS Sections
- PLSS Townships

Surface Geology (ND)

- Hell Creek Formation (Kh)
- Cannonball Fm, Fort Union Gp (Tc)



Geology Close-up

Drawn By:	Date:	Project #:	Page
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KLJ

T136N R82W
T136N R81W
T136N R80W
T135N R82W
T135N R81W
T135N R80W
T134N R82W
T134N R81W
T134N R80W
Morton Co.
Kh
Tc
Kf

NPC Paleontological Resources Monitoring and Mitigation Plan

Colstrip, MT to Bismarck, ND

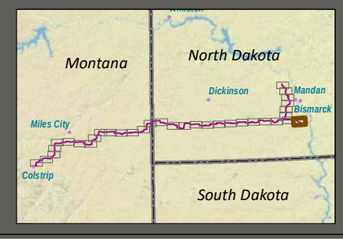
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- Paleo Survey Area
- Preferred Route
- Preferred Access
- Preferred Structure
- Laydown Yard
- PLSS Sections
- PLSS Townships

Surface Geology (ND)

- Fox Hills Formation (Kf)
- Hell Creek Formation (Kh)
- Cannonball Fm, Fort Union Gp (Tc)



Geology Close-up

Drawn By:	Date:	Project #:	Page
JDP	8/8/2024	2309-00309	28 of 34

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Tb

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T137N R82W

Kh

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Morton Co.

T136N R84W

T136N R83W

T136N R82W

NPC Paleontological Resources Monitoring and Mitigation Plan

Colstrip, MT to Bismarck, ND

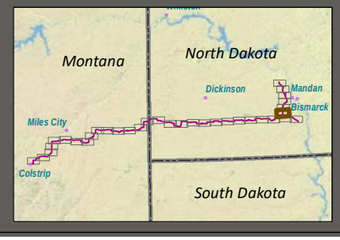
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- Paleo Survey Area
- Preferred Route
- Preferred Access
- PLSS Sections
- PLSS Townships

Surface Geology (ND)

- Hell Creek Formation (Kh)
- Tongue River (Bullion Creek) Fm, Fort Union Gp (Tb)
- Cannonball Fm, Fort Union Gp (Tc)



Geology Close-up

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NPC Paleontological Resources Monitoring and Mitigation Plan

Colstrip, MT to Bismarck, ND

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T137N R82W
Morton Co.
Tb
Tc
Kh

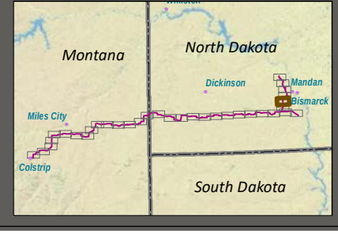
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- Laydown Yard
- PLSS Sections
- PLSS Townships

Surface Geology (ND)

- Hell Creek Formation (Kh)
- Tongue River (Bullion Creek) Fm, Fort Union Gp (Tb)
- Cannonball Fm, Fort Union Gp (Tc)



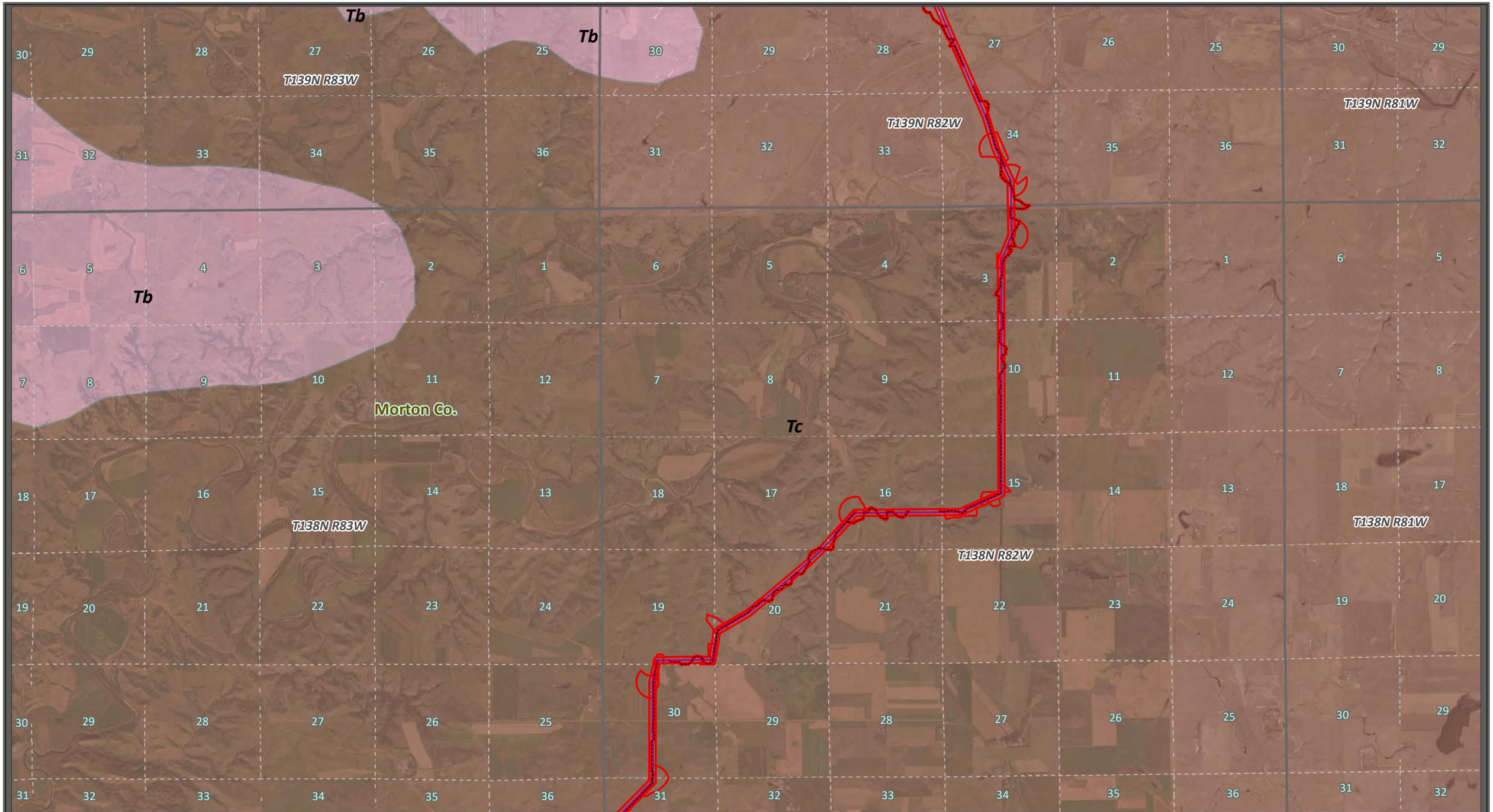
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NPC Paleontological Resources Monitoring and Mitigation Plan

Colstrip, MT to Bismarck, ND

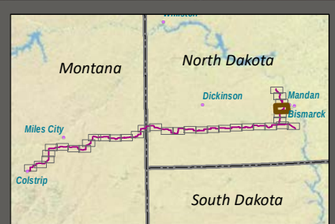
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- Paleo Survey Area
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- Preferred Access
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- PLSS Townships

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- Cannonball Fm, Fort Union Gp (Tc)



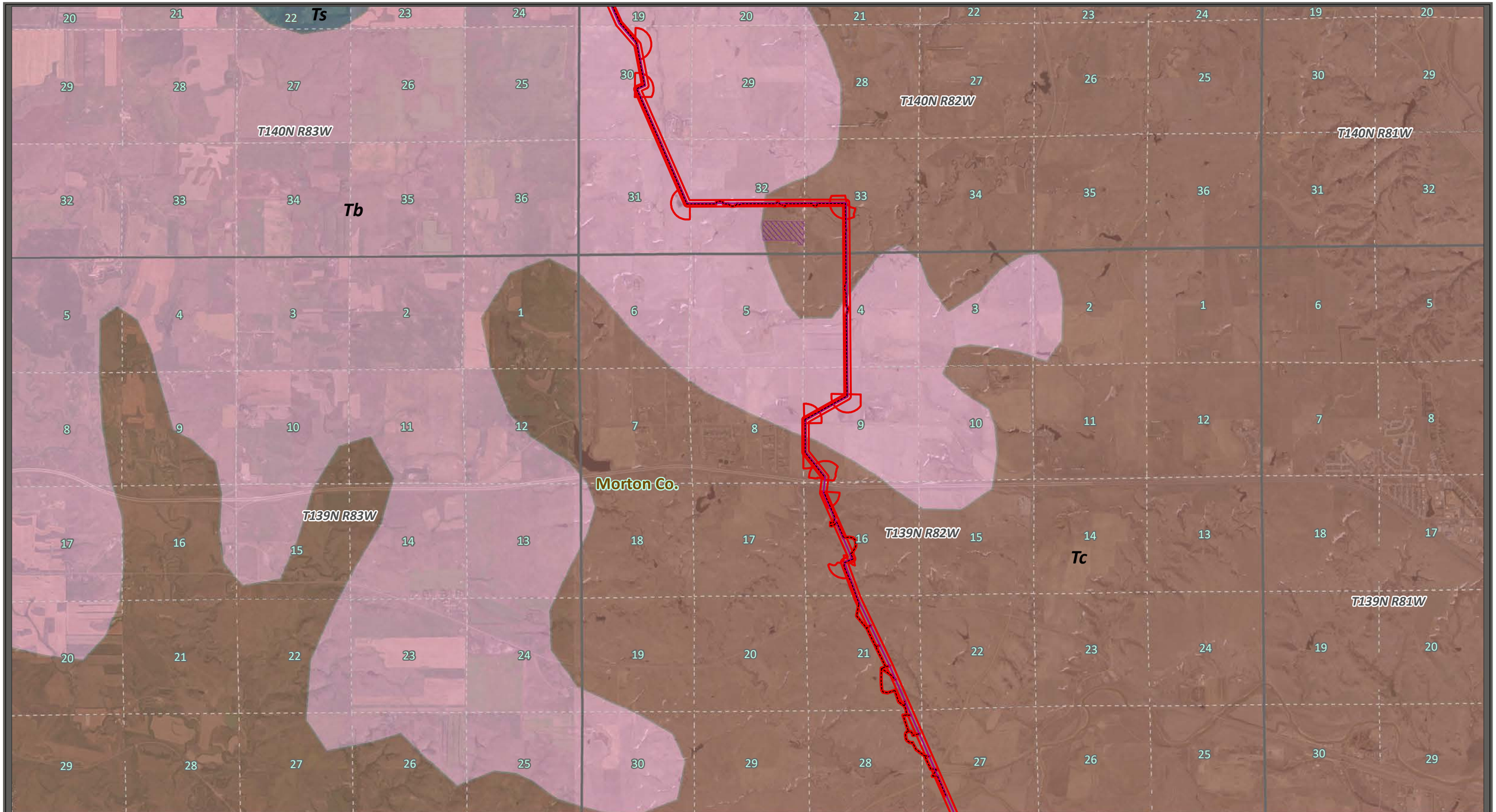
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NPC Paleontological Resources Monitoring and Mitigation Plan

Colstrip, MT to Bismarck, ND

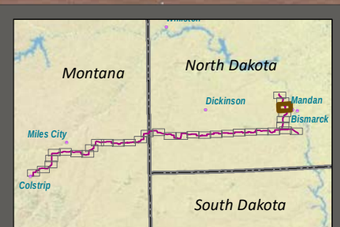
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- Paleo Survey Area
- Preferred Route
- Preferred Access
- Laydown Yard
- PLSS Sections
- PLSS Townships

Surface Geology (ND)

- Tongue River (Bullion Creek) Fm, Fort Union Gp (Tb)
- Cannonball Fm, Fort Union Gp (Tc)
- Sentinel Butte Formation, Fort Union Gp (Ts)



Geology Close-up

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Data Sources: KLJ, MT State Library, ND GIS, MDT, NDDOT, & MBMG

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NPC Paleontological Resources Monitoring and Mitigation Plan

Colstrip, MT to Bismarck, ND

T141N R83W
T141N R82W
T141N R81W
T140N R83W
T140N R82W
Oliver Co.
Morton Co.
Ts
Tb
Tc

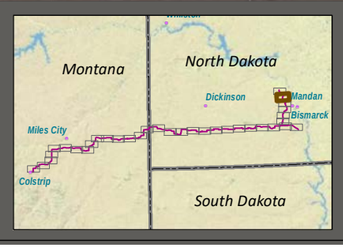
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- Preferred Access
- Laydown Yard
- County Line
- PLSS Sections
- PLSS Townships

Surface Geology (ND)

- Tongue River (Bullion Creek) Fm, Fort Union Gp (Tb)
- Cannonball Fm, Fort Union Gp (Tc)
- Sentinel Butte Formation, Fort Union Gp (Ts)



Geology Close-up

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Data Sources: KLJ, MT State Library, ND GIS, MDT, NDDOT, & MBMG

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KLJ

Ts

T142N R84W

T142N R83W

T142N R82W

Oliver Co.

Tb

T141N R84W

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Tc

NPC Paleontological Resources Monitoring and Mitigation Plan

Colstrip, MT to Bismarck, ND

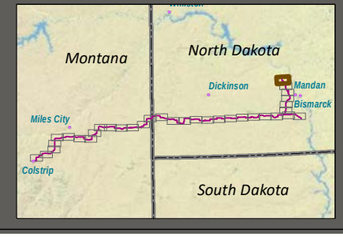
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- Paleo Survey Area
- Preferred Route
- Preferred Access
- PLSS Sections
- PLSS Townships

Surface Geology (ND)

- Tongue River (Bullion Creek) Fm, Fort Union Gp (Tb)
- Cannonball Fm, Fort Union Gp (Tc)
- Sentinel Butte Formation, Fort Union Gp (Ts)



Geology Close-up

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Orthophoto Source: ESRI World Imagery Layer

Data Sources: KLJ, MT State Library, ND GIS, MDT, NDDOT, & MBMG

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ATTACHMENT C

UNANATICIPATED DISCOVERY PLAN

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UNANTICIPATED DISCOVERY PLAN

Procedure to Follow After Discoveries Are Made

Unusual objects might be encountered during ground disturbing activities that might be fossils. In those cases, these steps should be followed. All project personnel should be instructed on procedures in the event an unanticipated paleontological resource discovery is found. All contact information for relevant personnel outlined in this procedure is found below.

Abbreviations: Paleontology Principal Investigator (PI or paleontologist), Paleontological Resources Monitor (PRM).

1. In the event that suspected paleontological resources are uncovered during ground disturbing activities, the Contractor will immediately notify the appropriate Project Coordinator. All undertaking-related activities, including vehicular traffic, within 100 feet of the discovery should immediately be halted. Fossils will be left in place untouched until further instructions are received from the PI.

2. The Project Coordinator will immediately notify the PRM (if present) and the PI for confirmation of the discovery.

3. If the discovery is confirmed and determined by the PI or PRM to be significant:

    a. For federal land(s), the PI will notify the relevant Federal Field Office Manager and/or Paleontology Coordinator.

    b. For discoveries on State land, the PI will notify the State Coordinator for consultation.

    c. If the discovery is on private land, the PI will notify the landowner. The PI will determine the significance of the paleontological discovery and the need for mitigation and make recommendations to the landowner.

4. If the discovery is not significant, the fossil(s) will be documented, a locality form completed, and left in place. The PI will authorize work to continue and follow-up with an email to the relevant federal or state agency.

5. Following the determination of fossil significance, the PI will do the following:
    a. If the find can be immediately salvaged and fully documented by the paleontologist, no additional action is required, and the salvage will be reported to the federal or state agency as part of the normal reporting, and the PI can authorize work to restart once salvage is completed.

    b. If the mitigation of the find will take more than half a day (4 hours) or an extended amount of time (more than 8 hours), the PI may need to develop and implement a separate mitigation plan to adequately document and excavate the paleontological resources. The PI will notify the relevant federal or state agency immediately upon discovery of a large or extensive fossil locality.

    c. The PI will submit the mitigation plan to the federal or state agency for review. The mitigation plan shall identify qualified personnel per federal and state regulations who will conduct mitigation activities. The federal or state agency will approve a mitigation plan within seven (7) business days of submittal.

d. If a mitigation plan is required, work will not resume within 100 feet of the paleontological find until the federal or state agency notifies the Project (in writing) that mitigation is complete, and activities can resume. The federal or state agency will issue a Notice to Proceed after review and approval of the draft report from the PI.

6. The PI will prepare a preliminary list of recovered fossils that conforms to the standards for paleontological resource reports. A copy of this report shall accompany the fossils to the approved curation facility (repository) or given to the landowner if found on private land. Final reports will be submitted to all applicable agencies as required.

7. Paleontological resources recovered from federal and state lands will be prepared for curation in accordance with standard professional paleontological techniques and curated at a designated federally approved repository.

CONTACT INFORMATION

Name	Title/Agency	Phone	E-mail
Federal – Bureau of Land Management			
Samantha Keeran	Miles City Office Paleontology Coordinator	406-233-2800	
Greg Liggett	MT/Dak State Office Paleontologist	406-896-5162	gliggett@blm.gov
Federal – USDA Forest Service			
Brian Kempenich	Dakota Prairie Grasslands, Minerals Program Coordinator	701-227-7847	Brian.kempenich@usda.gov
Federal – USDA Agricultural Research Service			
Jay Angerer	For Keogh Livestock & Range Research Laboratory, Research Leader	406-874-8222	Jay.angerer@usda.gov
William Ross	Administrative and Financial Management, Realty Specialist	970-492-7071	william.ross@usda.gov
State - Montana			
Patrick Rennie	DNRC Archaeologist	406-444-2882	prennie@mt.gov
State – North Dakota			
Clint Boyd	NDGS Paleontologist	701-328-8163	caboyd@nd.gov
Paleontological Resources Consultant (PI)			
TBD	Paleontologist		
Paleontological Resources Monitor(s) (PRM)			
TBD			
TBD			
Project Manager: Grid United			
Brian Dudeck	Grid United		Brian.dudeck@gridunited.com
Project Coordinator(s)			
TBD			
Contractors			
TBD			
TBD			

NORTH PLAINS CONNECTOR PROJECT

ATTACHMENT I

Plan for the Unanticipated Discovery of Contaminated Materials

NORTH PLAINS CONNECTOR

A Grid United Project

Draft Plan for the Unanticipated Discovery of Contaminated Materials

North Plains Connector LLC

GRID UNITED

January 2026

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LIST OF ATTACHMENTS

Attachment A Unanticipated Discovery of Contaminated Materials Report

ACRONYMS AND ABBREVIATIONS

BLM	Bureau of Land Management
CMRP	Construction Mitigation and Reclamation Plan
Contractor	construction contractor
EI	Environmental Inspector
Grid United	Grid United LLC
North Plains	North Plains Connector LLC
Plan	Draft Plan for the Unanticipated Discovery of Contaminated Materials
Project	North Plains Connector Project
USFS	U.S. Forest Service

1.0 INTRODUCTION

North Plains Connector LLC (North Plains), a Delaware limited liability company formed pursuant to Section 18-201 of the Delaware Limited Liability Company Act, has prepared this Draft Plan for the Unanticipated Discovery of Contaminated Materials (Plan) for the North Plains Connector Project (Project), a proposed interregional electric connector line. North Plains, an affiliate of Grid United LLC (Grid United), is a Houston, Texas-based company developing next generation energy infrastructure to power the future. Grid United is focused on the infrastructure needed to make the United States power grid more modern, efficient, reliable, and secure.

2.0 PLAN PURPOSE

This Plan outlines the standard procedures that North Plains will implement throughout Project construction to manage contaminated material encountered during Project work. This Plan will apply to material contaminated as a result of historical activities or events that occurred prior to the Project commencing.

North Plains has also developed a Construction Mitigation and Reclamation Plan (CMRP), which describes the construction procedures and mitigation measures North Plains will implement to reduce potential Project-related impacts. This Plan references the CMRP where additional guidance is provided therein.

3.0 REGULATORY COMPLIANCE

Construction activities associated with the Project are subject to various regulations regarding the management of contaminated materials, such as soils and groundwater. When assessing which mitigation measures are appropriate for a specific area, North Plains will adhere to this Plan and the applicable federal, state, and local permits, which condition or regulate contaminated materials management. Where permit and agency requirements differ, the more stringent requirements will be followed.

In the event of an unanticipated release, North Plains will follow the steps and notification requirements outlined in the Spill Prevention and Response Plan to maintain compliance with regulatory reporting requirements.

4.0 ROLES AND RESPONSIBILITIES

North Plains will select a third-party construction contractor to construct the Project. The construction contractor (Contractor) will be responsible for site preparation, installation of support structures, general Project construction, testing and commissioning, health and safety, and environmental compliance, including the contents of this Plan. However, North Plains is responsible for construction of all associated facilities.

For the duration of the Project construction, North Plains will implement and maintain the measures outlined in this Plan, the CMRP, and in all applicable Project permits.

4.1 ENVIRONMENTAL INSPECTION

North Plains will employ Environmental Inspectors (EIs) during the construction phase. Further information on EIs and their responsibilities is provided in the CMRP.

5.0 TRAINING

Before commencing construction, North Plains will organize environmental training sessions for relevant Project personnel. These training programs will cover relevant construction, restoration, and mitigation plans, including this Plan, along with any applicable permit conditions. Furthermore, North Plains will conduct large-group training sessions before each work crew begins construction, followed by periodic follow-up training for newly assigned personnel. Training will be documented, and training records will be saved with Project files.

6.0 CONTAMINATED MATERIALS DUE DILIGENCE

North Plains conducted desktop reviews of land crossed by the Project for records of previous contamination. This review did not identify any previous locations of contamination within the Project workspace. As the Project design is finalized, North Plains will continue to conduct reviews to identify any previously recorded sites that could impact, or be impacted by, the Project.

This Plan addresses the measures North Plains will take in the event previously undiscovered contaminated soil, water, or other material is detected during Project construction.

7.0 DISCOVERY OF CONTAMINATED MATERIALS

Throughout construction, North Plains, the Contractor and the EI(s) will observe work areas for signs of potential contamination, including:

- discoloration of soil;
- chemical-like odors from soil or water;
- oily sheens or puddles on soil or water;
- buried drums or waste such as garbage, debris, ash, medical waste, or clinical containers;
- discolored surface water; and
- differences in vegetation growth.

7.1 INITIAL RESPONSE PROCEDURES

If signs of potential contamination are encountered, North Plains will stop work in the area of the suspected contamination, restrict access to the suspected contamination site, and notify the EI or the Spill Coordinator (identified in the Spill Prevention and Response Plan), the applicable landowner, and the appropriate agency(ies). The EI or Spill Coordinator will complete the *Unanticipated Discovery of Contaminated Materials Report* form provided in Attachment A with the assistance of on-site personnel. This form will serve as a record of contaminated material discovery and documentation of the measures outlined in this Plan.

7.2 CONTAINMENT AND CHARACTERIZATION

North Plains will immediately initiate measures to avoid the spread of contaminated material until the type of contaminant, the concentration, potential exposure routes, and management options are evaluated and next steps determined. If signs of potential contamination are observed during construction, the following procedures will be implemented:

- Excavation will stop in the area of potential contamination and the EI, Construction Manager, and North Plains Environmental will be contacted immediately.
- If potentially contaminated soil will not be backfilled, the soil will be placed on an impervious surface or 10-mil polyethylene and covered with 10-mil polyethylene to prevent rainfall run-on and run-off.
- Contaminated materials will be stored in appropriately designated and approved areas away from wetlands, waterbodies, or stormwater conveyances until proper disposal by a licensed disposal contractor has been arranged. North Plains will not remove potentially contaminated soil from the site unless approved to do so by the applicable regulatory authority.
- Measures will be implemented to prevent precipitation run-off from entering open excavations containing contaminants, such as installing water bars to divert runoff from entering the excavation. Potentially contaminated groundwater will not be pumped from the excavation.
- Potentially contaminated soil and groundwater will be managed in accordance with applicable federal, state, and local laws and regulations.

After contaminated material is recovered, machinery used in the clean-up will be decontaminated, and recovered material will be treated as hazardous waste. Contaminated cleanup materials, such as absorbent pads, and vegetation will be disposed of in a similar manner. If necessary, characterization of contaminated materials will be performed either by the relevant agency or by North Plains under the guidance of the relevant agency using available material-specific standard operating procedures. North Plains may verify successful remediation through sampling and laboratory analysis of the contaminated area.

In general, North Plains will seek expert advice to properly clean up significantly contaminated sites. Clean up and disposal of contaminated materials is also discussed in the CMRP, the Hazardous Materials Management Plan, and the Spill Prevention and Response Plan.

8.0 NOTIFICATIONS

Should contamination be discovered during the Project, North Plains will contact the applicable land-managing and jurisdictional agencies outlined in Sections 8.1 and 8.2 consistent with applicable reporting regulations.

8.1 LAND-MANAGING AGENCY CONTACTS

Should contamination be discovered during the Project, North Plains will contact the applicable land-managing agency, listed below for guidance. Hazardous or deleterious substances or other

wastes contamination, regardless of size, will be reported to the applicable agency(ies). North Plains will provide the information identified in Attachment A to facilitate the agency's characterization of the contamination.

TABLE 8.1-1

Land-Managing Agency Contacts for Unanticipated Contamination Discovery

Project Area / Land-Managing Agency	Address	Phone Number
BUREAU OF LAND MANAGEMENT (BLM)-MANAGED LANDS		
BLM	111 Garryowen Road Miles City, MT 59301	(406) 896-5004
U.S. DEPARTMENT OF AGRICULTURE (USDA)-MANAGED LANDS		
USDA Agriculture Research Service -Fort Keogh	243 Fort Keogh Road Miles City, MT 59301	(406) 874-8200
NATIONAL FOREST SYSTEM-MANAGED LANDS		
U.S. Forest Service (USFS) Dakota Prairie Grasslands	2000 Miriam Circle Bismarck, ND 58501	(701) 989-7300
USFS Little Missouri National Grasslands Medora Ranger District	99 23rd Ave. W. Suite B Dickinson, ND 58601	(701) 227-7800
MONTANA STATE-MANAGED LANDS		
Montana Department of Natural Resources and Conservation	1539 Eleventh Ave. Helena, MT 59601	(406) 444-2074
NORTH DAKOTA STATE-MANAGED LANDS		
North Dakota Department of Trust Lands	1707 N 9th Street Bismarck, ND 58501	(701) 328-2800

8.2 JURISDICTIONAL CONTACTS

Should contamination be discovered during the Project, North Plains will contact the appropriate agency with jurisdiction, listed below for guidance. Hazardous or deleterious substances or other wastes contamination, regardless of size, will be reported to the applicable agency(ies). North Plains will provide the information identified in Attachment A to facilitate the agency's characterization of the contamination.

TABLE 8.2-1

Jurisdictional Contacts for Unanticipated Contamination Discovery

Agency	Address	Phone Number	Jurisdiction
USACE, Omaha District - Montana	P.O. Box 7032 Billings, MT 59103	(406) 657-5910	Contamination identified within jurisdictional wetlands and waterbodies in Montana
USACE, Omaha District - North Dakota	3319 University Drive Bismarck, ND 58504	(701) 255-0015	Contamination identified within jurisdictional wetlands and waterbodies in North Dakota
Montana Department of Environmental Quality	1520 E 6th Avenue Helena, MT 59601	(406) 444-2544	Contamination identified within the State of Montana
North Dakota Department of Environmental Quality	4201 Normandy Street Bismarck, ND 58503-1324	(701) 328-5150	Contamination identified within the State of North Dakota

9.0 AVOIDANCE AND RESPONSE PLANS

If a contaminant is found to pose an immediate threat to human health or safety, the area in which the contamination was discovered will be evacuated and secured until trained personnel are onsite, the appropriate notifications have been made as required by applicable law and permit conditions, and mitigation measures have been designed and implemented to allow the removal of the contaminant. Contaminated soil will not be returned to an excavation unless written approval is obtained by the appropriate regulatory agency and by North Plains.

If the contaminant does not pose an immediate health or safety concern and will not interfere with construction activities, a written response plan for conducting construction activities within the contaminated area will be prepared. North Plains may excavate test pits or borings to evaluate the extent of the contamination within the Project workspace. Depending on the nature and extent of contaminated media, site-specific measures may be identified to complete construction without impacting the contaminated area, or complete construction without facilitating conveyance of the hazardous materials outside the boundary of the previously contaminated area. These measures may include:

- storing excavated soil on an impervious surface or a sheet of 10-mil polyethylene;
- avoiding water withdrawals from excavations;
- removing and disposing contaminated media at an approved disposal facility;
- replacing contaminated soil with clean backfill; or
- implementing staged withdrawal and disposal of standing water from excavations during backfilling to avoid overflow and runoff.

10.0 PLAN REVISIONS

TABLE 10.0-1

Plan Revisions

Revision Number	Revision Type(s)	Revision Date
Rev 0	Initial Plan draft.	February 2025
Rev 1	Updated language for consistency across all project plans.	August 2025
Rev 2	Updated language for consistency across all project plans.	January 2026

ATTACHMENT A

UNANTICIPATED DISCOVERY OF CONTAMINATED MATERIALS REPORT

NORTH PLAINS CONNECTOR

A Grid United Project

Unanticipated Discovery of Contaminated Materials Report			
Date		Time	
Location Information			
Site Name/Milepost			
GPS Coordinates			
Other Location Information			
Property Owner			
Observations			
Depth			
Odor			
Color			
Physical State			

Notification Record

Date	Time	Agency	Contact	Notes

NORTH PLAINS CONNECTOR PROJECT

ATTACHMENT J

Spill Prevention and Response Plan

NORTH PLAINS CONNECTOR

A Grid United Project

Draft Spill Prevention and Response Plan

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North Plains Connector LLC

GRID UNITED

January 2026

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Attachment B Emergency Response Contractors; Disposal And Treatment Facilities

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ACRONYMS AND ABBREVIATIONS

BLM	Bureau of Land Management
CFR	Code of Federal Regulations
CMRP	Construction, Mitigation, and Restoration Plan
Contractor	construction contractor
DOT	Department of Transportation
Grid United	Grid United LLC
MDEQ	Montana Department of Environmental Quality
MDES	Montana Department of Emergency Services
NDDEQ	North Dakota Department of Environmental Quality
North Plains	North Plains Connector LLC
NRC	National Response Center
Plan	Draft Spill Prevention and Response Plan
Project	North Plains Connector Project
USDA	U.S. Department of Agriculture

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1.0 INTRODUCTION

North Plains Connector LLC (North Plains), a Delaware limited liability company formed pursuant to Section 18-201 of the Delaware Limited Liability Company Act, has prepared this Draft Spill Prevention and Response Plan (Plan) for the North Plains Connector Project (Project), a proposed interregional electric connector line. North Plains, an affiliate of Grid United LLC (Grid United), is a Houston, Texas-based company developing next generation energy infrastructure to power the future. Grid United is focused on the infrastructure needed to make the United States' power grid more modern, efficient, reliable, and secure.

2.0 PLAN PURPOSE

This Plan was developed to provide measures that will be used by North Plains to prevent, control, and respond to spills of substances that may affect surface waters. This Plan also discusses proper storage and handling procedures of hazardous substances.

Based on Project design, the development of a Spill Prevention, Control, and Countermeasure Plan, required for facilities that store more than 1,320 gallons of petroleum products, is not applicable. Should Project activities require storage of more than 1,320 gallons of petroleum products in containers with capacities of 55 gallons or greater, North Plains will develop a Spill Prevention, Control, and Countermeasure Plan in accordance with Title 40 Code of Federal Regulations (CFR) Part 112.

North Plains has also developed a Construction Mitigation and Reclamation Plan (CMRP), which describes the construction procedures and mitigation measures North Plains will implement to reduce potential Project-related impacts. This Plan references the CMRP where additional guidance is provided therein.

3.0 REGULATORY COMPLIANCE

North Plains will comply with all permit and land-managing agency requirements with regard to the prevention of and response to spills of hazardous substances. Federal- and state-specific notification and reporting requirements are discussed in greater detail in Section 9.0 of this Plan. Where requirements differ, the more stringent will be followed.

4.0 ROLES AND RESPONSIBILITIES

North Plains will select a third-party construction contractor to construct the Project. The construction contractor (Contractor) will be responsible for site preparation, installation of support structures, general Project construction, testing and commissioning, health and safety, and environmental compliance, to include hazardous materials management. However, North Plains is responsible for construction of all associated facilities.

For the duration of the Project construction, North Plains will implement and maintain the measures outlined in this Plan, the CMRP, and in all applicable Project permits.

North Plains will appoint a Spill Coordinator who will be responsible for coordinating crews for spill cleanup, investigating spills, and the completion of spill report forms. The Spill Coordinator will be responsible for reporting spills to North Plains.

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4.1 ENVIRONMENTAL INSPECTION

North Plains will employ Environmental Inspectors during the construction phase. Further information on Environmental Inspectors and their responsibilities is provided in the CMRP.

5.0 TRAINING

Before commencing construction, North Plains will organize environmental training sessions for relevant Project personnel. These training programs will cover relevant construction, restoration, and mitigation plans, including this Plan, along with any applicable permit conditions. Furthermore, North Plains will conduct large-group training sessions before each work crew begins construction, followed by periodic follow-up training for newly assigned personnel. Training will be documented, and training records will be saved with Project files.

North Plains will provide training to all personnel on the appropriate methods to prevent, control, and respond to spills. North Plains will train personnel in the proper management of those materials under normal operating circumstances and under emergency circumstances. At a minimum, training will cover:

- contents of this Spill Response and Prevention Plan;
- general Project operations;
- liquids and waste materials storage;
- secondary containment;
- safety and health considerations;
- operation and maintenance of equipment to prevent spills;
- spill response and recovery procedures; and
- reporting procedures.

6.0 GENERAL PETROLEUM PRODUCTS, QUANTITIES, AND STORAGE

Equipment used to construct the Project will require the use of various petroleum products. Typical fuels used for the Project will include diesel fuel and gasoline; typical lubricants will include engine oil, transmission/drive train oil, hydraulic oil, gear oil, and general lubricating grease; and typical coolants will include glycols, such as anti-freeze.

The quantity of liquids stored onsite will vary throughout the life of the Project. North Plains will store liquids in bulk or retail packaging at contractor yards, which will be transported in trucks to the Project workspace as needed. Licensed operators will use fuel trucks to transport large quantities of fuel and smaller quantities of fuel may be transported via pickup trucks and stored temporarily in the Project workspace along the right-of-way.

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6.1 FUEL, LUBRICANT, AND HAZARDOUS MATERIAL STORAGE AREAS

Storage of containers will be conducted in accordance with U.S. Environmental Policy Agency regulations 40 CFR Part 112, 40 CFR Part 261, and 40 CFR Part 265.170.

- All petroleum products required for fueling and maintenance of construction equipment will be stored in designated, well maintained, and secured locations to minimize the environmental and safety impacts associated with spills of fuel, lubricants, or hazardous materials.

- Areas in which petroleum products are stored and which have the potential to be spilled off site will be designed to contain spills. Appropriate secondary containment will include dikes, berms, or retaining walls sufficiently impermeable to contain spill oils.

- All containers and drums will be stored in such a way to avoid contact with the ground and standing water, be protected to prevent rupture or leakage, and to facilitate inspection.

- Containers used to store liquids will be in good condition, kept closed except when adding or emptying waste, and will not contain waste incompatible with the containers.

- Fuels, lubricants, waste oil, and any other regulated substances will be stored in aboveground tanks only. Storage tanks and containers will conform to all applicable industry codes, such as the National Fire Protection Association and Unified Facilities Criteria and will be appropriately labelled at all times.

- Secondary containment will be in place for all fuel, lubricant, and waste oil storage, as well as dewatering pumps. Secondary containment structures will provide a minimum containment volume equal to 10 percent of the aggregate volume of all containers or the total volume of the largest container, whichever is greater, plus one foot of freeboard.

- Secondary containment will be inspected regularly for evidence of spill. If visual inspection of the secondary containment structure confirms no spill has occurred, the accumulated water will be drawn off and discharged in a surrounding upland area.

    - If evidence of a spill is observed, such as a sheen on the water or presence of odor, the accumulated water will be pumped into drum, tank, or truck storage for offsite disposal in accordance with local, state, and federal regulations.

- Tools and materials appropriate to stop the flow of leaking containers and piping will be kept on-site. Equipment may include plugs, patches, clamps, and metal screws with rubber washers. Fully stocked spill kits will be located at all fuel storage, loading, and unloading areas.

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- Appropriate signage, such as "Fuel Storage Area – No smoking within 50 feet," will be installed at all fuel storage areas.

- Hazardous materials will be stored in designated locations only. Fuel, lubricants, or hazardous materials will be stored at least 100 feet from a waterbody, wetland boundary, spring, environmentally sensitive area, or within a municipal watershed. Hazardous materials will not be stored in surface water conveyances, or within the 100-year floodplain.

- North Plains will also prohibit storage of hazardous materials, chemicals, fuels, lubricating oils, and other petroleum products within 200 feet of active private water wells and identified public or municipal water wells.

- Construction equipment will be removed from wetlands and parked a minimum of 100 feet away from surface waters, including waterbodies, wetlands, and springs, at the end of each workday. Where no accessible or suitable upland areas are available, and upon approval from North Plains, stationary equipment located within 100 feet of a surface water or conveyance will be placed within secondary containment appropriate for the largest volume contained within the equipment.

- Washing of construction vehicles, such as concrete trucks, will be allowed only in designated areas at least 100 feet from a waterbody, wetland boundary, spring, active private water well and identified public or municipal water well, environmentally sensitive area, or within a municipal watershed. Washing areas will be contained with berms or other barriers to prevent transport of wastewater or sediments into surface waters or stormwater conveyances. Waste concrete material will be removed and properly disposed of once it has hardened.

- Refueling or use of other hazardous liquids may occur within the setback areas identified above only if the Environmental Inspector has determined that there is no reasonable alternative, and the contractor has taken appropriate steps (including secondary containment structures) to prevent spills.

- No hazardous or potentially hazardous materials, other than essential materials such as coating or sandblasting media, gasoline, diesel, or standard lubricants will be transported into the Project workspace without North Plains' coordination and approval.

    - Hazardous waste containers and drums will be separated and protected from incompatible materials by means of dike, berm, retaining wall or other approved means. Incompatible materials are wastes which, when mixed, can produce effects which are harmful to human health and the environment.

6.2 EQUIPMENT MAINTENANCE

The following measures will be implemented during equipment maintenance:

- North Plains will inspect equipment daily to ensure it is free of leaks prior to use on the Project, and prior to entering or working in or near waterbodies or wetlands.

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- During construction, North Plains will regularly inspect hoses, pipes, valves, and tanks to ensure equipment is free of leaks. Any equipment leaking or in need of repair will be immediately removed from service and repaired, prior to resuming use of the equipment. Containment and absorbent materials will be placed under the equipment until the leak can be repaired.

- Equipment that requires extensive repairs will be removed from the Project workspace until the repairs are completed. If equipment is unable to be moved, the Contractor, in collaboration with the Spill Coordinator and inspection and monitoring staff, will develop a protection plan to be implemented until repairs have been completed.

- Precautionary measures such as placement of absorbent pads or drip pans beneath equipment will be implemented when performing equipment maintenance or repair activities.

- Maintenance, refueling, and lubrication of construction equipment will not be allowed within 100 feet of a waterbody, wetland boundary, spring, active private water well and identified public or municipal water well, environmentally sensitive area, or within a municipal watershed.

- Refueling or use of other hazardous liquids may occur within the setback areas identified above only if the Environmental Inspector has determined that there is no reasonable alternative, and the contractor has taken appropriate steps (including secondary containment structures) to prevent spills.

- Equipment maintenance wastes, including used oils and other fluids, will be managed by properly trained personnel. All equipment maintenance waste will be collected in labeled containers appropriate for the contents, stored within designated areas, and disposed of in accordance with this Plan, the CMRP, the Hazardous Materials and Waste Management Plan, and local, state, and federal regulations. All equipment maintenance wastes will be properly disposed of at facilities permitted to receive hydrocarbon waste.

- North Plains will retain all transport and disposal manifests and records.

6.3 INSPECTIONS

North Plains will regularly inspect spill response equipment to ensure spill kits are fully stocked at all times and will replenish spill response materials and equipment, as needed. Inspection and monitoring staff will conduct inspections of oil-containing equipment at least weekly, and all equipment will be inspected prior to its use. These inspections will include the following items below, at a minimum and as applicable:

- container integrity;

- secondary containment efficacy;

- condition of hoses, piping, valves, and seals;

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- condition of piping and piping support;
- condition of valve locking mechanisms;
- fluid levels;
- fluids gauges; and
- leaks of any type or stains and accumulated free product on the ground.

Inspections will be recorded electronically or on a paper spill report form, included as Attachment A.

7.0 SPILL PREVENTION MEASURES

The following sections describe various spill prevention measures that North Plains will implement to reduce the potential for a spill to occur. Measures include conducting oil transfer operations in accordance with applicable oil pollution prevention and safety requirements, as well as conducting periodic inspections and personnel training.

North Plains will ensure environmental protection measures are applied Project-wide and will address the concerns associated with spills. These measures will be subject to change and will be finalized after discussions with agencies and as the Project progresses.

7.1 SECONDARY CONTAINMENT

All equipment containing hazardous materials with the potential to discharge to water bodies will be placed in secondary containment structures that will provide a minimum containment volume equal to 10 percent of the aggregate volume of all containers or the total volume of the largest container, whichever is greater, plus one foot of freeboard. All personnel will follow oil loading and unloading procedures developed by North Plains and in accordance with land-managing agency requirements, and at all times have spill response materials on hand for immediate response to a spill, should one occur.

7.2 REFUELING

North Plains will ensure that fuel loading and unloading operations are conducted in accordance with the U.S. Department of Transportation (DOT) requirements and regulations, as well as all applicable agency and permit conditions and requirements. North Plains will maintain readily available absorbent materials or other spill containment materials onsite at all times. All trucks transporting fuel to onsite equipment will travel only on approved access roads. Additional fueling best management practices will be implemented, including the following:

- Only authorized personnel will dispense fuels and all refueling will be conducted during daylight hours, unless otherwise approved by North Plains.
- Personnel will conduct fuel transfer operations through aboveground unloading hoses only, which will be supported and designed to minimize abrasion during transfer operations at all times.

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- Fuel dispensing equipment, such as portable gas cans, nozzles, and hoses will be of the appropriate type for the fuel and equipment.

- North Plains will take appropriate measures during refueling operations to reduce the risk of a spill, including placing an absorbent pad or a secondary containment structure under the fuel nozzle during fueling and ensuring fuel tanks are not overfilled. Refueling activities will be observed by designated personnel at all times.

- Authorized personnel will remain present at all times during fueling operations. If both ends of the fueling hose are not visible by one person, a second individual will be positioned at the concealed end.

- Within large wetlands where no upland site is available for refueling, auxiliary fuel tanks on construction equipment will be used.

- Refueling of construction equipment will not be allowed within 100 feet of a waterbody, wetland boundary, spring, active private water well and identified public or municipal water well, environmentally sensitive area, or within a municipal watershed.

- If conditions require that refueling cannot occur at the setback distances listed above, North Plains will consult with the inspection and monitoring staff to determine necessary emergency equipment that will be in place and emergency response actions that will be conducted prior to refueling activities.

    - North Plains will, at a minimum, consider the environmental and safety risks of relocating equipment to a refueling area against risks involved with refueling *in situ*.

    - If requested by North Plains, the Environmental Inspector will evaluate site-specific conditions and may require implementation of additional precautionary measures prior to approval of refueling within the restricted zones.

North Plains will take the following additional measures to prevent spills prior to, during, and after unloading:

- Prior to unloading: North Plains will verify fuel levels, double check connections, and examine hoses for integrity. North Plains will post signs warning all vehicular traffic operating in the transfer area to use caution.

- During unloading: Only trained personnel authorized to conduct fuel transfers will oversee unloading activities. Qualified and authorized personnel will continually monitor the transfer and pumping system for leaks, as well as the fuel level in the receiving container to prevent overfilling.

- After unloading**:** Personnel conducting fueling operations will completely drain and disconnect the transfer hose and evaluate all tank truck drains and connections for proper closure prior to vehicle departure.

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To prevent vehicles from departing before disconnection of the transfer hose, spill prevention techniques will include:

- installation of barriers or warning signs to prevent vehicles from leaving before unloading has been completed, and
- installation of wheel chocks to prevent vehicle movement during unloading Chocks will remain in place until fueling operations have been deemed complete.

8.0 SPILL RESPONSE MEASURES

North Plains will comply with all applicable local, state, and federal regulations regarding emergency response operations including, but not limited to, spill control, cleanup, notification, and disposal procedures. North Plains will ensure all personnel onsite are familiar with the procedures in this Plan, and applicable permits and agency conditions.

North Plains will commit the personnel, equipment, and materials necessary to respond to and control a spill of any nature. North Plains will submit a list of spill response contractors and commercial disposal facilities prior to commencing construction (see Attachment B). In the event of a spill, North Plains will adhere to all applicable local, state, and federal regulations for spill cleanup and reporting. State and federal reporting requirements are discussed in Section 9.0 of this Plan.

Upon discovery of a spill, North Plains will make all reasonable efforts to immediately control the source of the discharge and contain the spilled material. Responding personnel will immediately place absorbent materials, with efforts directed to limiting the area of contamination. All reasonable efforts will be made to prevent any spill from reaching wetlands, waterbodies, or other surface waters. If a spill reaches surface waters, North Plains will immediately install straw bales, booms, and absorbent materials to contain the spilled material and reduce further migration of the spilled material. In the event of a spill that reaches surface waters, the spill response contractors provided by North Plains will be called to assist with cleanup efforts.

Clean up activities will be initiated as soon as the spill has been contained. North Plains will collect and contain all spilled material, contaminated soil, and absorbent material(s) in appropriate, lidded, and labeled containers for disposal in accordance with federal, state, and local regulations.

8.1 SPILL RESPONSE EQUIPMENT

North Plains will maintain spill kits containing a sufficient quantity of absorbent and barrier materials to adequately contain and recover potential spills. Spill kits will include, but will not be limited to, absorbent pads, commercial absorbent materials, spill containment barriers, plastic bags and/or sheeting, skimmer pumps, holding tanks, and shovels. This equipment will be located near fuel storage areas and other locations as applicable to be readily available to all personnel in the event of a spill. North Plains will maintain Safety Data Sheets onsite for diesel, gasoline, lubrication oil, and any other hazardous materials used on the Project at each location where these materials are stored.

Additional best management practices that will be followed include:

- All personnel will be aware of the locations of spill response equipment.

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- Each construction crew will have on hand sufficient supplies of absorbent materials, barrier material, and U.S. DOT-approved containers to allow for expedient containment and recovery of any spill which may occur.

- Fuel trucks transporting fuel to on-site construction equipment will travel only on approved access roads and have spill containment materials on hand which are adequate to control foreseeable spills.

- All fuel nozzles will be equipped with a functional, automatic shut-off and over-flow alarm.

- Suitable plastic lining materials will be available for placement below and on top of temporarily stored contaminated soils and materials.

8.2 IMMEDIATE CONTAINMENT AND RESPONSE

Controlling spills will be accomplished by stopping or isolating the source of the spill, using the required response materials to contain the spill and, if warranted, cessation of operations within the affected area(s).

Immediately upon discovery of the spill of any fuel, oil, hazardous material, or other regulated substance, the person discovering the situation will:

- identify the source of the spill;

- immediately deploy absorbent materials and initiate actions to contain the material that has spilled;

- initiate action to eliminate the source of the spill to the maximum extent that is safely possible; and

- notify the Spill Coordinator and/or inspection staff and provide them with the:

    - location and cause of the spill;

    - the type of material spilled; and,

    - whether the spill has reached or is likely to reach any surface water.

<u>Personnel will only respond to a spill if they have adequate training to do so safely.</u>

Upon learning of a spill or a potential spill the Spill Coordinator will:

- Obtain as much information as possible as to the nature and size of the spill and record it on a Construction Spill Report Form, included in Attachment A.

- Assess the situation and determine the need for further action, which may include mobilizing additional personnel and equipment for containment and/or cleanup appropriate to the extent of the spill.

- Direct subsequent containment activities or assign needed responsibilities to other personnel.

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- If it is determined that a spill cannot be mitigated due to the scope of on-site equipment and personnel, the Spill Coordinator will immediately notify the Contractor that emergency response contractors are needed to contain and/or clean up the spill. Available emergency response contractors are identified in Attachment B of this Plan.

- The Spill Coordinator will assist North Plains to ensure that all response actions are consistent with the requirements of this Plan, the CMRP, as well as permit conditions and land-managing agency requirement.

As soon as possible after initiating spill control and cleanup activities, North Plains will determine if the spill is reportable based on federal or state regulations (see Section 9.0). Any amount of any material in such quantity with a reasonable potential to injure or be detrimental to human health, animal or plant life, property, or unreasonably interfere with public welfare or use of property will be reported. In addition to current spills, the discovery of evidence of previous unauthorized discharges, such as contaminated soil or groundwater, will also be reported.

8.2.1 Spills Occurring in Upland Areas

In addition to the above measures, the following procedures will be followed for any spill occurring in an upland area:

- If a spill occurs during refueling operations, the operation will be stopped until the spill can be controlled, and the incident mitigated.

- Absorbent materials will be placed over the spill to minimize spreading and to reduce infiltration into the soil.

- If free-standing fluid is present, fluids will be skimmed to the extent possible and transferred into U.S. DOT-approved containers.

- Flowing spills will be contained and/or absorbed before reaching sensitive resource areas such as surface waters or wetlands. Berms, booms, or wattles will be placed around the perimeter of the spill, as needed.

- All storm drains within the area that may be impacted by the spill will be plugged.

- If needed, berms or ditches will be constructed to stop the spill's flow.

- North Plains will ensure spilled material, contaminated soil, and other materials associated with a spill, such as used absorbent pads, are treated, collected, contained, and disposed of in accordance with all applicable federal, state, and local agency requirements.

8.2.2 Spills Occurring in Wetlands or Waterbodies

In addition to the above measures, the following conditions will apply if a spill occurs near or into a stream, wetland, or other waterbody, regardless of the size of the spill:

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- For spills into streams, lakes, or other waterbodies containing standing or flowing water, regardless of size, the Spill Coordinator will immediately notify North Plains of the incident.

- For spills within standing water, sorbent booms and pads will be used to contain and recover spilled materials. In addition, other spill response materials and equipment will be on hand, as appropriate, for each waterbody, and used to contain and recover foreseeable spills, such as containment booms, skimmer pumps, holding tanks, boats, and other equipment.

- If contaminated soils are present in wetlands, as much of the spill as possible will be contained and the appropriate agencies will be contacted before excavating the soil.

- Unless the applicable land-managing agency deems otherwise, contaminated soil will be excavated and temporarily placed on plastic sheeting in a bermed area, a minimum of 100 feet away from the wetland. Contaminated soils will be covered with plastic sheeting while being stored temporarily and properly disposed of as soon as possible, in accordance with this Plan and local, state, and federal regulations.

- Once a spill is contained, cleanup activities will begin immediately. All spilled material, contaminated soil, and absorbent material will be picked up and contained for disposal. In the event of a large spill or a spill that migrates into surface waters, waste cleanup specialists will be called to assist in cleanup efforts.

9.0 NOTIFICATIONS AND REPORTING

9.1 EMERGENCY CONTACTS

Any spill of any material in such quantity that may, with reasonable probability, injure or be detrimental to human health, animal, plant life, property, or may unreasonably interfere with public welfare or property use will be reported. This includes chemical, biohazardous, petroleum-product, and sewage spills and incidents, as well as non-Project-related contaminated soil or groundwater that is discovered during Project activities. As soon as possible after beginning spill control and cleanup activities, North Plains will determine if the spill is reportable and, if so, will notify the appropriate authorities.

This Plan provides the federal and state contacts that North Plains will notify in the event of a reportable hazardous material spill. For spills on state and federal lands, North Plains will document the spill and provide the documentation to the land management agency's authorized officer. North Plains will also note the cause of the spill and note corrective measures taken to prevent another spill from occurring.

9.1.1 FEDERAL

The Clean Water Act of 1973 and Oil Protection Act of 1990 require operators to notify the National Response Center (NRC) at (800) 424-8802 or (202) 267-2675 of oil spills as soon as they are discovered or within 15 minutes of discovery. This requirement applies to all discharges that reach waters of the U.S. or adjoining shorelines and

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- cause a sheen;
- violate applicable water quality standards; or
- cause a sludge or emulsion beneath the surface of the water or upon adjoining shorelines.

The report will include the following:

- name, organization, and telephone number;
- name and address of the party responsible for the incident;
- date and time of the incident;
- location of the incident;
- source and cause of the discharge;
- types of material(s) discharged;
- quantity of materials discharged;
- danger or threat posed by the discharge;
- number and types of injuries, if any;
- weather conditions at the incident location; and
- other information to help emergency personnel respond to the incident.

9.1.2 MONTANA

North Plains will report petroleum spills greater than 25 gallons to Montana Department of Environmental Quality (MDEQ) within 24 hours of being detected as required by Administrative Rules of Montana 17.56 Subchapter 5. The Contractor will contain and clean up petroleum spills less than 25 gallons in volume within 24 hours. If cleanup cannot be completed within 24 hours, North Plains will report the spill to the MDEQ leak line for reporting spills at (800) 457-0568. Outside normal business hours, North Plains will report spills to the Montana Disaster and Emergency Services (MDES) Duty Officer 24-hour phone number at (406) 324-4777. Spills will be reported to a live person and voice mails will not be considered adequate notification.

In addition to the following reporting requirements, notification may be required by permits issued by local, state, or federal government agencies or as conditions required by land-managing agencies. Notification to the NRC may also be required at (800) 424-8802; MDES or MDEQ will not be responsible for notifying the NRC.

The following types of spills will be reported:

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- releases or spills of hazardous substances in amounts that meet or exceed the reportable quantities in 40 CFR Part 302;
- spills, overfills, and suspected releases from underground storage tanks and petroleum storage tanks;
- releases or spills of any materials that would lower the quality of groundwater below water quality standards;
- spills that enter or may enter state water or a drainage that leads directly to surface water;
- spills that cause sludge or emulsion beneath the surface of the water, stream banks or shorelines;
- spills that cause a film, sheen, or change the color of the water, stream banks or shorelines; and
- spills of 25 gallons or more of any petroleum product such as crude oil, gasoline, diesel fuel, aviation fuel, asphalt, road oil, kerosene, fuel oil; produced water, injection water, salt water or combination thereof; and derivatives of mineral, animal, or vegetable oils.

Should a spill occur on Bureau of Land Management (BLM) or U.S. Department of Agriculture (USDA) Agricultural Research Service lands in Montana, North Plains will contact the applicable office, listed below, for guidance.

TABLE 9.1.2-1

Contact Information for Reporting Spills on BLM or USDA Land in Montana

Land-Managing Agency	Address	Phone Number
BLM	111 Garryowen Road Miles City, MT 59301	(406) 896-5004
USDA Agricultural Research Service - Fort Keogh	243 Fort Keogh Road Miles City, MT 59301	(406) 874-8200
USDA Rosebud County Farm Service Agency	270 S 3rd Ave Forsyth, MT 59327	(406) 346-7333 ext. 2
USDA Custer County Farm Service Agency	3120 Valley Drive E Miles City, MT 59301	(406) 232-7905 ext. 2
USDA Fallon County Farm Service Agency	141 S 4th St W Baker, MT 59313	(406) 778-2238 ext. 2

9.1.3 NORTH DAKOTA

North Plains will ensure that all releases or spills of hazardous substances or other wastes, regardless of size, are immediately and properly managed, contained, and removed. North Plains will notify the North Dakota Department of Environmental Quality (NDDEQ) of a spill of any size that could enter a waterway, such as a stream, river, pond, lake, shoreline, wetland, or ditch.

The following types of spills will be reported:

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- releases or spills of hazardous substances in amounts that meet or exceed the reportable quantities in 40 CFR Part 302;
- spills, overfills, and suspected releases from underground storage tanks and petroleum storage tanks;
- releases or spills of any materials that would lower the quality of groundwater below water quality standards; and
- any spill or discharge of liquid or solid waste which may cause pollution of waters of the State.

North Plains will report all releases and spills immediately to NDDEQ-Environmental Incident Reporting at:

- Emergency: (800) 472-2121 (State Radio 24-Hour Hotline - valid only within North Dakota).
- Non-emergency: (701) 328-8020 or (701) 328-5210, Monday-Friday 9-5:00.

In addition, North Plains will follow the initial notification by submitting a Hazardous Materials Spill Report form at https://www.dmr.nd.gov/dmr/oilgas/spills (NDDEQ, 2024). As soon as safe conditions allow after a hazardous materials spill, North Plains will provide a written follow-up spill report to NDDEQ.

This report will include:

- actions taken to respond to and contain the spill;
- any known or anticipated acute or chronic health risks associated with the spill; and
- advice regarding medical attention necessary for exposed individuals, if needed.

Should a spill occur on National Forest System lands in North Dakota, North Plains will contact the applicable office, listed below, for guidance.

TABLE 9.1.3-1

Contact List for National Forest System Lands

Land-Managing Agency	Address	Phone Number
USDA U.S. Forest Service Dakota Prairie Grasslands	2000 Miriam Circle Bismarck, ND 58501	(701) 989-7300
USDA U.S. Forest Service Little Missouri National Grasslands Medora Ranger District	99 23rd Ave. W. Suite B Dickinson, ND 58601	(701) 227-7800

10.0 POST-SPILL CLEAN UP REQUIREMENTS

10.1 GENERAL REQUIREMENTS

The following general measures will be implemented during site clean-up after a spill:

- All equipment will be wiped down with absorbent pads or other oil-absorbing material where fuel, lubricants, or other materials have spilled.
- All impacted soil within the area of spill will be excavated, stored, and disposed of in accordance with local, state, and federal regulations.
- Excavated areas will be restored to original conditions by back-filling with clean soil.
- Cleanup of the spill area(s) will be completed within 48 hours after notification or discovery of the spill.

11.0 RECORDKEEPING

The following recordkeeping measures will be implemented after a spill:

- North Plains will complete a spill report, either in paper or electronic format.
- North Plains will be responsible for all waste identification and characterization, handling, labeling, storage, manifesting, transportation, record-keeping, and disposal in accordance with all applicable federal, state, and local regulations and ordinances.
- North Plains will maintain copies of sample results, shipping manifests, chain-of-custodies, and bills-of-lading for wastes transported for disposal.

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12.0 PLAN REVISIONS

TABLE 12.0-1

Plan Revisions

Revision Number	Revision Type(s)	Revision Date
Rev 0	Initial draft plan.	February 2025
Rev 1	Revised per North Plains comments. Updated language for consistency across all project plans.	August 2025
Rev 2	Updated language for consistency across all project plans.	January 2026

13.0 REFERENCES

North Dakota Department of Environmental Quality. 2024. Unified Spill Reporting. Available online at: https://www.spill.nd.gov/. Accessed June 5, 2024.

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ATTACHMENT A

CONSTRUCTION SPILL REPORT FORM

APPENDIX A

CONSTRUCTION SPILL REPORT FORM

If a spill is below the reportable quantity complete only Section 1.

If the spill exceeds the reportable quantity complete both Sections 1 and 2.

Section 1 (All Spills)

Facility name:_____ District/region:_____

Facility phone number:_____

Facility address:_____

Date of spill:_____ Date of spill discovery:_____

Time of spill:_____ Time of spill discovery:_____

Location of release: _____ County/State_____

Type of material spilled and manufacturer's name:_____

Substance released to (check all that apply): Land__ Air__ Water__ Secondary Containment__

Estimated volume of spill: _____ Estimated volume recovered:_____

Brief description of the incident including cause and corrective action:_____

_____

_____

Person completing form (Contact):_____ Date:__

Contact's phone number:_____

Section 2 (Reportable Spills)

Facility type (well, tank, flow line, pit):_____

Spill location: address:_____

County:_____ Coordinates: Latitude_____ Longitude_____

PLSS: Township_____Range_____ Section_____

Additional location details:_____

_____

Spill medium (pavement, sandy soil, water, etc.):_____

Topography and surface conditions of spill site:_____

Soil/Geology description:_____

Weather conditions: Wind Direction ___ Wind Speed___ Temperature___ Precipitation_____

Proximity of spill to surface waters: _____

Did the spill reach ground water? _____ Yes _____ No

Did the spill reach surface water? _____ Yes _____ No

If so, was a sheen present? _____ Yes _____ No

Current land Use:_____

Distance to nearest…

Surface Water _____Wetland _____Building _____Livestock_____Water Wells_____

Spill Coordinator must complete this for any spill, regardless of size. The Contractor(s) must submit the form to North Plains within 24 hours of the occurrence.

APPENDIX A

CONSTRUCTION SPILL REPORT FORM

Depth to shallowest groundwater _____

Was there a fire associated with the release? ___Yes _____ No

Did the incident result in death or injury? ___Yes _____ No

Was there any immediate damage observed to plants or animals? ___Yes _____ No

Describe the extent of observed contamination, both horizontal and vertical (i.e., spill-stained soil in a 5-foot radius to a depth of 1 inch): ____

_____

How was the extent of the spill determined?_____

Current status of cleanup actions:_____

Proposed remediation activities:_____

Describe measures to prevent reoccurrence:_____

Did the spill occur while in transit?_____

Duration of spill occurrence?_____

Directions from nearest community:_____

Name and title of discoverer:_____

Name of operator:_____

Address of operator:_____

Operator contact person:_____

Is the Operator the responsible party? _____Yes _____No

If no, what is the responsible party's name and contact information? _____

_____

List all parties and agencies notified (Counties, BLM, EPA, DOT, local, etc.)

Date	Agency	Contact	Phone Number	Response

Spill Coordinator must complete this for any spill, regardless of size. The Contractor(s) must submit the form to North Plains within 24 hours of the occurrence.

APPENDIX A

CONSTRUCTION SPILL REPORT FORM

Any additional information:_____

Name/Company/Address/Phone Number for the following:

Construction Superintendent:_____

Spill Coordinator:_____

Environmental Manager:_____

Person Who Reported the Spill:_____

Inspections and Monitoring Staff:_____

Spill Coordinator must complete this for any spill, regardless of size. The Contractor(s) must submit the form to North Plains within 24 hours of the occurrence.

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ATTACHMENT B

EMERGENCY RESPONSE CONTRACTORS; DISPOSAL AND TREATMENT FACILITIES

APPENDIX B

EMERGENCY RESPONSE CONTRACTORS; DISPOSAL AND TREATMENT FACILITIES

Contractor(s) will dispose of all wastes according to applicable federal, state, and local requirements and is responsible for complying with all interstate requirements for transporting hazardous materials across state lines. A list of potential Emergency Spill Response Contractors and waste disposal facilities is provided below. This list was developed from state-wide databases representing firms operating at the time the data base was produced. Contractor(s) will be responsible for verifying if a contractor or facility is currently operating under appropriate permits or licenses. Selection of an Emergency Response Contractor or disposal facility will be subject to approval by North Plains.

Spill Response Contractors

Name/ Company	Under Contract	Phone Number	Location	Services Provided
Clean Harbors Environmental Services	☐ Yes ☐ No	(800) 645-8265	Locations Nationwide	24-hour Emergency Response
Ambipar Group	☐ Yes ☐ No	(866) 610-7928	12 Sunrise Estates Rd, Watford City, ND 58854	24-hour Emergency Response
JMAC Resources	☐ Yes ☐ No	(701) 774-8511	121 48th Ave. SW Williston, ND 58801	Emergency Spill Response Hazardous Waste Transport

Waste Handling/Disposal Contractors

Name/ Company	Under Contract	Phone Number	Location	Services Provided
Nuverra Environmental Solutions	☐ Yes ☐ No	(701) 580-0336	13195 26th St NW Arnegard, ND 58835	Petroleum contaminated soil disposal facility
IHD Solids Management	☐ Yes ☐ No	(701) 774-8514	14070 43rd St NW, Alexander, ND 58831	Petroleum contaminated soil disposal facility

NORTH PLAINS CONNECTOR PROJECT

ATTACHMENT K

Traffic and Transportation Management Plan

NORTH PLAINS CONNECTOR

A Grid United Project

Draft Traffic and Transportation Management Plan

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North Plains Connector LLC

GRID UNITED

January 2026

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ACRONYMS AND ABBREVIATIONS

CMRP	Construction Mitigation and Reclamation Plan
Contractor	construction contractor
EI	environmental inspector
Grid United	Grid United LLC
North Plains	North Plains Connector LLC
Project	North Plains Connector Project
Plan	Draft Traffic and Transportation Plan
USDA	U.S. Department of Agriculture

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1.0 INTRODUCTION

North Plains Connector LLC (North Plains), a Delaware limited liability company formed pursuant to Section 18-201 of the Delaware Limited Liability Company Act, has prepared this Draft Traffic and Transportation Management Plan (Plan) for the North Plains Connector Project (Project), a proposed interregional electric connector line. North Plains, an affiliate of Grid United LLC (Grid United), is a Houston, Texas-based company developing next generation energy infrastructure to power the future. Grid United is focused on the infrastructure needed to make the United States power grid more modern, efficient, reliable, and secure.

2.0 PLAN PURPOSE

This Plan outlines the strategies that North Plains will implement throughout Project construction to minimize or prevent impacts to traffic and transportation resulting from construction-related activities.

North Plains has also developed a Construction Mitigation and Reclamation Plan (CMRP), which describes the construction procedures and mitigation measures North Plains will implement to reduce potential Project-related impacts. This Plan references the CMRP where additional guidance is provided therein.

3.0 REGULATORY COMPLIANCE

Multiple agencies will have jurisdiction over the transportation-related components of the Project, including the U.S. Department of Transportation, Montana Department of Transportation, North Dakota Department of Transportation, local county and township road authorities, and local law enforcement in the counties crossed by the Project. In addition, the U.S. Department of the Interior Bureau of Land Management, U.S. Department of Agriculture (USDA) Forest Service, and USDA Agricultural Research Station at Fort Keogh have jurisdiction over roads located on the lands that they manage and that will be used by the Project.

North Plains plans to use existing public roads to bring equipment, materials and supplies to the Project area and to access the Project workspace. Where needed, North Plains will improve existing public roads to accommodate Project construction vehicles (e.g., intersection improvements). Before construction begins, North Plains will secure all necessary federal, state, and local permits for road use and crossings such as utility permits, approach/access permits, encroachment permits, and oversize and overweight load permits. All Project personnel will adhere to permit requirements and conditions to reduce traffic impacts and interruptions, ensure public safety, and reduce impacts to roads. North Plains will distribute this Plan, along with the relevant permits, to the necessary personnel.

4.0 ROLES AND RESPONSIBILITIES

North Plains will select a third-party construction contractor to construct the Project. The construction contractor (Contractor) will be responsible for site preparation, installation of support structures, general Project construction, testing and commissioning, health and safety, and environmental compliance, to include hazardous materials management. However, North Plains is responsible for construction of all associated facilities.

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For the duration of the Project construction, North Plains will implement and maintain the measures outlined in this Plan, the CMRP, and in all applicable Project permits.

North Plains will collaborate with local law enforcement, fire departments, and emergency medical services to coordinate access for effective emergency response during construction.

4.1 ENVIRONMENTAL INSPECTION

North Plains will employ environmental inspectors (EIs) during the construction phase. Further information on EIs and their responsibilities is provided in the CMRP.

5.0 TRAINING

Before commencing construction, North Plains will organize environmental training sessions for relevant Project personnel. These trainings will cover relevant construction, restoration, and mitigation plans, including this Plan, along with any applicable permit conditions. Furthermore, North Plains will conduct large-group training sessions before each work crew begins construction, followed by periodic follow-up training for newly assigned personnel. North Plains will document training will be documented, and training records will be saved with Project files.

6.0 TRAFFIC MANAGEMENT MEASURES

North Plains will make every reasonable effort to minimize the effects of Project construction activities on public transportation and to provide for public safety. North Plains will map and clearly mark authorized access routes in the field with signs or flagging, which North Plains will maintain until final cleanup and reclamation is completed, at which time North Plains will remove the signs and flags.. All signage and flagging will be implemented and maintained in accordance with this Plan and the CMRP.

North Plains will review the location of permitted access and will be responsible for ensuring construction travel is limited to designated areas. Although construction traffic is not expected to disrupt access to residences along the right-of-way, North Plains will notify adjacent landowners of the construction schedule, where applicable. Relevant field personnel will attend an environmental training program during which North Plains will instruct field personnel to use only approved roads, drive within the delineated road limits, and obey jurisdictional and posted speed limits to minimize potential impacts to environmental resources.

Road and lane closures are anticipated to be limited and temporary, most commonly associated with conductor stringing activities or during blasting. If road and lane closures are needed, North Plains will notify the appropriate regulatory agencies, affected parties, and emergency service providers in advance.

To further minimize impacts on roadway traffic, North Plains will implement traffic control measures to assist with the efficient transportation of construction equipment and materials to the Project workspace, and to ensure public safety. North Plains will place caution signs on roads to alert drivers of ongoing electric transmission line construction and warn them of potential slow traffic due to construction activities across roadways. North Plains will also station flaggers, equipped with the appropriately classed high-visibility safety vests and stop/slow signs, on each side of the road when equipment is operating on or crossing the road.

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North Plains, inspections staff, and traffic-directing personnel will maintain a communications network via two-way radios or cellular or satellite phones. This will allow for coordination of equipment traffic along existing access roads so public safety, traffic, and resource impacts are minimized.

7.0 TRANSPORTATION OF PROJECT PERSONNEL, EQUIPMENT, AND MATERIALS

The transportation of construction equipment, materials, and Project personnel will temporarily increase traffic volumes on local roadways. Where available, North Plains will primarily use large multi-lane highways to transport heavy construction equipment and large deliveries of materials to the right-of-way to minimize disruptions to traffic on local roads. However, the majority of the Project access points will be from state, county, and local roads. Contractor yards will serve as staging areas for construction, storage for materials, and parking for equipment when not in use on-site. Construction crews will park only in designated areas and will be shuttled to the appropriate work sites, as necessary.

North Plains will make use of existing public and private roads to access the Project workspace during the construction and operation of the Project. Once within the Project workspace, construction equipment will move along the right-of-way as work progresses, thereby reducing traffic on local roads.

All vehicles will obey jurisdictional traffic speed regulations and the posted speed limits. Speed limits may be reduced based on conditions in the field, as discussed in the CMRP. North Plains will discuss speed limits and any associated reduction in limits during the Project safety meetings.

8.0 ACCESS ROAD CONSTRUCTION AND IMPROVEMENTS

North Plains will use only roads approved by the applicable land managing agency or landowner. In remote areas, North Plains will construct new access roads. If additional roads are needed to complete the construction of the Project, North Plains will not construct or use the additional roads until the relevant land managing agency or landowner has approved them. North Plains will clearly identify all approved access roads by signage visible to all parties using the road.

Some existing access roads may need improvements such as grading, widening, adding gravel, or removing obstructions to ensure proper drainage or to safely accommodate construction equipment and vehicles. North Plains will make road improvements with relevant land managing agency or landowner approval and in compliance with applicable regulatory requirements, permits, and agreements with land-managing agencies and landowners.

Further information on access roads and associated improvements is provided in the CMRP.

9.0 ROAD AND RAILROAD CROSSINGS

North Plains will conduct construction activities across paved roads, highways, and railroads in line with requirements specified in road and railroad crossing permits or approvals, as applicable. North Plains will maintain traffic control measures including the use of flaggers, warning signs, lights, and barriers to maintain safety and minimize road congestion for emergency vehicles and landowners. Traffic delays may occur when construction equipment is moved in or out of the Project workspace; however, delays are anticipated to be short term in duration. In these situations, North Plains will employ flaggers and signage to safely slow or direct traffic, as needed.

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9.1 INSTALLATION OF GUARD STUCTURES

Temporary guard structures will be erected at road and railroad crossing locations where necessary to protect the public during Project activities. Guard structures will typically consist of H-frame wood poles placed on either side of the road to prevent ground wires, conductors, or equipment from falling and disrupting road traffic. Guard structures may not be required for small or rarely traveled rural roads. In such cases, other safety measures such as barriers, flaggers, or other traffic controls will be used.

Typically, guard structures will be installed just outside of the road right-of-way. Although the preference is for access to each of these guard structures to be located outside the road right-of-way, it may be necessary for access to be in the road right-of-way depending on topography and access restrictions imposed by the land-managing agency. Where the Project crosses interstate highways, North Plains will install temporary guard structures in medians between opposite-traffic-flow lanes. Short-term traffic impacts resulting from guard structure installation and removal may include short-term traffic diversions, traffic congestion, and brief road closures.

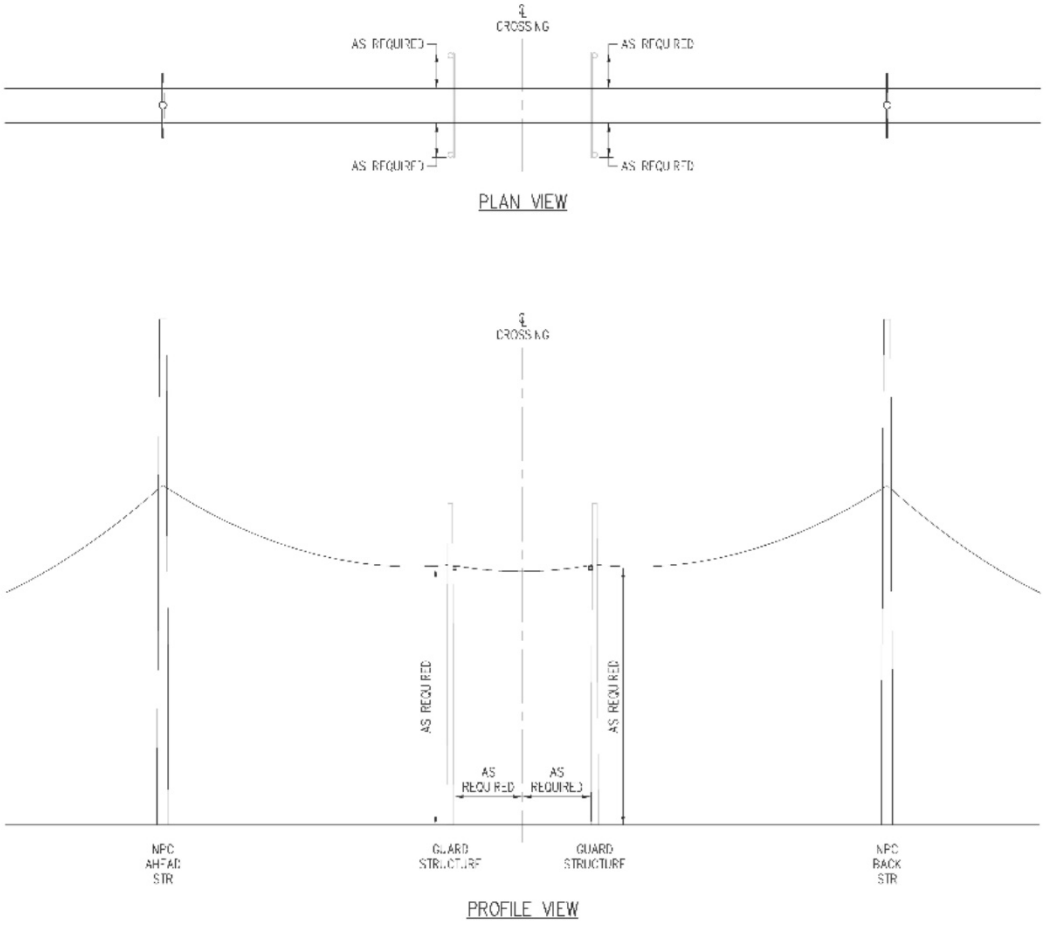
Railroad crossing operations and procedures are controlled by the railroad company operating the affected rail line. Typically, stoppage of railroad traffic is not required during construction or conductor stringing and tensioning activities. Crossing activities are similar to those for road crossings and typically involve the use of guard structures, as discussed above. North Plains will perform stringing and tensioning activities in coordination with the appropriate railroad authorities. The railroad will typically provide a switchman to be present when work is being performed near or over railroad lines.

For safety and efficiency reasons, construction crews typically perform wire stringing and tensioning activities during daylight hours and typically schedule these activities at road and railway crossings to coincide with periods of minimal use to minimize traffic disruptions. North Plains will pull or string pilot lines from structure to structure by either a helicopter or land-operated equipment, then thread the pilot line through the stringing sheaves at each structure. North Plains will use a helicopter as necessary to pull the pilot lines at railway crossings to minimize or avoid impacts to railroad traffic.

Following the completion of Project activities, all guard structures will be removed, and the area reclaimed in accordance with the CMRP.

A typical guard structure is shown on Figure 9.1-1 below.

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NORTH PLAINS CONNECTOR

For Environmental Review Purposes Only

Figure 9.1-1
Guard Structure Typical Drawing
North Plains Connector Project

10.0 IMPACT PREVENTION AND MAINTENANCE OF PROJECT ROADS

North Plains will take precautions to prevent damage to road surfaces crossed by construction equipment. North Plains will use tires, equipment mats, or plywood sheets to minimize the potential for damage from tracked equipment crossing paved roads. North Plains will remove excess soil or mud tracked onto paved roadways as soon as possible, or in the timeline required by permit conditions, and return it to the construction work area.

Throughout construction, North Plains will conduct maintenance activities, including blading or filling activities, to ensure the safety and proper functioning of all access roads. North Plains will control dust emissions along unpaved access roads by applying suppressants, as needed and in accordance with the CMRP. If excessive rutting occurs on access roads, North Plains will conduct maintenance activities on the road before continuing its use. All road maintenance will comply with federal, state, and local, landowner, or land-managing agency requirements.

North Plains will be responsible for removing obstructions that affect access roads within the boundaries of the roadway. North Plains will clear obstructions in the following manners, as appropriate:

- North Plains will limit removal of trees, limbs, brush, and other obstructions to those which obstruct the driver's sight distance.
- North Plains will use pruning saws, power saws, nippers, bow saws, or crosscuts flush with the trunk of the tree for limbing, except for portions of overhanging limbs; axes will not be used for limbing.
- North Plains will dispose of removed material from approved areas as directed by the landowner or land management agency.

During winter, North Plains will remove snow from approved access roads in accordance with the CMRP to allow safe access to the construction rights-of-way. North Plains will plow access roads, as needed for safe access and completion of Project activities, until the end of active construction.

Upon completion of construction, North Plains will repair any road damage that occurs due to construction and will restore roadways to their preconstruction condition or leave the roads in place in accordance with land management agency or private landowner requests. This may necessitate the temporary closure of the road to traffic and the establishment of detours. North Plains will coordinate with the road administrator to determine lane closures, detours, and safety and communication measures such as posting signs at road crossings. North Plains will notify landowners, land managing agencies, law enforcement agencies, and local businesses that could be affected by the closure.

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11.0 PLAN REVISIONS

TABLE 11.0-1

Plan Revisions

Revision Number	Revision Type(s)	Revision Date
Rev 0	Initial Plan draft	April 2025
Rev 1	Updated language for consistency across all project plans.	August 2025
Rev 2	Updated language for consistency across all project plans.	January 2026

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NORTH PLAINS CONNECTOR PROJECT

ATTACHMENT L

General Permits

USACE Nationwide Permit 57

Nationwide Permit 57
Electric Utility Line and Telecommunications Activities

Effective Date: March 15, 2021 / Expiration Date: March 14, 2026
Authorities: Sections 10 and 404

Activities required for the construction, maintenance, repair, and removal of electric utility lines, telecommunication lines, 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.

Electric utility lines and telecommunication lines: 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 electric utility lines and telecommunication lines. There must be no change in pre-construction contours of waters of the United States. An "electric utility line and telecommunication line" is defined as any cable, line, fiber optic line, or wire for the transmission for any purpose of electrical energy, telephone, and telegraph messages, and internet, radio, and television communication.

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 electric utility line or telecommunication line crossing of each waterbody.

Electric utility line and telecommunications substations: This NWP authorizes the construction, maintenance, or expansion of substation facilities associated with an electric utility line or telecommunication line 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 overhead electric utility line or telecommunication line towers, poles, and anchors: This NWP authorizes the construction or maintenance of foundations for overhead electric utility line or telecommunication line towers, poles, and anchors in all waters of the United States, provided the foundations are the minimum size necessary and separate footings for each tower leg (rather than a larger single pad) are used where feasible.

Access roads: This NWP authorizes the construction of access roads for the construction and maintenance of electric utility lines or telecommunication lines, including overhead lines and substations, 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 electric utility lines or telecommunication lines 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). Electric utility lines or telecommunication lines constructed over section 10 waters and electric utility lines or telecommunication lines that are routed in or under section 10 waters without a discharge of dredged or fill material 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 electric utility lines or telecommunication lines. 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 electric utility lines or telecommunication lines.

This NWP also authorizes temporary structures, fills, and work, including the use of temporary mats, necessary to conduct the electric utility line 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; or (2)

the discharge will result in the loss of greater than 1/10-acre of waters of the United States. (See general condition 32.) (Authorities: Sections 10 and 404)

Note 1: Where the electric utility line 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 electric utility line to protect navigation.

Note 2: For electric utility line or telecommunications 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. Electric utility line and telecommunications activities must comply with 33 CFR 330.6(d).

Note 3: Electric utility lines or telecommunication lines consisting of aerial electric power transmission lines crossing navigable waters of the United States (which are defined at 33 CFR part 329) must comply with the applicable minimum clearances specified in 33 CFR 322.5(i).

Note 4: 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 electric utility line or telecommunication line must be removed upon completion of the work, in accordance with the requirements for temporary fills.

Note 5: This NWP authorizes electric utility line and telecommunication line 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 overhead electric utility lines and telecommunication lines authorized by this NWP, a copy of the PCN and NWP verification will be provided by the Corps to the Department of Defense Siting Clearinghouse, which will evaluate potential effects on military activities.

Note 7: For 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

Note: To qualify for NWP authorization, the prospective permittee must comply with the following general conditions, as applicable, in addition to any regional or case-specific conditions imposed by the division engineer or district engineer. Prospective permittees should contact the appropriate Corps district office to determine if regional conditions have been imposed on an NWP. Prospective permittees should also contact the appropriate Corps district office to determine the status of Clean Water Act Section 401 water quality certification and/or Coastal Zone Management Act consistency for an NWP. Every person who may wish to obtain permit authorization under one or more NWPs, or who is currently relying on an existing or prior permit authorization under one or more NWPs, has been and is on notice that all of the provisions of 33 CFR 330.1 through 330.6 apply to every NWP authorization. Note especially 33 CFR 330.5 relating to the modification, suspension, or revocation of any NWP authorization.

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 e-mail, 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 e-mail 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).

Definitions

Best management practices (BMPs): Policies, practices, procedures, or structures implemented to mitigate the adverse environmental effects on surface water quality resulting from development. BMPs are categorized as structural or non-structural.

Compensatory mitigation: The restoration (re-establishment or rehabilitation), establishment (creation), enhancement, and/or in certain circumstances preservation of aquatic resources for the purposes of offsetting unavoidable adverse impacts which remain after all appropriate and practicable avoidance and minimization has been achieved.

Currently serviceable: Useable as is or with some maintenance, but not so degraded as to essentially require reconstruction.

Direct effects: Effects that are caused by the activity and occur at the same time and place.

Discharge: The term “discharge” means any discharge of dredged or fill material into waters of the United States.

Ecological reference: A model used to plan and design an aquatic habitat and riparian area restoration, enhancement, or establishment activity under NWP 27. An ecological reference may be based on the structure, functions, and dynamics of an aquatic habitat type or a riparian area type that currently exists in the region where the proposed NWP 27 activity is located. Alternatively, an ecological reference may be based on a conceptual model for the aquatic habitat type or riparian area type to be restored, enhanced, or established as a result of the proposed NWP 27 activity. An ecological reference takes into account the range of variation of the aquatic habitat type or riparian area type in the region.

Enhancement: The manipulation of the physical, chemical, or biological characteristics of an aquatic resource to heighten, intensify, or improve a specific aquatic resource function(s). Enhancement results in the gain of selected aquatic resource function(s), but may also lead to a decline in other aquatic resource function(s). Enhancement does not result in a gain in aquatic resource area.

Establishment (creation): The manipulation of the physical, chemical, or biological characteristics present to develop an aquatic resource that did not previously exist at an upland site. Establishment results in a gain in aquatic resource area.

High Tide Line: The line of intersection of the land with the water's surface at the maximum height reached by a rising tide. The high tide line may be determined, in the absence of actual data, by a line of oil or scum along shore objects, a more or less continuous deposit of fine shell or debris on the foreshore or berm, other physical markings or characteristics, vegetation lines, tidal gages, or other suitable means that delineate the general height reached by a rising tide. The line encompasses spring high tides and other high tides that occur with periodic frequency but does not include storm surges in which there is a departure from the normal or predicted reach of the tide due to the piling up of water against a coast by strong winds such as those accompanying a hurricane or other intense storm.

Historic Property: Any prehistoric or historic district, site (including archaeological site), building, structure, or other object included in, or eligible for inclusion in, the National Register of Historic Places maintained by the Secretary of the Interior. This term includes artifacts, records, and remains that are related to and located within such properties. The term includes properties of traditional religious and cultural importance to an Indian tribe or Native Hawaiian organization and that meet the National Register criteria (36 CFR part 60).

Independent utility: A test to determine what constitutes a single and complete non-linear project in the Corps Regulatory Program. A project is considered to have independent utility if it would be constructed absent the construction of other projects in the project area. Portions of a multi-phase project that depend upon other phases of the project do not have independent utility. Phases of a project that would be constructed even if the other phases were not built can be considered as separate single and complete projects with independent utility.

Indirect effects: Effects that are caused by the activity and are later in time or farther removed in distance, but are still reasonably foreseeable.

Loss of waters of the United States: Waters of the United States that are permanently adversely affected by filling, flooding, excavation, or drainage because of the regulated activity. The loss of stream bed includes the acres of stream bed that are permanently adversely affected by filling or excavation because of the regulated activity. Permanent adverse effects include permanent discharges of dredged or fill material that change an aquatic area to dry land, increase the bottom elevation of a waterbody, or change the use of a waterbody. The acreage of loss of waters of the United States is a threshold measurement of the impact to jurisdictional waters or wetlands for determining whether a project may qualify for an NWP; it is not a net threshold that is calculated after considering compensatory mitigation that may be used to offset losses of aquatic functions and services. Waters of the United States temporarily filled, flooded, excavated, or drained, but restored to pre-construction contours and elevations after construction, are not included in the measurement of loss of waters of the United States. Impacts resulting from activities that do not require Department of the Army authorization, such as activities eligible for exemptions under section 404(f) of the Clean Water Act, are not considered when calculating the loss of waters of the United States.

Navigable waters: Waters subject to section 10 of the Rivers and Harbors Act of 1899. These waters are defined at 33 CFR part 329.

Non-tidal wetland: A non-tidal wetland is a wetland that is not subject to the ebb and flow of tidal waters. Non-tidal wetlands contiguous to tidal waters are located landward of the high tide line (i.e., spring high tide line).

Open water: For purposes of the NWPs, an open water is any area that in a year with normal patterns of precipitation has water flowing or standing above ground to the extent that an ordinary high water mark can be determined. Aquatic vegetation within the area of flowing or standing water is either non-emergent, sparse, or absent. Vegetated shallows are considered to be open waters. Examples of “open waters” include rivers, streams, lakes, and ponds.

Ordinary High Water Mark: The term ordinary high water mark means that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.

Perennial stream: A perennial stream has surface water flowing continuously year-round during a typical year.

Practicable: Available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes.

Pre-construction notification: A request submitted by the project proponent to the Corps for confirmation that a particular activity is authorized by nationwide permit. The request may be a permit application, letter, or similar document that includes information about the proposed work and its anticipated environmental effects. Pre-construction notification may be required by the terms and conditions of a nationwide permit, or by regional conditions. A pre-construction notification may be voluntarily submitted in cases where pre-construction notification is not required and the project proponent wants confirmation that the activity is authorized by nationwide permit.

Preservation: The removal of a threat to, or preventing the decline of, aquatic resources by an action in or near those aquatic resources. This term includes activities commonly associated with the protection and maintenance of aquatic resources through the implementation of appropriate legal and physical mechanisms. Preservation does not result in a gain of aquatic resource area or functions.

Re-establishment: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former aquatic resource. Re-establishment results in rebuilding a former aquatic resource and results in a gain in aquatic resource area and functions.

Rehabilitation: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of repairing natural/historic functions to a degraded aquatic resource. Rehabilitation results in a gain in aquatic resource function, but does not result in a gain in aquatic resource area.

Restoration: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former or degraded aquatic resource. For the purpose of tracking net gains in aquatic resource area, restoration is divided into two categories: re-establishment and rehabilitation.

Riffle and pool complex: Riffle and pool complexes are special aquatic sites under the 404(b)(1) Guidelines. Riffle and pool complexes sometimes characterize steep gradient sections of streams. Such stream sections are recognizable by their hydraulic characteristics. The rapid movement of water over a course substrate in riffles results in a rough flow, a turbulent surface, and high dissolved oxygen levels in the water. Pools are deeper areas associated with riffles. A slower stream velocity, a streaming flow, a smooth surface, and a finer substrate characterize pools.

Riparian areas: Riparian areas are lands next to streams, lakes, and estuarine-marine shorelines. Riparian areas are transitional between terrestrial and aquatic ecosystems, through which surface and subsurface hydrology connects riverine, lacustrine, estuarine, and marine waters with their adjacent wetlands, non-wetland waters, or uplands. Riparian areas provide a variety of ecological functions and services and help improve or maintain local water quality. (See general condition 23.)

Shellfish seeding: The placement of shellfish seed and/or suitable substrate to increase shellfish production. Shellfish seed consists of immature individual shellfish or individual shellfish attached to shells or shell fragments (i.e., spat on shell). Suitable substrate may consist of shellfish shells, shell fragments, or other appropriate materials placed into waters for shellfish habitat.

Single and complete linear project: A linear project is a project constructed for the purpose of getting people, goods, or services from a point of origin to a terminal point, which often involves multiple crossings of one or more waterbodies at separate and distant locations. The term "single and complete project" is defined as that portion of the total linear project proposed or accomplished by one owner/developer or partnership or other association of owners/developers that includes all crossings of a single water of the United States (i.e., a single waterbody) at a specific location. For linear projects crossing a single or multiple waterbodies several times at separate and distant locations, each crossing is considered a single and complete project for purposes of NWP authorization. However, individual channels in a braided stream or river, or individual arms of a large, irregularly shaped wetland or lake, etc., are not separate waterbodies, and crossings of such features cannot be considered separately.

Single and complete non-linear project: For non-linear projects, the term "single and complete project" is defined at 33 CFR 330.2(i) as the total project proposed or accomplished by one owner/developer or partnership or other association of owners/developers. A single and complete non-linear project must have independent utility (see definition of "independent utility"). Single and complete non-linear projects may not be "piecemealed" to avoid the limits in an NWP authorization.

Stormwater management: Stormwater management is the mechanism for controlling stormwater runoff for the purposes of reducing downstream erosion, water quality degradation, and flooding and mitigating the adverse effects of changes in land use on the aquatic environment.

Stormwater management facilities: Stormwater management facilities are those facilities, including but not limited to, stormwater retention and detention ponds and best management practices, which retain water for a period of time to control runoff and/or improve the quality (i.e., by reducing the concentration of nutrients, sediments, hazardous substances and other pollutants) of stormwater runoff.

Stream bed: The substrate of the stream channel between the ordinary high water marks. The substrate may be bedrock or inorganic particles that range in size from clay to boulders. Wetlands contiguous to the stream bed, but outside of the ordinary high water marks, are not considered part of the stream bed.

Stream channelization: The manipulation of a stream's course, condition, capacity, or location that causes more than minimal interruption of normal stream processes. A channelized jurisdictional stream remains a water of the United States.

Structure: An object that is arranged in a definite pattern of organization. Examples of structures include, without limitation, any pier, boat dock, boat ramp, wharf, dolphin, weir, boom, breakwater, bulkhead, revetment, riprap, jetty, artificial island, artificial reef, permanent mooring structure, power transmission line, permanently moored floating vessel, piling, aid to navigation, or any other manmade obstacle or obstruction.

Tidal wetland: A tidal wetland is a jurisdictional wetland that is inundated by tidal waters. Tidal waters rise and fall in a predictable and measurable rhythm or cycle due to the gravitational pulls of the moon and sun. Tidal waters end where the rise and fall of the water surface can no longer be practically measured in a predictable rhythm due to masking by other waters, wind, or other effects. Tidal wetlands are located channelward of the high tide line.

Tribal lands: Any lands title to which is either: 1) held in trust by the United States for the benefit of any Indian tribe or individual; or 2) held by any Indian tribe or individual subject to restrictions by the United States against alienation.

Tribal rights: Those rights legally accruing to a tribe or tribes by virtue of inherent sovereign authority, unextinguished aboriginal title, treaty, statute, judicial decisions, executive order or agreement, and that give rise to legally enforceable remedies.

Vegetated shallows: Vegetated shallows are special aquatic sites under the 404(b)(1) Guidelines. They are areas that are permanently inundated and under normal circumstances have rooted aquatic vegetation, such as seagrasses in marine and estuarine systems and a variety of vascular rooted plants in freshwater systems.

Waterbody: For purposes of the NWPs, a waterbody is a “water of the United States.” If a wetland is adjacent to a waterbody determined to be a water of the United States, that waterbody and any adjacent wetlands are considered together as a single aquatic unit (see 33 CFR 328.4(c)(2)).

REGIONAL CONDITIONS:

The following Regional Conditions have been approved by the Wilmington District for the Nationwide Permits (NWPs) published in the January 13, 2021, *Federal Register* (86 FR 2744) announcing the reissuance of 12 existing (NWPs) and four new NWPs, as well as the reissuance of NWP general conditions and definitions with some modifications.

A. EXCLUDED WATERS AND/OR AREAS

The Corps has identified waters that will be excluded from the use of all NWP’s during certain timeframes. These waters are:

1. **Anadromous Fish Spawning Areas.** Work in waters of the U.S. designated by either the North Carolina Division of Marine Fisheries (NCDMF) or the North Carolina

Wildlife Resources Commission (NCWRC) as anadromous fish spawning areas are prohibited from February 15th through June 30th, without prior written approval from the Corps and the appropriate wildlife agencies (NCDMF, NCWRC and/or the National Marine Fisheries Service (NMFS)). Work in waters of the U.S. designated by NCWRC as primary nursery areas in inland waters are prohibited from February 15th through September 30th, without prior written approval from the Corps and the appropriate wildlife agencies. Work in waters of the U.S. designated by NCDMF as primary nursery areas shall be coordinated with NCDMF prior to being authorized by this NWP. Coordination with NCDMF may result in a required construction moratorium during periods of significant biological productivity or critical life stages.

2. **Trout Waters Moratorium.** Work in waters of the U.S. in the designated trout watersheds of North Carolina are prohibited from October 15th through April 15th without prior written approval from the NCWRC, or from the Eastern Band of Cherokee Indians (EBCI) Fisheries and Wildlife Management (FWM) office if the project is located on EBCI trust land. (See Section C.3. above for information on the designated trout watersheds).

3. **Sturgeon Spawning Areas.** No in-water work shall be conducted in waters of the U.S. designated by the National Marine Fisheries Service as Atlantic sturgeon critical habitat from February 1st through June 30th. No in-water work shall be conducted in waters of the U.S. in the Roanoke River designated as Atlantic sturgeon critical habitat from February 1st through June 30th, and August 1st through October 31st, without prior written approval from NMFS.

4. **Submerged Aquatic Vegetation.** Impacts to Submerged Aquatic Vegetation (SAV) are not authorized by any NWP, except NWP 48, NWP 55 and NWP 56, unless Essential Fish Habitat (EFH) consultation has been completed pursuant to the Magnuson-Stevens Fisheries Conservation and Management Act (Magnuson-Stevens Act). Permittees shall submit a PCN (See NWP General Condition 32) to the District Engineer prior to commencing the activity if the project would affect SAV. The permittee may not begin work until notified by the Corps that the requirements of the Magnuson-Stevens Act have been satisfied and that the activity is verified.

B. REGIONAL CONDITIONS APPLICABLE TO ALL NWP's

1. **Critical Habitat in Western NC.** For proposed activities within waters of the U.S. that require a Pre-Construction Notification (PCN) and are located in the thirteen counties listed below, permittees must provide a copy of the PCN to the U.S. Fish and Wildlife Service (USFWS), 160 Zillicoa Street, Asheville, North Carolina 28801 and the Corps Asheville Regulatory Field Office. Please see General Condition 18 for specific PCN requirements related to the Endangered Species Act and the below website for information on the location of designated critical habitat.

Counties with tributaries that drain to designated critical habitat that require notification to the Asheville U.S. Fish and Wildlife Service: Avery, Cherokee, Graham, Haywood,

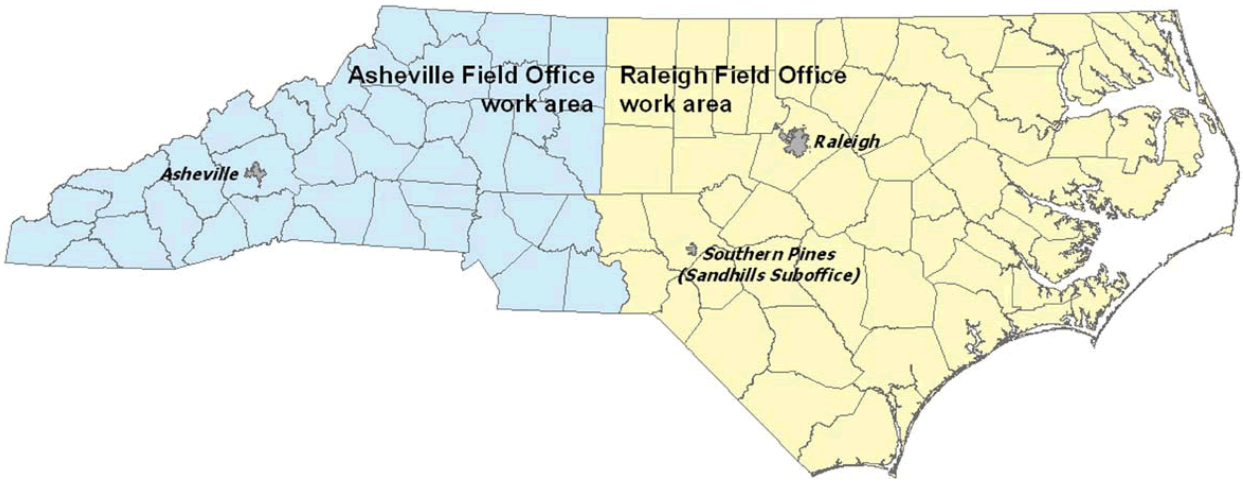
Henderson, Jackson, Macon, Mecklenburg, Mitchell, Swain, Transylvania, Union and Yancey.

Website and office addresses for Endangered Species Act Information:

The Wilmington District has developed the following website for permittees which provides guidelines on how to review linked websites and maps in order to fulfill NWP General Condition 18 (Endangered Species) requirements: http://www.saw.usace.army.mil/Missions/RegulatoryPermitProgram/AgencyCoordination/ESA.aspx.

Permittees who do not have internet access may contact the appropriate U.S. Fish and Wildlife Service offices listed below or Corps at (910) 251-4850.

Below is a map of the USFWS Field Office Boundaries:



Asheville U.S. Fish and Wildlife Service Office counties: All counties west of and including Anson, Stanly, Davidson, Forsythe and Stokes Counties.

U.S. Fish and Wildlife Service
Asheville Field Office
160 Zillicoa Street
Asheville, NC 28801
Telephone: (828) 258-3939

Raleigh U.S. Fish and Wildlife Service Office counties: All counties east of and including Richmond, Montgomery, Randolph, Guilford, and Rockingham Counties.

U.S. Fish and Wildlife Service
Raleigh Field Office
Post Office Box 33726
Raleigh, NC 27636-3726

Telephone: (919) 856-4520

2. **Special Designation Waters.** Prior to the use of any NWP that involves a discharge of dredged or fill material in any of the following identified waters and/or adjacent wetlands in North Carolina, permittees shall submit a PCN to the District Engineer prior to commencing the activity (see General Condition 32). The North Carolina waters and wetlands that require additional PCN requirements are:

"Primary Nursery Areas" (PNA), including inland PNA, as designated by the North Carolina Marine Fisheries Commission and/or the North Carolina Wildlife Resources Commission. The definition of and designated PNA waters can be found in the North Carolina State Administrative Code at Title 15A, Subchapters 3R and 10C (15A NCAC 03R .0103; 15A NCAC 10C .0502; and 15A NCAC 10C .0503) and at the following web pages:

- http://reports.oah.state.nc.us/ncac/title%2015a%20-%20environmental%20quality/chapter%2003%20-%20marine%20fisheries/subchapter%20r/15a%20ncac%2003r%20.0103.pdf

- http://reports.oah.state.nc.us/ncac/title%2015a%20-%20environmental%20quality/chapter%2010%20-%20wildlife%20resources%20and%20water%20safety/subchapter%20c/15a%20ncac%2010c%20.0502.pdf

- http://reports.oah.state.nc.us/ncac/title%2015a%20-%20environmental%20quality/chapter%2010%20-%20wildlife%20resources%20and%20water%20safety/subchapter%20c/15a%20ncac%2010c%20.0503.pdf

3. **Trout Waters.** Prior to any discharge of dredge or fill material into streams, waterbodies or wetlands within the 294 designated trout watersheds of North Carolina, the permittee shall submit a PCN (see General Condition 32) to the District Engineer prior to commencing the activity. The permittee shall also provide a copy of the PCN to the appropriate NCWRC office, or to the EBCI FWM Office (if the project is located on EBCI trust land), to facilitate the determination of any potential impacts to designated Trout Waters.

NCWRC and NC Trout Watersheds:

NCWRC Contact**	**Counties that are entirely within Trout Watersheds***	**Counties that are partially within Trout Watersheds***
Mountain Coordinator 645 Fish Hatchery Rd., Building B Marion, NC 28752 828-803-6054 For NCDOT Projects: NCDOT Coordinator 12275 Swift Rd. Oakboro, NC 28129 704-984-1070	Alleghany Ashe Avery Graham Haywood Jackson Macon Swain Transylvania Watauga	Burke Buncombe Caldwell Cherokee Clay Henderson Madison McDowell Mitchell Polk Rutherford Surry Wilkes Yancey
EBCI Contact**	**Counties that are within Trout Watersheds***	
Office of Natural Resources P.O. Box 1747, Cherokee, NC 28719 (828) 359-6113	Qualla Boundary and non-contiguous tracts of trust land located in portions of Swain, Jackson, Haywood, Graham and Cherokee Counties.	

*NOTE: To determine PCN requirements, contact the Corps Asheville Regulatory Field Office at (828) 271-7980 or view maps showing trout watersheds in each County at the following webpage: http://www.saw.usace.army.mil/Missions/Regulatory-Permit-Program/Agency-Coordination/Trout/.

**If a project is located on EBCI trust land, submit the PCN in accordance with Regional Condition C.16. Contact the Corps Asheville Regulatory Field Office at (828) 271-7980 with questions.

4. **Western NC Waters and Corridors.** The permittee shall submit a PCN (see General Condition 32) to the District Engineer prior to commencing the activity in waters of the U.S. if the activity will occur within any of the following identified waters in western North Carolina, within 0.5 mile on either side of these waters, or within 0.75 mile of the Little Tennessee River, as measured from the top of the bank of the respective water (i.e., river, stream, or creek):

Brasstown Creek
Burningtown Creek
Cane River
Caney Fork
Cartoogechaye Creek
Chattooga River
Cheoah River
Cowee Creek
Cullasaja River
Deep Creek
Ellijay Creek
French Broad River
Garden Creek
Hiwassee River
Hominy Creek
Iotla Creek
Little Tennessee River (within the river or within 0.75 mile on either side of this river)
Nantahala River
Nolichucky River
North Fork French Broad River
North Toe River
Nottley River
Oconaluftee River (portion not located on trust/EBCI land)
Peachtree Creek
Shooting Creek
Snowbird Creek
South Toe River
Stecoah Creek
Swannanoa River
Sweetwater Creek
Tuckasegee River (also spelled Tuckaseegee or Tuckaseigee)
Valley River
Watauga Creek
Watauga River
Wayah Creek

West Fork French Broad River

To determine PCN requirements, contact the Corps Asheville Regulatory Field Office at (828) 271-7980 or view maps for all corridors at the following webpage: http://www.saw.usace.army.mil/Missions/Regulatory-Permit-Program/Agency-Coordination/Designated-Special-Waters.aspx .

5. **Limitation of Loss of Stream Bed.** NWPs may not be used for activities that may result in the loss of more than 0.05 acres of stream bed, except for NWP 32.

6. **Pre-Construction Notification for Loss of Stream Bed Exceeding 0.02 acres.** The permittee shall submit a PCN to the District Engineer prior to commencing the activity (see General Condition 32) prior to the use of any NWP for any activity that results in the loss of more than 0.02 acres of stream bed. This applies to NWPs that do not have PCN requirements as well as those NWPs that require a PCN.

7. **Mitigation for Loss of Stream Bed.** For any NWP that results in a loss of more than 0.02 acres of stream bed, the permittee shall provide a mitigation proposal to compensate for more than minimal individual and cumulative adverse impacts to the aquatic environment, unless the District Engineer determines in writing that either some other form of mitigation would be more environmentally appropriate or the adverse effects of the proposed activity are minimal. For stream bed losses of 0.02 acres or less that require a PCN, the District Engineer may determine, on a case-by-case basis, that compensatory mitigation is required to ensure that the activity results in minimal adverse effect on the aquatic environment.

8**. Riprap.** For all NWPs that allow for the use of riprap material for bank stabilization, the following conditions shall be applied:

a. Filter cloth must be placed underneath the riprap as an additional requirement of its use in North Carolina waters. The placement of filter fabric is not required if the riprap will be pushed or “keyed” into the bank of the waterbody. A waiver from the specifications in this Regional Condition must be requested in writing.

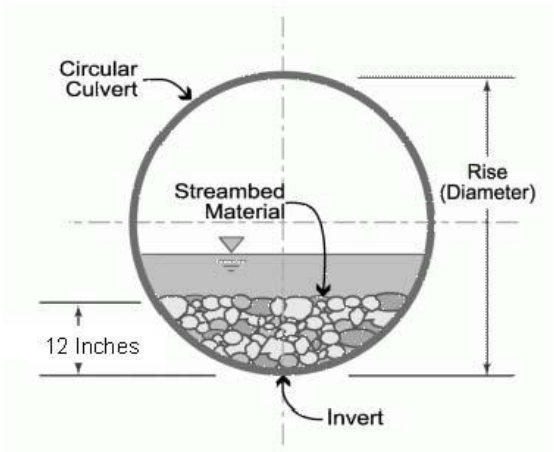
b. Riprap shall be placed only on the stream banks, or, if it is necessary to be placed in the stream bed, the finished top elevation of the riprap should not exceed that of the original stream bed.

9**. Culvert Placement.** For all NWPs that allow for culvert placement, the following conditions shall be applied:

a. For all NWPs that involve the construction/installation of culverts, measures shall be included in the construction/installation that will promote the safe passage of fish and other aquatic organisms

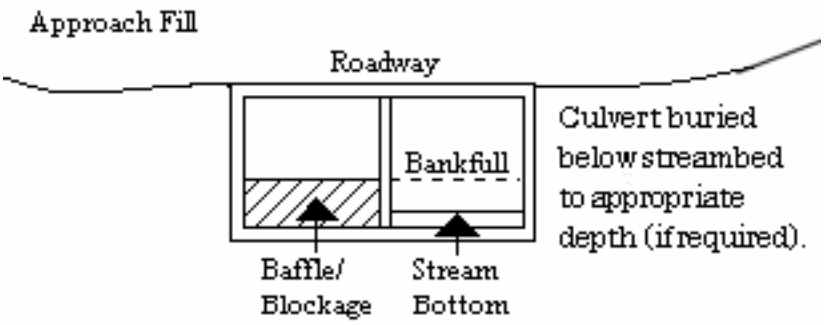
Placement of culverts and other structures in streams shall be below the elevation of the streambed by one foot for all culverts with a diameter greater than 48 inches, and 20% of the culvert diameter for culverts having a diameter less than or equal to 48 inches. If the culvert outlet is submerged within a pool or scour hole and designed to provide for aquatic passage, then culvert burial into the streambed is not required.
Culvert burial is not required for structures less than 72 inch diameter/width, where the slope of the culvert will be greater than 2.5%, provided that all alternative options for flattening the slope have been investigated and aquatic life movement/connectivity has been provided when possible (e.g., rock ladders, cross vanes, sills, baffles etc.). Culvert burial is not required when bedrock is present in culvert locations.

Installation of culverts in wetlands shall ensure continuity of water movement and be designed to adequately accommodate high water or flood conditions. When roadways, causeways, or other fill projects are constructed across FEMA-designated floodways or wetlands, openings such as culverts or bridges shall be provided to maintain the natural hydrology of the system as well as prevent constriction of the floodway that may result in destabilization of streams or wetlands.



A waiver from the depth specifications in this condition may be requested, in writing, by the permittee and issued by the Corp. This waiver request must be specific as to the reasons(s) for the request. The waiver will be issued if it can be demonstrated that the proposed design would result in less impacts to the aquatic environment. Culverts placed across wetland fills purely for the purposes of equalizing surface water do not have to be buried, but the culverts must be of adequate size and/or number to ensure unrestricted transmission of water.

b**.** Bank-full flows (or less) shall be accommodated through maintenance of the existing bank-full channel cross sectional area. Additional culverts or culvert barrels at such crossings shall be allowed only to receive bank-full flows.



c. Culverts shall be designed and installed in such a manner that the original stream profiles are not altered and allow for aquatic life movement during low flows. The dimension, pattern, and profile of the stream above and below a pipe or culvert shall not be modified by widening the stream channel or by reducing the depth of the stream in connection with the construction activity. The width, height, and gradient of a proposed culvert shall be such as to pass the average historical low flow and spring flow without adversely altering flow velocity. If the width of the culvert is wider than the stream channel, the culvert shall include multiple boxes/pipes, baffles, benches and/or sills to maintain the natural width of the stream channel. If multiple culverts/pipes/barrels are used, low flows shall be accommodated in one culvert/pipe and additional culverts/pipes shall be installed such that they receive only flows above bankfull.

10. **Utility Lines.** For all NWPs that allow for the construction and installation of utility lines, the following conditions shall be applied:

a. Utility lines consisting of aerial electric power transmission lines crossing navigable waters of the U.S. (which are defined at 33 CFR part 329) must comply with the applicable minimum clearances specified in 33 CFR 322.5(i).

b. The work area authorized by this permit, including temporary and/or permanent fills, will be minimized to the greatest extent practicable. Justification for work corridors exceeding forty (40) feet in width is required and will be based on pipeline diameter and length, size of equipment required to construct the utility line, and other construction information deemed necessary to support the request. The permittee is required to provide this information to the Corps with the initial PCN package.

c. A plan to restore and re-vegetate wetland areas cleared for construction must be submitted with the required PCN. Cleared wetland areas shall be re-vegetated, as appropriate, with species of canopy, shrub, and herbaceous species. The permittee shall not use fescue grass or any other species identified as invasive or exotic species by the NC Native Plant Society (NCNPS): https://ncwildflower.org/invasive-exotic-species-list/.

d. Any permanently maintained corridor along the utility right of way within forested wetlands shall be considered a loss of aquatic function. A compensatory mitigation plan will be required for all such impacts associated with the requested activity if the activity requires a PCN and the cumulative total of permanent conversion of forested wetlands

exceeds 0.1 acres, unless the District Engineer determines in writing that either some other form of mitigation would be more environmentally appropriate or the adverse effects of the proposed activity are minimal.

Where permanently maintained corridor within forested wetlands is 0.1 acres or less, the District Engineer may determine, on a case-by-case basis, that compensatory mitigation is required to ensure that the activity results in minimal adverse effects on the aquatic environment.

e. When directional boring or horizontal directional drilling (HDD) under waters of the U.S., including wetlands, permittees shall closely monitor the project for hydraulic fracturing or "fracking." Any discharge from hydraulic fracturing or "fracking" into waters of the U.S., including wetlands, shall be reported to the appropriate Corps Regulatory Field Office within 48 hours. Restoration and/or compensatory mitigation may be required as a result of any unintended discharges.

11. **Temporary Access Fills.** The permittee shall submit a PCN to the District Engineer prior to commencing the activity if the activity will involve the discharge of dredged or fill material into more than 0.1 acres of wetlands or 0.02 acres of stream channel for the construction of temporary access fills and/or temporary road crossings. The PCN must include a restoration plan that thoroughly describes how all temporary fills will be removed, how pre-project conditions will be restored, and include a timetable for all restoration activities.

12. **Federal Navigation Channel Setbacks.** Authorized structures and fills located in or adjacent to Federally authorized waterways must be constructed in accordance with the latest setback criteria established by the Wilmington District Engineer. You may review the setback policy at http://www.saw.usace.army.mil/Missions/Navigation/Setbacks.aspx. This general permit does not authorize the construction of hardened or permanently fixed structures within the Federally Authorized Channel Setback, unless the activity is approved by the Corps. The permittee shall submit a PCN (see General Condition 32) to the District Engineer to obtain a written verification prior to the construction of any structures or fills within the Federally Authorized Channel Setback.

13. **Northern Long-eared Bat – Endangered Species Act Compliance**

The Wilmington District, U.S. Army Corps of Engineers has consulted with the United States Fish and Wildlife Service (USFWS) in regard to the threatened Northern long-eared bat (NLEB) (*Myotis septentrionalis*) and Standard Local Operating Procedures for Endangered Species (SLOPES) have been approved by the Corps and the USFWS. This condition concerns effects to the NLEB only and does not address effects to other federally listed species and/or federally designated critical habitat.

A. Procedures when the Corps is the lead federal* agency for a project:

The permittee must comply with (1) and (2) below when:

• the project is located in the western 41 counties of North Carolina, to include non-federal aid North Carolina Department of Transportation (NCDOT) projects, OR;
• the project is located in the 59 eastern counties of North Carolina and is a non-NCDOT project.

*Generally, if a project is located on private property or on non-federal land, and the project is not being funded by a federal entity, the Corps will be the lead federal agency due to the requirement to obtain Department of the Army authorization to impact waters of the U.S. If the project is located on federal land, contact the Corps to determine the lead federal agency.

(1) A permittee using an NWP must check to see if their project is located in the range of the NLEB by using the following website: http://www.fws.gov/midwest/endangered/mammals/nleb/pdf/WNSZone.pdf. If the project is within the range of the NLEB, or if the project includes percussive activities (e.g., blasting, pile driving, etc.), the permittee is then required to check the appropriate website in the paragraph below to discover if their project:

• is located in a 12-digit Hydrologic Unit Code area ("red HUC" - shown as red areas on the map), AND/OR;
• involves percussive activities within 0.25 mile of a red HUC.

Red HUC maps - for the western 41 counties in NC (covered by the Asheville Ecological Services Field Office), check the project location against the electronic maps found at: http://www.fws.gov/asheville/htmls/project_review/NLEB_in_WNC.html. For the eastern 59 counties in NC (covered by the Raleigh Ecological Services Field Office), check the project location against the electronic maps found at: https://www.fws.gov/raleigh/NLEB_RFO.html.

(2) A permittee must submit a PCN to the District Engineer, and receive written verification from the District Engineer, prior to commencing the activity, if the activity will involve any of the following:

• tree clearing/removal and/or, construction/installation of wind turbines in a red HUC, AND/OR;
• bridge removal or maintenance, unless the bridge has been inspected and there is no evidence of bat use, (applies anywhere in the range of the NLEB), AND/OR:
• percussive activities in a red HUC, or within 0.25 mile of a red HUC.

The permittee may proceed with the activity without submitting a PCN to either the Corps or the USFWS, provided the activity complies with all applicable NWP terms and general and regional conditions, if the permittee's review under A.(1) and A.(2) above shows that the project is:

- located outside of a red HUC (and there are no percussive activities), and the activity will NOT include bridge removal or maintenance, unless the bridge has been inspected and there is no evidence of bat use, OR;
- located outside of a red HUC and there are percussive activities, but the percussive activities will not occur within 0.25-mile of a red HUC boundary, and the activity will NOT include bridge removal or maintenance, unless the bridge has been inspected and there is no evidence of bat use, OR;
- located in a red HUC, but the activity will NOT include tree clearing/removal; construction/installation of wind turbines; bridge removal or maintenance, unless the bridge has been inspected and there is no evidence of bat use, and/or; any percussive activities.

B. Procedures when the USACE is not the lead federal agency:

For projects where another federal agency is the lead federal agency - if that other federal agency has completed project-specific ESA Section 7(a)(2) consultation for the NLEB, and has (1) determined that the project would not cause prohibited incidental take of the NLEB, and (2) completed coordination/consultation that is required by the USFWS (per the directions on the respective USFWS office's website), that project may proceed without PCN to either the USACE or the USFWS, provided all General and Regional Permit Conditions are met.

The NLEB SLOPES can be viewed on the USACE website at: http://www.saw.usace.army.mil/Missions/Regulatory-Permit-Program/Agency-Coordination/ESA/. Permittees who do not have internet access may contact the USACE at (910) 251- 4633.

14. **West Indian Manatee Protection.** In order to protect the endangered West Indian manatee (*Trichechus manatus*) the Permittee shall implement the USFWS' Manatee Guidelines, and strictly adhere to all requirements therein. The guidelines can be found at https://www.fws.gov/raleigh/pdfs/ManateeGuidelines2017.pdf.

15. **ESA Programmatic Biological Opinions.** The Wilmington District, USFWS, NCDOT, and the FHWA have conducted programmatic Section 7(a)(2) consultation for a number of federally listed species and designated critical habitat (DCH), and programmatic consultation concerning other federally listed species and/or DCH may occur in the future. The result of completed programmatic consultation is a Programmatic Biological Opinion (PBO) issued by the USFWS. These PBOs contain mandatory terms and conditions to implement the reasonable and prudent measures that are associated with "incidental take" of whichever species or critical habitat is covered by a specific PBO. Authorization under NWPs is conditional upon the permittee's compliance with all the mandatory terms and conditions associated with incidental take of the applicable PBO (or PBOs), which are incorporated by reference in the NWPs. Failure to comply with the terms and conditions associated with incidental take of an applicable PBO, where a take of the federally listed species occurs, would constitute an unauthorized take by the permittee, and would also constitute permittee

non-compliance with the authorization under the NWPs. If the terms and conditions of a specific PBO (or PBOs) apply to a project, the Corps will include this/these requirements in any NWP verification that may be issued for a project. For an activity/project that does not require a PCN, the terms and conditions of the applicable PBO(s) also apply to that non-notifying activity/project. The USFWS is the appropriate authority to determine compliance with the terms and conditions of its PBO and the ESA. All PBOs can be found on our website at: https://www.saw.usace.army.mil/Missions/Regulatory-Permit-Program/Agency-Coordination/ESA/.

16. **Work on Eastern Band of Cherokee Land.**

Notifying NWPs - All PCNs submitted for activities in waters of the U.S. on Eastern Band of Cherokee Indians (EBCI) trust land (i.e., Qualla Boundary and non-contiguous tracts of trust land located in portions of Swain, Jackson, Haywood, Graham and Cherokee Counties), must comply with the requirements of the latest MOU between the Wilmington District and the EBCI.

Non-notifying NWPs - Prior to the use of any non-notifying NWP for activities in waters of the U.S. on EBCI trust land (i.e., Qualla Boundary and non-contiguous tracts of trust land located in portions of Swain, Jackson, Haywood, Graham and Cherokee Counties), all prospective permittees must comply with the requirements of the latest MOU between the Wilmington District and the EBCI; this includes coordinating the proposed project with the EBCI Natural Resources Program and obtaining a Tribal Approval Letter from the Tribe.

The EBCI MOU can be found at the following URL: http://saw-reg.usace.army.mil/FO/Final-MOU-EBCI-USACE.pdf

17. **Sedimentation and Erosion Control Structures and Measures**
All PCNs will identify and describe sedimentation and erosion control structures and measures proposed for placement in waters of the U.S. The structures and measures should be depicted on maps, surveys or drawings showing location and impacts to jurisdictional wetlands and streams.

C. SECTION 401 WATER QUALITY CERTIFICATION (WQC) AND/OR COASTAL ZONE MANAGEMENT ACT (CZMA) CONSISTENCY DETERMINATION SUMMARY AND APPLICABLE CONDITIONS

The CZMA Consistency Determination and all Water Quality Certifications for the NWPs can be found at: https://www.saw.usace.army.mil/Missions/Regulatory-Permit-Program/Permits/2017-Nationwide-Permits/

2021 Nationwide Permits

Proposed Regional Conditions

Omaha District

State Of Montana

US Army Corps of Engineers ®
Omaha District

2021 Nationwide Permits
Regional Conditions
Omaha District
State of Montana

The following Nationwide Permit (NWP) regional conditions will be used in the State of Montana. The issuance of the NWPs was announced in the January 13, 2021, issue of the Federal Register (86 FR 2744) and December 27, 2021, issue of the Federal Register (86 FR 73522). Regional conditions are placed on NWPs to ensure projects result in no more than minimal adverse impacts to the aquatic environment and to address local resources concerns.

A. PRECONSTRUCTION NOTIFICATION REQUIREMENTS APPLICABLE TO ALL NWPs OR 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. PCN required for NWP 3, 5, 6, 20, 27, 32, and 38.

   b. All NWPs not 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 the purpose of this condition, a spring water 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 of waters. 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. **Stream Channelization and Relocation Projects:**

   PCN required for any regulated activity that involves permanent stream channelization or relocation of an existing perennial stream channel. For the purpose of this condition, stream channelization is defined as “the manipulation of a stream’s course, condition, capacity or location that causes more than minimal interruption of normal stream processes.” Examples of stream channelization include, but are not limited to straightening, relocating, shifting, tubing (i.e., placement of a culvert in an open channel for construction purposes).

5. **Tribal Reservations and Tribal Trust Lands:**

   PCN and coordination with the Tribal Authority required for all NWPs requested by applicants other than the Tribal Authority for use within the reservation boundaries and tribal trust lands of Indian Country in Montana.

6. **Specific Waterways:**

PCN required for any regulated activity within the following waterways and their impoundments:

- Bitterroot River
- Clark Fork River (tributary to the Columbia River)
- Flathead Lake
- Flathead River
- Milk River
- Missouri River
- Yellowstone River

B. BEST MANAGEMENT PRACTICES

Required Best Management Practices:

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

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

2. **Bank and Shoreline Stabilization Activities:**

The following additional requirements apply to all bank and shoreline stabilization:

a. The revetment must conform to the existing bankline, unless such work is determined by the Corps to be biologically or geomorphically beneficial for the system; must not extend above the top of the bank (i.e., no new levees); and the slopes must be flatter than the angle of repose for the selected revetment material (i.e., rock riprap normally needs to be placed on a slope flatter than 1.5 Horizontal to 1 Vertical (1.5H:1V).

b. The revetment must not wholly or partially block flows from entering a side channel or an overflow channel.

3. **Placement and Removal of Temporary Fills:**

Temporary fills in wetlands must be placed on a horizontal marker layer, such as fabric or certified weed-free straw, to delineate the pre-project ground elevation and facilitate complete fill removal and site restoration.

4. **Erosion and Sediment Control Blanket:**

All erosion control blanket or fabric used in or adjacent to waters of the United States must be comprised of degradable material to ensure decomposition. Do not use material that includes stabilized netting or stabilized open mesh, as these products take a long time to degrade, and they can trap small animals, birds, amphibians and fish. This prohibition also applies to mesh materials used for wattles, rolled materials, and bank wraps. Erosion control blanket or fabrics that break down within 24 months are acceptable. Non- degradable blankets or fabric may be allowed on a case-specific basis if it will be buried beneath riprap or structures and it is not likely to be exposed. Non-degradable blanket or fabric that becomes exposed within waters of the United States must be removed.

5. **NWP-3 – Maintenance and NWP-45 – Repair of Uplands Damaged by Discrete Events Definition of "Discrete Event":**

   The definition of "discrete event," as used in these permits, includes, but is not limited to, unexpected natural and human-caused events such as fires, storms, landslides, avalanches, earthquakes, accidents, debris or ice jams, and floods. For the purpose of the NWPs, discrete event floods are stream flow events that overflow the OHWM.

6. **Outfall Structures and Associated Intake Structures:**

   Inlet screens for intakes in the Yellowstone River or the Missouri River in Blaine, Chouteau, Custer, Dawson, Fergus, Garfield, McCone, Petroleum, Phillips, Prairie, Richland, Roosevelt, Valley and Wibaux Counties must be installed on all pump intakes with a screen mesh opening size no larger than 1/4 inch. Water intake velocities must not exceed 1/2 foot per second through the mesh. Intakes must be located in the deepest water available and be elevated off the bottom of the riverbed.

7. **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 the lowering of the culvert invert would allow a headcut to migrate upstream of the project into an unaffected stream reach or 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	1/2-ft
Pipe diameter <8.0 ft	>640 acres	1-ft
Pipe diameter > 8.0 ft	All drainage sizes	20% of pipe diameter
Box culvert	All drainage sizes	1-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 inlet for culverts installed at a slope less than the slope of the stream flow line.

   d. Riprap inlet and outlet protection shall be placed to match the height of the culvert invert.

C. REGIONAL CONDITIONS APPLICABLE ONLY TO THE SPECIAL RIVER MANAGEMENT ZONE OF THE UPPER YELLOWSTONE RIVER

Special River Management Zone (SRMZ) of the Upper Yellowstone River is defined within the Special Area Management Plan (SAMP) as the 48-mile reach of the upper Yellowstone River (River Miles 531.8 to 483.6) from upstream of Emigrant River downstream to a few miles below the Shields River and Mission Creek confluences (0.7 mile downstream from the bridge at the community of Springdale). It includes secondary channels, side channels, and the main (primary) channels, and adjacent wetlands within the channel migration zone (CMZ) or, in absence of a CMZ, within areas flooded by the 100-year discharge. The SMRZ is located entirely within Park County, Montana.

In addition to the Regional Conditions and Best Management Practices above, additional Regional Conditions apply within the SRMZ described above. These are available at: https://www.nwo.usace.army.mil/Missions/Regulatory-Program/Nation-Wide-Permit-Information/

1. **Notification – All NWPs:**

   Permittees must notify the Corps in accordance with General Condition 32 (PCN) for any regulated activity in waters of the United States within the SRMZ. This includes all activities within the Yellowstone River, the portions of tributaries within the SRMZ, and wetlands within the SRMZ.

2. **Emergency Work:**

   Activities requiring a Department of the Army (DA) Permit that is necessary to prevent imminent loss of life or property is allowed within the SRMZ. Contact the Corps as soon as reasonably possible by telephone at 406-441-1375 and/or by Fax at 406-441-1380. Contact may also be made in person or by sending an e-mail to: Montana.Reg@usace.army.mil. All such work will be fully reviewed under the SAMP provisions.

3. **NWPs Revoked for Use:**

   The following NWPs have been revoked for all waters and activities within the 48-mile SRMZ:

   NWP 17 - Hydropower Projects

   NWP 21 - Surface Coal Mining Activities

   NWP 29 - Residential Developments

   NWP 39 - Commercial and Institutional Developments

   NWP 42 - Recreational Facilities

   NWP 43 - Stormwater Management Facilities

   NWP 44 - Mining Activities

   NWP 44 - Mining Activities

   NWP 45 - Repair of Uplands Damaged by Discrete Events

   NWP 49 - Coal Remining Activities

   NWP 50 - Underground Coal Mining Activities

4. Activities Requiring Individual Permit Review:

The following project activities are not authorized under an NWP in the SRMZ. These projects typically have more than minimal adverse impacts and must be reviewed under standard (individual) permit procedures.

a. New dams, new diversions, and/or new impoundments for any purpose.

b. Construction of ponds and new artificial stream channels, unless they are necessary and appropriate elements of a stream or wetland restoration project.

c. Hydraulic dredging and mining and mechanical excavation to obtain aggregate, fill material, or minerals, including gold. Processing of material for the purpose of obtaining select minerals or a specific gradation of material, where only a portion of the sediment or alluvium is removed and the remainder returned to the SRMZ, is not allowed under an NWP in the SRMZ.

5. Bank Stabilization Activities - All NWPs:

For bank stabilization activities associated with any NWP, including maintenance of bank stabilization, the following Regional Conditions apply:

For bank revetments such as riprap, root wads, bioengineered revetments, or combination revetments, a through e apply:

a. Revetments must conform to the existing eroded or eroding bankline, unless such work is determined by the Corps to be biologically or geomorphically beneficial for the upper Yellowstone River.

b. Revetment slopes must be flatter than the angle of repose for the selected revetment material. For example, rock riprap normally needs to be placed on a slope flatter than 1.5H:1V.

c. Revetments are only permittable under NWPs if they are parallel to and near the lateral boundaries of the SRMZ.

d. Revetments must not extend above the elevation of the adjacent natural bank height (i.e., no new levees).

e. Revetments must not wholly or partially block flows from entering a side channel, secondary channel, or an overflow channel, unless such work is determined by the Corps to be necessary for maintaining or restoring the geomorphic integrity of the upper Yellowstone River.

For bank stabilization structures that project into the stream, such as weirs, barbs, vanes, or hard points, f. through k. apply:

f. Bank stabilization structures must not wholly or partially block flows from entering a side channel, secondary channel, or an overflow channel, unless such work is determined by the Corps to be necessary for maintaining or restoring the geomorphic integrity of the upper Yellowstone River.

g. Bank stabilization structures are only permittable under NWPs if they result in an effective bankline that is approximately parallel to and near the lateral boundaries of the CMZ.

h. Bank stabilization structures must be keyed into the bank far enough to prevent flanking.

i. Bank stabilization structures cannot occupy more than 10% of the bankfull channel area. Bankfull channel area pertains to the specific primary or secondary channel in question and is not the aggregate channel area of all primary and secondary channels in multi-channel reaches.

j. Bank stabilization structures must not present hazardous obstructions to boating, floating, or other river uses.

k. Bank stabilization structures that are low in elevation, project only a short distance out from the bank, and angle upstream are more likely to qualify for NWPs because they typically result in less adverse impact on aquatic resources than structures that are tall, long, and point downstream.

6. Temporary Bank Stabilization – All NWPs.

Temporary bank stabilization is prohibited during seasonal high flows.

7. Sediment Management – All NWPs:

Sediment removal is allowable only to maintain function of existing facilities and structures, or as necessary to maintain or restore the geomorphic integrity of the upper Yellowstone River. Diversion or removal of sediment or alluvium from the river channel and adjacent wetlands for other purposes is not allowed in the SRMZ under any NWP.

8. Temporary Vegetation Impacts – All NWPs:

Limit clearing of riparian or wetland vegetation to the absolute minimum necessary. Where temporary riparian or wetland vegetation impacts are unavoidable, mow or cut off the vegetation above the ground, leaving the topsoil and root mass intact. Restore temporarily disturbed areas to original contours and use seeding and planting as necessary to re-establish desirable vegetative cover, utilizing native species in areas where native species were impacted.

9. NWP-11 – Temporary Recreational Structures:

Temporary recreational structures can be installed no earlier than seven (7) calendar days in advance of an event and must be removed no later than seven (7) calendar days after the event concludes.

10. NWP-12 – Oil or Natural Gas Pipeline Activities; NWP-57 – Electric Utility Line and Telecommunications Activities; and NWP-58 – Utility Line Activities for Water and Other Substances.

Trench excavation and backfill for utility lines is prohibited within the Ordinary High Water Mark of main and secondary flow channels and in adjacent wetlands.

11. NWP-13 – Bank Stabilization:

Construction of temporary or permanent levees is prohibited. Only bank stabilization that is parallel to and adjacent to the valley wall and/or SRMZ boundary is allowed. All other bank stabilization must be reviewed under standard (individual) permit procedures. Bank stabilization along existing roads, ditches, fills, and structures already located along the valley wall is allowed under this Permit.

12. NWP-14 – Linear Transportation Projects.

The construction of new transportation facilities in waters of the U.S. is prohibited under this NWP and must be reviewed under standard (individual) permit procedures. The expansion, modification, improvement, replacement, reconstruction, and upgrading of existing transportation facilities are allowed under this NWP within the SRMZ.

13. NWP- 27 – Aquatic Habitat Restoration, Establishment, and Enhancement Activities:

The construction of water control structures, dikes, berms, current deflectors, bank stabilization, and ponds is prohibited within the CMZ of the upper Yellowstone River unless it is demonstrated the proposed features contribute to the restoration or rehabilitation of previously lost or impaired functions of the upper Yellowstone River and adjacent aquatic areas.

14. NWP-30 – Moist Soil Management for Wildlife:

Fire breaks within the CMZ of the upper Yellowstone River must be reclaimed and restored within six (6) months after the fire event ends.

15. NWP-33 – Temporary Construction, Access, and Dewatering:

Construction of temporary levees and other structures or fills in waters of the U.S. that prevent or reduce overbank flow is prohibited.

16. NWP 40 – Agricultural Activities:

Only those activities associated with the reduction of existing adverse impacts on the upper Yellowstone River may be authorized by this NWP. Examples of potentially allowable projects include work associated with livestock management; moving livestock watering areas off the river or out of the CMZ; removal of irrigation systems from the CMZ; and the removal or conversion of irrigation systems from flood irrigation to sprinkler irrigation.

2021 Nationwide Permits

Proposed Regional Conditions

Omaha District

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US Army Corps of Engineers®
Omaha District

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The following Nationwide Permit regional condition best management practices are required for Montana, Nebraska, North Dakota, South Dakota, and Wyoming in the Omaha District. The issuance of the NWPs was announced in the January 13, 2021, issue of the Federal Register (86 FR 2744) and December 27, 2021, issue of the Federal Register (86 FR 73522). Regional conditions are placed on NWPs 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 PRACTICES 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

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B. MONTANA REQUIRED BEST MANAGEMENT PRACTICES

2. Bank and Shoreline Stabilization Activities:

The following additional requirements apply to all bank and shoreline stabilization:

a. The revetment must conform to the existing bankline, unless such work is determined by the Corps to be biologically or geomorphically beneficial for the system; must not extend above the top of the bank (i.e., no new levees); and the slopes must be flatter than the angle of repose for the selected revetment material (i.e., rock riprap normally needs to be placed on a slope flatter than 1.5 Horizontal to 1 Vertical (1.5H:1V).

b. The revetment must not wholly or partially block flows from entering a side channel or an overflow channel.

3. Placement and Removal of Temporary Fills:

Temporary fills in wetlands must be placed on a horizontal marker layer, such as fabric or certified weed-free straw, to delineate the pre-project ground elevation and facilitate complete fill removal and site restoration.

4. Erosion and Sediment Control Blanket:

All erosion control blanket or fabric used in or adjacent to waters of the United States must be comprised of degradable material to ensure decomposition. Do not use material that includes stabilized netting or stabilized open mesh, as these products take a long time to degrade and they can trap small animals, birds, amphibians and fish. This prohibition also applies to mesh materials used for wattles, rolled materials, and bank wraps. Erosion control blanket or fabrics that break down within 24 months are acceptable. Non- degradable blankets or fabric may be allowed on a case-specific basis if it will be buried beneath riprap or structures and it is not likely to be exposed. Non-degradable blanket or fabric that becomes exposed within waters of the United States must be removed.

5. NWP-3 – Maintenance and NWP-45 – Repair of Uplands Damaged by Discrete Events Definition of "Discrete Event":

The definition of "discrete event," as used in these permits, includes, but is not limited to, unexpected natural and human-caused events such as fires, storms, landslides, avalanches, earthquakes, accidents, debris or ice jams, and floods. For the purpose of the NWPs, discrete event floods are stream flow events that overflow the OHWM.

6. Outfall Structures and Associated Intake Structures:

Inlet screens for intakes in the Yellowstone River or the Missouri River in Blaine, Chouteau, Custer, Dawson, Fergus, Garfield, McCone, Petroleum, Phillips, Prairie, Richland, Roosevelt, Valley and Wibaux Counties must be installed on all pump intakes with a screen mesh opening size no larger than 1/4 inch. Water intake velocities must not exceed 1/2 foot per second through the mesh. Intakes must be located in the deepest water available and be elevated off the bottom of the river bed.

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7. **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 the lowering of the culvert invert would allow a headcut to migrate upstream of the project into an unaffected stream reach or 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	1/2-ft
Pipe diameter <8.0 ft	>640 acres	1-ft
Pipe diameter > 8.0 ft	All drainage sizes	20% of pipe diameter
Box culvert	All drainage sizes	1-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 inlet for culverts installed at a slope less than the slope of the stream flow line.

d. Riprap inlet and outlet protection shall be placed to match the height of the culvert invert.

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C. NEBRASKA REQUIRED BEST MANAGEMENT PRACTICES

2. Revegetation of Disturbed Areas:

a. All areas adjacent (contiguous, bordering, neighboring) to jurisdictional waters disturbed by construction shall be revegetated with appropriate perennial, native grasses and forbs and maintained in this condition. In accordance with Executive Order 13112, the use of invasive species and non- native species is not appropriate for revegetation of disturbed areas. A cover crop may be planted to aid in the establishment of native vegetation. The disturbed areas shall be reseeded concurrently with the project or immediately upon completion. Revegetation shall be acceptable when ground cover of appropriate perennial, native grasses and forbs reaches 75%. If this seeding cannot be accomplished by September 15 in the year of project completion, then an erosion blanket shall be placed on the disturbed areas. The erosion blanket shall remain in place until ground cover of appropriate perennial, native grasses and forbs reaches 75%. If the seeding can be accomplished by September 15, all seeded areas shall be properly mulched to prevent erosion.

b. When the vegetation has become established, all temporary erosion control materials shall be removed from the project site. Biodegradable or photodegradable materials need not be removed.

3. Temporary Structures/Work/Fill:

a. All NWPs

i. The use of dredged material in the construction of temporary structures or used for temporary work or used as temporary fill shall not be allowed. The term "dredged material" is defined as material that is excavated or dredged from waters of the United States. All temporary fill material shall be obtained from an upland source.

ii. Upon completion of the construction activity, all temporary fill material shall be removed in its entirety from the water of the United States to an upland area and the affected area shall be restored to its pre-construction condition. Wetlands disturbed by temporary construction shall be seeded with appropriate native hydrophytic species.

iii. General Condition 13 (Removal of Temporary Fills) is amended by adding the following: When temporary fills are placed in wetlands, a horizontal marker (i.e., fabric, certified weed-free straw, a ground survey with minimum accuracy of 1/10-foot, timber matting, etc.) must be used to demarcate the existing ground elevation of wetlands that will be temporarily filled during construction, in order to restore the wetlands to pre-project conditions.

b. NWPs with a PCN Requirement

In addition to the above Regional Conditions in "a", the following apply to NWPs with a PCN requirements.

i. A proposal for the temporary structure/work/fill, if not already provided, shall be submitted 14 days prior to construction and authorized/verified by the Nebraska Regulatory Office prior to the commencement of construction.

ii. The Nebraska Regulatory Office shall be notified with documentation (i.e., photos) when the site has been restored to its pre-project condition.

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D. 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 stable 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 the lowering of the culvert invert would allow a headcut to migrate upstream of the project into an unaffected stream reach or 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	1/2 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 inlet for culverts installed at a slope less than the slope of the stream flow line.

d. Riprap inlet and outlet protection shall be placed to match the height of the culvert invert.

4. Spawning Areas:

Spawning areas and seasons can be accessed on the North Dakota Game & 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 1/4-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 1/2-foot 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 1/4-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. <u>Boat Docks:</u>

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 are:
   i. Bois de Sioux River
   ii. James River Missouri River
   iii. Red River of the North
   iv. Upper Des Lacs Lake
   v. Yellowstone River

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E. SOUTH DAKOTA REQUIRED BEST MANAGEMENT PRACTICES

2. 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 the lowering of the culvert invert would allow a headcut to migrate upstream of the project into an unaffected stream reach or 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	1/2-ft
Pipe diameter <8.0 ft	>640 acres	1-ft
Pipe diameter > 8.0 ft	All drainage sizes	20% of pipe diameter
Box culvert	All drainage sizes	1-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 inlet for culverts installed at a slope less than the slope of the stream flow line.

d. Riprap inlet and outlet protection shall be placed to match the height of the culvert invert.

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F. WYOMING REQUIRED BEST MANAGEMENT PRACTICES

2. Spawning Areas:

Spawning locations are defined as sites within stream networks where mature fish congregate to release gametes into the riverine environment.

Spawning periods are driven by a host of local environmental factors including elevation, day length and water temperature. As such, there is a high degree of variability in timing from one location to the next in the state. If a permittee is proposing to undertake regulated activities in spawning locations and within the spawning periods identified below, they must first obtain site-specific information from Fisheries Supervisors in Wyoming Game and Fish Department Regional Offices (WGFD). Additional information is available at:

https://wgfd.wyo.gov/Habitat/Habitat-Plans/Wyoming-State-Wildlife-Action-Plan

Activities in spawning locations during the periods listed below must be avoided to the maximum extent practicable.

Spawning seasons for common native species are:

i. Chub, Leatherside: April 1 through August 15
ii. Chub, Roundtail: May 1 through July 15
iii. Sauger: May 1 through June 15
iv. Sturgeon: May 1 through June 15
v. Sucker, Bluehead: May 1 through July 15
vi. Sucker, Flannelmouth: May 1 through July 15
vii. Trout, Bonneville Cutthroat: April 15 through July 31
viii. Trout, Colorado River Cutthroat: May 1 through July 31
ix. Trout, Snake River Cutthroat: March 15 through July 31
x. Trout, Yellowstone Cutthroat: May 15 through July 31

Spawning seasons for common nonnative salmon and trout species are:

xi. Salmon, Kokanee: September 15 through November 30
xii. Trout, Brook: September 15 through November 30
xiii. Trout, Brown: September 15 through November 30
xiv. Trout, Rainbow: May 15 through July 31

The WGFD can provide information on Blue Ribbon and Red Ribbon trout streams or waters that contain State Wildlife Action Plan Native Species Status 1, 2, and 3 fish species. Potential effects on these important resources should be considered when formulating a project plan with the intent of minimizing adverse effects. If PCN is required, early coordination with Fisheries Supervisors in WGFD Regional Offices should be conducted prior to submitting a PCN for activities located in these waters. Otherwise, project modifications to minimize adverse effects after receiving a PCN may be required.

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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 the lowering of the culvert invert would allow a headcut to migrate upstream of the project into an unaffected stream reach or 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	1/2ft
Pipe diameter <8.0 ft	>640 acres	1-ft
Pipe diameter > 8.0 ft	All drainage sizes	20% of pipe diameter
Box culvert	All drainage sizes	1-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 inlet for culverts installed at a slope less than the slope of the stream flow line.

d. Riprap inlet and outlet protection shall be placed to match the height of the culvert invert.

Montana Department of Environmental Quality

General Permit

For Stormwater Discharges Associated with Construction Activity

Permit Number MTR100000

GENERAL PERMIT
FOR
STORM WATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY

PERMIT NUMBER MTR100000

MONTANA DEPARTMENT OF ENVIRONMENTAL QUALITY

AUTHORIZATION TO DISCHARGE UNDER THE MONTANA POLLUTANT DISCHARGE ELIMINATION SYSTEM (MPDES)

In compliance with Section 75-5-101 *et seq.,* Montana Code Annotated (MCA); Administrative Rules of Montana (ARM) 17.30.1101; 17.30.1301 *et seq.; and ARM* 17.30.601 *et seq.,* owners and operators (permittees) with authorization under this *General Permit for Storm Water Discharges Associated with Construction Activity* are permitted to discharge storm water resulting from construction activities as described in Part 1.1 of this permit and subject to effluent limitations, monitoring requirements, and other conditions set forth herein.

This permit shall become effective January 1, 2023.

This permit and the authorization to discharge shall expire at midnight, December 31, 2027.

FOR THE MONTANA DEPARTMENT
OF ENVIRONMENTAL QUALITY

|S| Jon Kenning

Jon Kenning, Chief
Water Protection Bureau

Issuance Date: October 31, 2022

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1. Coverage Under this Permit

1.1 Eligibility

1.1.1 Construction Activities Covered

The MPDES Storm Water Discharges Associated with Construction Activity General Permit (SWC or the General Permit) applies to all areas of the State of Montana, except for areas within the boundary of "Indian country," as defined in Part 5. This permit applies to "storm water discharge associated with construction activity," as defined in Part 5 and in ARM 17.30.1102. In this permit, the "owner or operator" (owner/operator), as defined in Part 5, is also identified as the permittee.

Owner/operators with construction activities that meet the following criteria are required to obtain authorization under the General Permit:

- There are areas of ground disturbance or other potential pollutant sources related to construction activity where a storm water discharge to state surface waters can occur; and
- Construction activity disturbs a total area of greater than or equal to one acre. Construction activities include clearing, grading, excavation, stockpiling earth materials, and other placement or removal of earth material performed during construction projects.
    - Permit coverage is required for construction activities that disturb less than one acre but are part of a "larger common plan of development or sale (larger common plan)" whose "total area" is greater than or equal to one acre, as defined in Part 5. See Part 1.1.5, below.

For construction activities that result in disturbance of less than five acres of total land area, determination of the acreage of disturbance does not include disturbance for routine maintenance activities on existing roads. The exclusion for routine maintenance is not available if the maintenance or repaving operation will alter the line and grade or hydrologic capacity of the road or involves clear, grading, or excavating of underlying and/or surrounding soil.

In determining the occurrence or potential occurrence of a storm water discharge associated with construction activity based on the acreage of ground disturbance and discharge potential to state surface waters, the permittee must consider the following additional factors:

- All potential drainage/discharge conditions and flow patterns, and their variation during the different phases of the construction activity;
- All potential rainfall or snowmelt events and their unpredictability over time (such as experiencing a relatively higher amount of rainfall or snowmelt in a relatively shorter time period);
- Support activities for the construction project which may be on or off the conventional construction project "site" (as defined in Part 5);
- Storm water discharges must typically be regulated beyond the conventional construction earthwork and building phases, lasting from the initiation of construction-related ground disturbance to "final stabilization" (per Parts 3.8 and 5) of that disturbance, which can sometimes take significant extra time to achieve; and
- Storm water which discharges into a drain inlet and/or storm sewer system from the site is regulated as a discharge to state surface waters if the inlet or system ultimately discharges into a state surface water.

1.1.1.1 Support Activities

A support activity is a construction-related activity that occurs alongside construction and specifically supports construction activity. Support activities may include, but are not limited to:

- Areas used for access-related work,
- Earth material borrow areas,
- Equipment staging areas,
- Materials storage areas,
- Temporary concrete or asphalt batch plants, and
- Any areas used for fill placement.

For storm water discharges from support activities to be covered under a particular authorization under the General Permit, such support activities must:

- Be related to a specific construction activity with authorization under the General Permit;
- Not be part of a larger commercial operation serving multiple unrelated construction activities;
- Not be part of a larger commercial operation serving multiple unrelated construction activities, and not continue operation beyond the completion of the particular construction activity; and
- Not continue beyond the completion date of the associated construction activity authorized under the General Permit;
- Have appropriate controls and pollution prevention measures implemented and documented in the SWPPP, per Part 3.

1.1.2 Allowable Storm Water Discharges

Unless otherwise made ineligible through the provisions in Part 1.1.4, the following discharges are eligible for coverage under this permit:

- "Storm water discharges associated with construction activity" as defined in Part 5; and
- Storm water discharges to impaired waterbodies that are consistent with approved "TMDLs" (as defined in Part 5) and assigned WLAs, and the additional requirements within the General Permit.

1.1.3 Allowable Non-Storm Water Discharges

The following are non-storm water discharges allowed under this permit:

- Uncontaminated condensate from air conditioners, coolers, and other compressors and from the outside storage of refrigerated gases or liquids;
- Irrigation drainage;
- Landscape watering provided all pesticides, herbicides, and fertilizer have been applied in accordance with the approved labeling;
- Pavement wash waters where no detergents are used and no spills or leaks of toxic or hazardous materials have occurred (unless all spilled material has been removed);
- Routine external building wash down that does not use detergents;
- Uncontaminated ground water or spring water;
- Water used to control dust;
- Discharges from emergency fire-fighting activities;
- Foundation or footing drains where flows are not contaminated with process materials; and
- Incidental windblown mist from cooling towers that collects on rooftops or adjacent portions of the facility, but not intentional discharges from the cooling tower (e.g., "piped" cooling tower blowdown or drains).

1.1.4 Limitations on Coverage

The following discharges are not eligible for coverage under this permit:

- Storm water discharges that are mixed with non-storm water, other than those non-storm water discharges listed in Part 1.1.3;
- Prohibited discharges as listed in Part 2.1.7;
- Discharges of construction dewatering effluent to state surface waters requiring authorization under the MPDES General Permit for Construction Dewatering;
- Storm water discharges to impaired waterbodies that are inconsistent with approved TMDLs and assigned WLAs, and the additional requirements with the General Permit;
- Storm water discharges to waterbodies that are inconsistent with additional Montana Department of Environmental Quality (DEQ) requirements, on a case-by-case basis; or
- Discharges which DEQ determines have a reasonable potential to cause, or contribute to, an exceedance of any applicable water quality standard, and/or DEQ has determined coverage under a MPDES Individual Permit is required.

Coverage does not relieve the permittee from any other statute, regulation, permits, or other regulatory requirements for activities occurring within the project area

DEQ may deny coverage for storm water discharges citing that the permittee appears unable to comply with one or more of the following requirements:

- Effluent standards, effluent limitations, standards of performance for new sources of pollutants, toxic effluent standards and prohibitions, and pretreatment standards;
- Water quality standards established pursuant to 75-5-301, MCA;
- Prohibition of discharge of any radiological, chemical, or biological warfare agent or high-level radioactive waste;
- Prohibition of any discharges to which the regional administrator has objected in writing;
- Prohibition of any discharge which is in conflict with a plan or amendment thereto approved pursuant to section 208(b) of the Clean Water Act;
- Any additional requirements that DEQ determines are necessary to carry out the provisions of 75-5-101, et seq., MCA; and
- A point source is a new source or a new discharge and the discharge from its construction or operation will cause or contribute to a violation of water quality standards per ARM 17.30.1311(7).

In addition, DEQ may deny coverage for the following reasons:

- The storm water discharge is different in degree or nature from discharges reasonably expected from sources or activities within the category described in this MPDES General Permit (including pollutants from process wastewater streams).
- The MPDES permit authorization for the same operation has previously been denied or revoked.
- The discharge sought to be authorized under the 2023 General Permit is also included within an application or is subject to review under the Major Facility Siting Act, 75-20-101, et seq., MCA.

The point source is, or will be, located in an area of unique ecological or recreational significance. Such determination must be based upon considerations of Montana stream classifications adopted under 75-5-301, MCA, impacts on fishery resources, local conditions at proposed discharge sites, and designations of wilderness areas under 16 USC 1132 or of wild and scenic rivers under 16 USC 1274.

1.1.5 Larger Common Plan of Development or Sale

A “larger common plan of development or sale (larger common plan)” is defined in Part 5 and referenced at ARM 17.30.1102. A larger common plan often involves dividing a parcel of land into smaller parts for individual sale, such as in residential communities, large commercial developments, or transportation projects.

See Parts 1.2.4.1; 1.3; and 1.4.1.

1.2 Authorization under this Permit

An "owner/operator" of a "storm water discharge associated with construction activity" (as defined in Part 5) is required to obtain authorization under an MPDES permit. An owner/operator is a person who owns, leases, operates, controls, or supervises a point source. All construction activities that include ground disturbance and are part of a larger common plan that disturbs at least an acre are subject to coverage under the General Permit.

To obtain coverage under the General Permit, the owner/operator must submit a complete Notice of Intent application package to DEQ prior to discharge storm water associated with construction activity under this General Permit. By signing and submitting a complete NOI-SWC package the owner/operator confirms eligibility for coverage and agrees to comply with all conditions of this General Permit including effluent limits, monitoring requirements and special conditions.

1.2.1 Submission of Notice of Intention application packages, Modification Requests or Notice of Termination Forms

Documents related to requests for authorization (Part 1.1.5), modification (Part 1.2.4), transfer (Part 1.3), or termination (Part 1.4) of coverage under the General Permit must be completed and submitted via a DEQ-approved electronic method or mailed to:

Montana Department of Environmental Quality
Water Protection Bureau
P.O. Box 200901
Helena, MT 59620-0901

1.2.2 New Authorizations (Not Previously Authorized)

Owners or operators can obtain first-time coverage under this permit by submitting a complete a Notice of Intent to Discharge under the Storm Water Discharges Associated with Construction Activity General Permit (NOI-SWC) Package to DEQ.

The NOI-SWC Package must consist of:

- A complete NOI-SWC form (signed by an authorized signatory per Part 4.18.1) and topographic map(s);
- A separate SWPPP (signed by an authorized signatory or duly authorized representative per Part 4.18), including all associated SWPPP site maps, diagrams, details, and plans, which has been completed in accordance with the requirements identified in Part 3;
- A copy of the consultation letter from the Montana Sage Grouse Habitat Conservation Program (if applicable); and
- The appropriate application fee.

1.2.3 Continuing Authorizations Issued Under the 2018 General Permit

Permittees requiring continued authorization beyond the December 31, 2022, expiration date, must submit a complete a SWC Renewal Package to DEQ for coverage under this reissued General Permit.

The SWC Renewal Package must consist of:

- A complete renewal NOI-SWC form (signed by an authorized signatory per Part 4.18.1) with "Renewal" selected in Section A and updated topographic map(s);
- A separate SWPPP (signed by an authorized signatory or duly authorized representative per Part 4.18), including all associated SWPPP site maps, diagrams, details, and plans, updated which has been completed in accordance with the requirements identified in Part 3;
- A copy of the consultation letter from the Montana Sage Grouse Habitat Conservation Program (if applicable); and

- The appropriate fee.

1.2.4 Modification Requests to Authorizations under this General Permit

Permittees can request a modification to their authorization under the General Permit by submitting a SWC Modification Package to DEQ.

Timing of the modification request relative to initial authorization determines how the request is processed.

- Modification requests to current authorizations (including decreased or increased disturbance area) submitted within six months of the date of initial coverage under the General Permit are processed as minor modifications with the corresponding fee.
- Modification requests (other than transfers) submitted more than six months after the first date of coverage under the General Permit will be processed with an application fee for a new authorization.

A permittee may request to add additional area(s) if the new additional construction-related disturbance is directly contiguous to and directly associated with the original site, except for support activities.

A permittee may request to reduce the area of a project, only when these areas requested to be removed from coverage have achieved final stabilization as defined in this General Permit.

The SWC Modification Package must consist of:

- A complete NOI-SWC application form (signed by an authorized signatory per Part 4.18.1) with "Modification" selected in Section A and updated topographic map(s);
- An updated SWPPP (signed by an authorized signatory or duly authorized representative per Part 4.18), including all associated maps, diagrams, details, plans, and records, updated in accordance with the requirements identified in Part 3;
- A copy of the consultation letter from the Montana Sage Grouse Habitat Conservation Program (see below for applicability); and
- The appropriate fee.

1.2.4.1 Modifications to Projects Part of a Larger Common Plan

For projects part of a larger common plan per Parts 1.1.5 and 5, and referenced at ARM 17.30.1102, the permittee may request a modification to reduce the area covered under the General Permit if:

- The areas requested to be removed from coverage under the General Permit have achieved final stabilization, or
- There is a new owner/operator of a specific parcel(s) and the new owner/operator has obtained coverage under the General Permit.
    - As part of the SWC Modification Package, the owner/operator of record (i.e. the current permittee) must include the authorization number for the parcel(s) with a new owner/operator and a provide a map showing the parcel(s) with coverage under a new authorization.

Until DEQ grants the modification, the owner/operator of record remains responsible for compliance with the terms of the authorization under the General Permit, including fees and/or violations.

1.2.4.2 Sage Grouse Consultation Requirements for Modifications

If the project is within designated sage grouse habitat, any modification due to a change in disturbed acreage requires verification from the Montana Sage Grouse Habitat Conservation Program that may require a consultation letter and/or updates to a consultation letter. If the modification request is outside of sage grouse habitat, no consultation is required.

1.2.5 Resubmittal and Administrative Processing

DEQ may request a resubmittal of a NOI-SWC form, SWPPP, any required records, and any associated fees. Administrative processing fees may be assessed for DEQ reviews.

1.3 Transfer of Coverage

Permittees may request a transfer ownership or change the name of the entity that holds an authorization under the General Permit by submitting a Storm Water Construction Permit Transfer Notification form (PTN-SWC) and the corresponding fee. The PTN-SWC must be submitted at least 30 days before the effective date of the proposed transfer. Submittal constitutes written notice to DEQ under the Montana Water Quality Act that the new owner/operator assumes responsibility and liability for all the terms and conditions, including permit fees. The PTN-SWC form may not be used to transfer coverage to a new or different construction site, activity, or location.

The PTN-SWC form may only be used to transfer an entire project authorized under the General Permit to a new single owner/operator. For projects that are part of a larger common plan, it is more appropriate to modify (see Part 1.2.4) or terminate (see Part 1.4) an authorization if there will be several new owner/operators.

Until DEQ determines the submitted PTN-SWC form and the transfer to the new owner/operator a complete, the owner/operator of record remains responsible for compliance with the terms of the authorization under the General Permit, including fees and/or violations.

1.4 Termination of Coverage

Permittees may request termination of coverage under the General Permit after achieving "final stabilization" per Parts 3.8 and 5. In addition to achieving final stabilization, permittees must also complete the following prior to termination:

- Removal of all temporary storm water conveyances/channels and other temporary BMPs;
- Removal of all construction equipment and vehicles from the site; and
- Cessation of all potential pollutant-generating activities due to the construction activity.

To request that permit coverage be terminated, the permittee must submit a Notice of Termination for Storm Water Discharges Associated with Construction Activity General Permit (NOT-SWC) to DEQ. A complete NOT-SWC form must be signed by an authorized signatory meeting the requirements in 4.18.1. See Part 1.4.1 for additional termination requirements for projects part of a larger common plan.

Coverage under the General Permit remains in effect until DEQ reviews and processes the NOT-SWC. The permittee is responsible for payment of annual fees for each calendar year covered under the General Permit. Failure to submit a NOT-SWC will result in accrual of annual permit fees. The permittee is responsible for complying with the terms of the General Permit until notified by DEQ that the authorization is terminated.

1.4.1 Terminations for Projects Part of a Larger Common Plan

Projects part of a larger common plan may request to terminate coverage under the General Permit in the following instances:

- The entire site meets the requirements in Part 1.4, above; or
- Each parcel has met the requirements in Part 1.4 or has a new owner/operator who has obtained coverage under the General Permit.

For projects part of a larger common plan, the NOT-SWC form must include:

- The authorization number for the parcel(s) with a new owner/operator, and
- A map showing:
  - The parcel(s) with coverage under a new authorization,
  - The parcel(s) that have achieved final stabilization, and
  - The owner/operator for each parcel.

If a one or more parcels part of the larger common plan have not reached final stabilization and do not have coverage under a General Permit authorization for a new owner/operator, then the authorization may not be terminated. The permittee may request a modification to permit authorization, per Part 1.2.4

Coverage under the permit remains in effect until the Department processes a NOT-SWC form. The permittee is responsible for payment of annual fees for each calendar year covered under the permit. Failure to submit a NOT-SWC will result in accrual of annual permit fees. The permittee is responsible for complying with the terms of this permit until notified by the Department that the authorization is terminated.

1.5 Public Sign

The permittee must post a sign to publicly display confirmation of coverage under the General Permit. The sign must be posted starting on the authorization date and remain posted until permit authorization is terminated.

At a minimum the sign must:

- Use a large, readable font (at least 1" lettering);
- Be visible from the nearest road;
- Include the MPDES SWC authorization number for the project;
- Include the statement "Request project information from Montana DEQ Water Protection Bureau at (406) 444-3080"; and
- Include the statement "File a complaint at deq.mt.gov/reporting."

Sign location:

- The public sign must be posted at the construction site's entrance/exit, or most visible entrance/exit if there are multiple access points.
- For linear projects, the sign must be posted at the entrance to the equipment laydown, material storage, or job trailer location or at the entrance/exit(s) of the most active portion of the project.

1.6 Storm Water Rainfall Erosivity Waiver

The Storm Water Rainfall Erosivity Waiver (Erosivity Waiver) is an optional alternative to obtaining coverage under the General Permit for discharges associated with construction activity.

Construction activities must meet the following requirements to be eligible for coverage under the Erosivity Waiver:

- Total area of "disturbance related to construction activity" (disturbance), as defined in Part 5, is less than five acres;
- Disturbance related to construction activity starts after March 1 and reaches "final stabilization" (per Parts 3.8 and 5) before November 30th of a given calendar year;
- The project's Rainfall Erosivity (R) Factor is less than five during the period of construction activity; and
- The Erosivity Waiver request includes the entire construction project.
    - The Erosivity Waiver is not available for individual filings, phases, or portions of a construction project or site. A project that is part of a larger common plan is only eligible for an Erosivity Waiver if the entire development meets the conditions listed above.

To request a Waiver, the "owner/operator" (as defined in Part 5) must submit an Erosivity Waiver Request form, applicable attachments, and the associated fee to DEQ. A project is not waived from coverage under the General Permit until DEQ receives a complete application and issues an Erosivity Waiver Confirmation Letter.

Those covered by an Erosivity Waiver are not required to submit a Notice of Termination (NOT) to end coverage, however construction activities and associated discharge are only authorized for the date range listed in the Erosivity Waiver Confirmation Letter. If the project changes, and any of the above criteria are not met, the project no longer qualifies for an Erosivity Waiver and the owner/operator must apply for and obtain coverage under the General Permit.

Any discharge of storm water associated with small construction activity not covered by either the General Permit or an Erosivity Waiver may be considered an unpermitted discharge under the Montana Water Quality Act. DEQ may notify any owner/operator covered by an Erosivity Waiver that they must obtain General Permit coverage.

2. Effluent Limitations, Monitoring, and Reporting Requirements

2.1 Technology-Based Effluent Limitations

Technology based effluent limits must be achieved through the good engineering practices and appropriate selection, design, implementation, installation, and maintenance of best management practices (BMPs) for all authorized storm water discharges associated with construction activities. To meet this requirement, the permittee must comply with all conditions in Part 2.1 and Part 3, and any other state or local requirements, regardless of stringency.

2.1.1 Universal Requirements for Best Management Practices

a. The permittee must select, design, install and maintain BMPs that address:
   1. The amount, frequency, intensity, and total duration of precipitation;
   2. Quantity and quality of storm water runoff including peak flow rates and total storm water volume;
   3. Characteristics of soils (including soil type and particle size) that are present at the construction project area(s); and
   4. Select BMPs appropriate to the timeframe and seasons in which the construction project will be completed.

b. The permittee must complete the following for all BMPs:
   1. Document all BMPs in the SWPPP, SWPPP site map(s), and/or inspection records.
   2. Select, implement, and install all BMPs in accordance with good engineering practices and design specifications;
   3. Complete implementation and installation of BMPs appropriate to each phase of construction before or at the start of each major construction activity;
   4. Maintain BMPs in effective operating condition;
   5. Before terminating permit coverage, remove temporary BMPs or transition temporary BMPs to permanent BMPs.

2.1.2 Erosion and Sediment Controls

a. To minimize soil erosion, the permittee must:
   1. Stabilize ditches, swales, channels, and outlets;
   2. Minimize erosion within the perimeter and interior of construction project area; and
   3. Divert storm water runoff from disturbed areas to sediment removal BMPs.

b. To minimize sediment discharges, the permittee must:
   1. Construct storm water retention and detention facilities during initial site grading activities;
   2. Minimize erosion at outlets and conveyance channels;
   3. Protect downstream properties and waterways by controlling volume and velocity within the construction project area;
   4. Protect all storm drain inlets;
      i. If the permittee has the authority to access offsite the storm drain inlets, he must protect offsite inlets which convey storm water flow from the construction site to a state surface water;
   5. Protect infrastructure, including infiltration facilities from sedimentation during active construction; and
   6. Stabilize and remove accumulated sediment from areas of disturbance, including storm water retention and detention facilities.

c. To minimize offsite sediment transport, the permittee must:
   1. Minimize vehicle/equipment entrances and exits to the construction project area; and
   2. Manage vehicle/equipment entrances and exits, equipment laydown, and material storage areas with stabilization techniques.

d. To minimize soil disturbance and maintain natural buffers, the permittee must:
   1. Limit areas of disturbance and soil exposure;
   2. Mark and maintain clearing limits before disturbing soils and during construction activities;
   3. Maintain topsoil;
   4. Provide a natural (such as vegetated) buffer within the construction project area;
   5. Maintain natural buffers around "state waters" as defined in Part 5; and
   6. Direct storm water runoff to vegetated areas.

e. To minimize the disturbance of steep slopes of 15% or greater, the permittee must:
   1. Design and construct cut-and-fill slopes to minimize erosion;
   2. Divert off site storm water or ground water away from slopes and disturbed areas; and
   3. Prevent storm water run on from impacting sediment removal BMPs.

2.1.3 Soil Stabilization

a. Temporary soil stabilization measures must include:
   1. Stabilization of disturbed areas immediately for any portion of the construction project that will remain inactive for 14 or more calendar days with erosion control BMPs.

b. Final stabilization measures must include:
   1. Use erosion control BMPs (including post construction BMPs) to stabilize disturbed areas within any portion of the project that have completed clearing, grading, excavation, or other earth disturbing activities.

2.1.4 Dewatering

a. For "construction dewatering" activities the permittee must:
   1. Control ground water, surface water, and/or accumulated storm water dewatering activities to prevent discharges to state waters; and
   2. Obtain authorization under the Construction Dewatering General Permit or an individual permit prior to discharge of dewatering effluent to state surface waters. See Part 3.6.

2.1.5 Pollution Prevention Measures

a. To implement pollution prevention measures that effectively manage and dispose of all pollutants in a way that does not cause contamination of storm water, the permittee must:
   1. Provide cover, containment, and protection for all chemicals, liquids, petroleum products, and construction materials, products, and wastes;
   2. Use spill prevention and control measures for vehicle maintenance and fueling;
   3. Maintain appropriate spill kits; clean up spills and leaks immediately; and report appropriate quantities in accordance with Part 4;
   4. Prevent discharge of equipment wash water and clean-out wastes, and designate these activities away from and state waters and their conveyances;
   5. Apply fertilizers and herbicides per manufacturers' requirements; and
   6. Prevent discharges of concrete products.

2.1.6 Surface Outlets

a. The permittee must ensure discharge of the highest quality water using structures that withdraw water from the surface from basins and impoundments as follows:
   1. Retention facilities must have a surface outlet installed for active construction.
   2. Detention facilities must be designed to prevent discharges from bottom outlets during active construction.
   3. When discharging from impoundments such as sediment basins and traps, outlet structures must be utilized that withdraw water from the surface.

2.1.7 Prohibited Discharges

a. The following discharges are prohibited:
   1. Wastewater from washout of concrete;
   2. Wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds and other construction materials;
   3. Fuels, oils, or other potential pollutants used in vehicle and equipment operation and maintenance;
   4. Soaps or solvents used in vehicle and equipment washing or external building wash down;
   5. Storm water discharges of disturbed, contaminated soils; and
   6. Toxic or hazardous substances from a spill or other release including the disturbance and/or removal of contaminated soils.

2.2 Water Quality-Based Effluent Limitations

2.2.1 Water Quality Standards

Storm water discharges regulated under this permit must be controlled as necessary to meet applicable numeric and narrative water quality standards. A storm water discharge associated with construction activity may not cause or contribute to an exceedance of applicable water quality standards.

If at any time the permittee becomes aware, or DEQ determines, that a storm water discharge causes or contributes to an exceedance of applicable water quality standards, the permittee must take corrective action as required in Part 2.4. Additionally, DEQ may require the permittee to obtain coverage under an individual permit, if information indicates the discharges are not controlled as necessary to meet applicable water quality standards.

2.2.2 Storm Water Discharges to Impaired Waterbodies

The permittee must identify if storm water discharges from their construction activity will discharge to impaired waterbodies. Information on impaired waterbodies may be obtained from DEQ. The permittee must consider all impairments and the presence of the corresponding pollutants of concern in their proposed discharges. Storm water-related pollutants contributing to impairments generally include sediment, suspended solids and turbidity, and any secondary sources of pollutants based on construction materials and support activities.

Permittees will be informed if any additional controls are necessary for discharges to protect beneficial uses or to be consistent that the assumptions of any available TMDL wasteload allocation. Such additional controls must be identified within the permittees SWPPP. In certain cases, DEQ may require a facility to obtain coverage under a MPDES individual permit.

Discharges of pollutants of concern to impaired waterbodies are eligible for coverage under this General Permit if consistent with approved TMDLs and assigned WLAs, and the requirements outlined below.

2.2.2.1 Discharges to an Impaired Waterbodies with No Approved TMDL

For regulated storm water discharges associated with construction activity under this permit, the SWPPP must include a section that describes BMPs that target and reduce any discharges of the identified pollutants of concern to the corresponding impaired waterbodies. Under this subsection of the General Permit, the permittee need only to include the identified pollutants of concern in its SWPPP if the waterbodies are listed as impaired for such pollutants.

2.2.2.2 Discharges to an Impaired Waterbodies with an Approved TMDL

For regulated storm water discharges associated with construction activity, the SWPPP must include a section that describes BMPs that target and reduce any discharges of the identified pollutants of concern to the corresponding impaired waterbodies. Under this subsection of the General Permit, the permittee need only include the identified pollutants of concern in its SWPPP if the waterbodies are listed as impaired for such pollutants. The section submitted by the permittee must ensure that all discharges are

consistent with the assumptions of any applicable TMDL wasteload allocation. All EPA approved TMDL wasteload allocations applicable to MPDES-regulated storm water construction activities are incorporated by reference into this permit.

2.3 Inspections

2.3.1 Person(s) Responsible for Conducting and Documenting Inspections

Inspections must be performed by a SWPPP Administrator as defined in Part 3.2.

2.3.2 Frequency of Inspections

Inspections must be performed in accordance with the inspection schedule in Part 2.3.3 or the inspection schedule in 2.3.4, unless the construction site or areas of the construction site meet the conditions for a reduction in inspection frequency as defined in Part 2.3.5. Inspections must be conducted during the construction project's normal business hours. The inspection schedule must be documented in the SWPPP. Any changes to the inspection schedule must be documented in the SWPPP or corresponding inspection report.

2.3.3 Weekly Routine Inspections

If the weekly inspection schedule is chosen, a SWPPP Administrator must do all of the following:

- Conduct a routine inspection at least once every 7 calendar days;
- Document any changes to the inspection schedule, even during periods of noncompliance, in the SWPPP or corresponding inspection report.

2.3.4 Biweekly Routine and Post-Storm Event Inspections

If a biweekly and post-storm event inspection schedule is chosen, a SWPPP Administrator must do all of the following:

- Conduct a routine inspection at least once every 14 calendar days;
- Conduct and a post-storm event inspection within 24-hours of the end of a rainfall event of 0.25 inches or greater and within 24-hours of runoff from snowmelt (i.e., any snowmelt event resulting in a discharge); and
- Use one of the following methods to determine the amount of rainfall resulting from a storm event:

  (1) Maintain a rain gage on site, or

  (2) Obtain storm event information from a weather service representative of the site's location.
- For any day of rainfall 0.25 inches or greater, record the method of rainfall determination and the total rainfall measured in a calendar day.
- A post-storm event inspection may be used as a biweekly routine inspection, but the biweekly routine inspections must commence again no later than 14 calendar days after the last post-storm event inspection.
- Document any changes to the inspection schedule, even during periods of noncompliance, in the SWPPP or corresponding inspection report.

2.3.5 Reductions in Inspection Frequency

The inspection schedules in Parts 2.3.3 and 2.3.4 may be temporarily reduced to a routine inspection once every 30 calendar days for either the entire construction site or a portion of it. For any reduction in inspection frequency, the requirements in a (below) must be followed and the conditions of b or c must be met.

a. For any reduction to inspection frequency:
   1. The change to the inspection schedule must be documented in the SWPPP or corresponding inspection report;
   2. BMPs must remain in place as identified in the SWPPP and/or inspection report, and SWPPP site map(s); and
   3. For a reduction in inspection frequency for a portion of the site, the portion of the construction site with reduced inspection frequency must be identified on updated SWPPP site map(s).

b. The entire site is eligible for a reduction in inspection frequency if:
   1. All construction activities at the site are temporarily inactive or shutdown and all areas of disturbance have achieved "temporary stabilization" as defined in Part 5; or
   2. Earthwork and construction activities are completed at the site, and erosion and sediment controls are implemented or installed to establish "final stabilization" per Parts 3.8 and 5.

c. A portion of the site is eligible for a reduction in inspection frequency if one of the following conditions is met and the portions of the construction site with reduced inspection frequency are identified on updated SWPPP site map(s):
   1. A portion of the site is temporarily inactive or shutdown and that portion has achieved "temporary stabilization" as defined in Part 5; or
   2. A portion of the site is completed and erosion and sediment controls are implemented or installed to establish "final stabilization" per Parts 3.8 and 5.

2.3.6 Severe Winter Conditions Delay

a. A delayed inspection may be allowed if an inspection is not possible due to:
   1. Remote site access;
   2. Severe winter condition; and
   3. Temporary work shutdown at the site due to severe winter weather.

b. In the event of a delayed inspection, the following are required:
   1. Documentation of the cause of the delayed inspection must be included in the corresponding inspection report and SWPPP, accordingly.
   2. A substitute inspection must be performed to compensate for the delayed inspection and follow requirements in accordance with Part 2.3.7.
   3. Inspections must resume as soon as the site is accessible. Delays are self-determined on a case-by-case basis with appropriate documentation, and determination is subject to review during a DEQ compliance evaluation inspection.

2.3.7 Inspection Requirements

Inspections conducted under Parts 2.3.3, 2.3.4, and 2.3.5 must comply with the inspection requirements in Part 2.3.7, below.

a. At a minimum, the following areas must be inspected:
   1. All areas disturbed by the construction activity;
   2. All pollutant sources generated by the construction activity;
   3. Material and waste storage areas exposed to rainfall or snowmelt;
   4. Support activities exposed to rainfall or snowmelt;
   5. Entrance and exit locations to the construction activity;
   6. Site perimeter;
   7. All areas where storm water flows onto and within the construction project area; and
   8. Discharge locations and if impaired waterbodies were impacted.

b. At a minimum, the inspection report must include:
   1. The MPDES permit authorization number;
   2. The inspection date and time;
   3. Name(s) of the SWPPP Administrator(s) completing the inspection;
   4. Weather conditions at the time of the inspection;
   5. The type of inspection based on Parts 2.3.3, 2.3.4, 2.3.5, and 2.3.6;
   6. Changes in the inspection schedule;
   7. Major construction activities at the time of the inspection;
   8. Pollutant sources present at the time of the inspection;
   9. BMPs implemented or installed at the time of the inspection;
   10. Description of all BMPs requiring maintenance;
   11. Corrective actions per Part 2.4 including a description of implementation including dates that the corrective action(s) were completed;
   12. Discharges of sediment or other pollutants;
   13. Instances of noncompliance; and
   14. Certification and signature.

c. Inspection reports must be signed and certified by a SWPPP Administrator based on the requirements in Part 4.15.

d. Inspection records must be maintained as required by Part 2.5.

e. Maintenance, repair, replacement, or installation of new BMPs determined necessary during site inspections to address ineffective or inadequate BMPs must be conducted in accordance with Part 2.3.8.

2.3.8 BMP Maintenance, Replacement, and Failures

a. All BMPs must be maintained in effective operating condition.

b. If inspections identify BMPs that are not in effective operating condition:
   1. Maintenance must be documented and performed by the close of the next business day.
      i. If this timeframe is "infeasible" (as defined in Part 5), document rationale and provide a schedule of events with a maintenance timeframe making BMPs operational within seven (7) calendar days.
   2. If new or replacement BMPs are required to be implemented or installed or if additional BMPs are necessary, these additional measures must be implemented or installed by no later than seven (7) calendar days from the time of discovery.
      i. If this timeframe is infeasible (as defined in Part 5), document rationale and provide a schedule of events with a timeframe making BMPs operational as soon as feasible after the 7-day timeframe.

c. All changes in the design, implementation, or installation of erosion and sediment controls or other BMPs must be documented according to Part 3.12.2.

2.4 Corrective Actions

Corrective actions are actions a SWPPP Administrator takes to:

- Repair, modify, or replace any BMP used at the site;
- Install new or additional BMPs;
- Immediately clean up, dispose of, and, under Part 4, report spills, releases, and other deposits; and
- Remedy a permit violation or noncompliance.

If any of the following conditions occur, a SWPPP Administrator must review and revise the selection, design, installation, implementation, and maintenance of BMPs to ensure the condition is eliminated and will not be repeated in the future:

- An unauthorized release or discharge (e.g., spill, leak, or discharge of non-storm water not authorized by this or another MPDES permit) occurs at the site;

- A SWPPP Administrator or DEQ determines that the BMPs are not adequate enough for the discharge as it causes or contributes to an exceedance of applicable water quality standards;
- A SWPPP Administrator or DEQ determines that modifications to the BMPs are necessary to meet the requirements in Part 2;
- A SWPPP Administrator or DEQ determines that the BMPs are not properly selected, designed, installed, operated, and/or maintained; or
- A failure of erosion or sediment controls resulting in sediment, solids, or other wastes being discharged from the site. Upon identification of sediment, solids, or other wastes lost or discharged from the site, the material must be cleaned up and placed back on site, or otherwise disposed of in an acceptable manner.
- A SWPPP Administrator must document the completed corrective actions in the corresponding inspection report, and complete any updates to the SWPPP site map(s). In addition, these changes can be updated in the SWPPP for the permittee to maintain consistency with their internal records.

2.5 Recordkeeping

At the identified site, the primary SWPPP Administrator must retain:

- A copy of the General Permit;
- A copy of the completed and signed NOI-SWC form including modification submittals;
- A copy of DEQ's confirmation letter;
- A copy of the signed SWPPP, including revisions and updates, and attachments;
- BMP installation, design, and maintenance specifications/standards for all BMPs installed and detailed in the SWPPP and/or inspection records;
- SWPPP site map(s) reflecting up-to-date site conditions
- SWPPP Administrator and Preparer documentation under Part 3.2;
- All inspection records required under Part 2.3, 2.4, 3.11, and 3.12;
- All reports of noncompliance under Part 4; and
- Sage Grouse consultation letter, as applicable.

These documents are to be made available at the site immediately upon request from a DEQ representative, EPA official, or local official. These records are to be maintained by the permittee for a period of three years from the date of termination.

2.6 Reporting

2.6.1 Notification of SWPPP Administrator Changes

The permittee must notify DEQ in writing of any change to the SWPPP Administrator's name, mailing address, and/or telephone number within 15 calendar days of the change. Notification can be submitted using Attachment A or other written correspondence sent to DEQ.

2.6.2 Noncompliance Reporting

Any instance of noncompliance must be reported to DEQ as required by Part 4.23.

3. Storm Water Pollution Prevention Plan (SWPPP)

3.1 SWPPP General Requirements

3.1.1 SWPPP Definition

The SWPPP is a document that must be developed, implemented, and maintained in accordance with good engineering selection and design, hydrologic principles, and pollution control practices to minimize and control potential pollutants in storm water associated with construction activity.

3.1.2 SWPPP Minimum Requirements

At a minimum, the SWPPP must have the following components:

- Include the information specified in Part 2 and Part 3 of the General Permit;
- Provide a site description of the nature of the construction activity that includes identification and details of the major construction activities and project area characteristics;
- Identify and describe all potential pollutant sources which may affect the quality of storm water discharges associated with the construction activity;
- Identify and describe the BMPs to be used to reduce potential pollutants in storm water discharges associated with the construction activity and to ensure compliance with the effluent limitations in the General Permit;
- Identify and describe the measures which will be used to achieve final stabilization; and
- Identify and clearly describe the inspection and maintenance procedures implemented at the site to maintain BMPs identified in the SWPPP in good and effective operating condition.

3.1.3 SWPPP Implementation

The SWPPP must be implemented as follows:

- The SWPPP must be implemented in accordance with the primary SWPPP Administrator's up-to-date field copy;
- SWPPP implementation must initiate at the start of ground disturbance associated with the construction activity;
- The SWPPP must be maintained to reflect up-to-date site conditions through documented revisions and updates in accordance with Part 3.12.2. Inspection reports, logs, and the SWPPP site map may supplement the SWPPP to reflect the most up-to-date site conditions; and
- SWPPP implementation must continue until final stabilization of all construction activity-related ground disturbance is achieved and permit coverage has been terminated.

3.2 SWPPP Preparer and Administrator

SWPPP Preparers and Administrators must obtain certification from a course approved by DEQ and maintain a valid certification by meeting the requirements in Parts 3.2.1, 3.2.2, and 3.2.3, as applicable to their role. Consistent with standard industry practice, a SWPPP Preparer or Administrator certification is valid no more than 3 years after date of certification. Training providers issue certifications complete with expiration dates.

Validation of SWPPP Preparer and Administrator certification will be determined at the time a NOI-SWC Package is submitted or during a regulatory inspection. Valid certification demonstrating the minimum requirements for the SWPPP Preparer and Administrator(s) must be maintained with the SWPPP, and must include the following:

- Name(s), title(s), phone number(s), and email address(es) of SWPPP Preparer and Administrator(s); and
- Date and name of provider of course(s).

3.2.1 SWPPP Preparer and Administrator Minimum Requirements

DEQ identified minimum requirements for SWPPP Preparers and Administrators so that the quality of storm water discharges is controlled and the effluent limitations in Part 2 are complied with.

To adequately serve their assigned roles and maintain valid certification, SWPPP Preparers and Administrators must understand and be able to apply the following concepts:

- General Permit requirements including, but not limited to: applicability, application procedures, SWPPP elements, standard conditions, and termination conditions;
- Local permitting requirements;
- Sage Grouse requirements based on location of the project;
- Principles and practices of erosion and sediment controls and pollution prevention, including the minimum criteria for BMPs defined in Part 2.1;
- Construction site assessment and planning skills including knowledge and identification of major construction activities, phases of construction activities and all support activities, and the potential pollutants generated based on the scope of the project;
- Development, selection, and implementation skills for all BMPs on the site, including final stabilization measures, required by this permit based on appropriate design, installation, function, and location; and how they are to be maintained and/or repaired according to developed and/or manufacturers plans and specifications;
- Development, selection, and implementation skills for pollution prevention controls and BMPs required by the General Permit;
- Development and implementation skills for procedures and associated documentation for all inspections, maintenance, and required recordkeeping to include when and how to conduct inspections, record applicable findings, take corrective actions, and, when appropriate, report violations and/or noncompliance; and
- Ability to develop and update the SWPPP site map(s) required by the General Permit.

3.2.2 SWPPP Preparer

A SWPPP Preparer is a designated individual who is responsible for planning and development of the SWPPP prior to submission of the NOI-SWC Package. The permittee must specify a SWPPP Preparer in the NOI-SWC form and the SWPPP.

The SWPPP Preparer(s) must:

- Develop and document all aspects of the SWPPP, starting with the initiation of construction activities, and lasting until final stabilization is achieved and the permit authorization is terminated;
- Meet minimum requirements in Part 3.2.1 and obtain valid certification before the submittal of the NOI-SWC Package to DEQ.

3.2.3 SWPPP Administrator

A SWPPP Administrator is a designated individual who is responsible for developing, implementing, maintaining, revising, and updating the SWPPP. The permittee must specify at least one SWPPP Administrator in the NOI-SWC form and the SWPPP. For new employees hired after the submission of the NOI-SWC Package, the minimum requirements and valid certification must be completed before assuming SWPPP Administrator responsibilities. Validation of certification will be determined during an inspection. Valid certification demonstrating the minimum requirements for the SWPPP Administrator(s) must be maintained with the SWPPP.

The SWPPP Administrator(s) must:

- Address all aspects of the SWPPP, initiating with the start of construction activities, and lasting until final stabilization is achieved and the permit authorization is terminated;

- Apply knowledge of erosion and sediment controls and pollution prevention to assess site conditions and determine the effectiveness of selected BMPs;
- Meet minimum requirements in Part 3.2.1 and obtain valid certification before the submittal of the NOI-SWC Package to DEQ;
- Individuals seeking to assume the SWPPP Administrator responsibilities after the start of a project must first meet the minimum requirements Part 3.2.1 and obtain valid certification;
- Meet the duly authorized representative requirements as defined in Part 4.18 to sign inspection documents and other reports.

3.3 Site Description

a. The SWPPP must include of all of the following:

1. A description of the nature of the construction activity and what is being constructed;
2. A description of all support activities and associated storm water discharges dedicated to the construction activity including but not limited to: material borrow areas, material fill areas, concrete or asphalt batch plants, equipment staging areas, access roads/corridors, material storage areas, and material crushing/recycling/processing areas;
3. The total area of the site (in acres), and the area of the site (in acres) expected to undergo construction-related disturbance (including all construction-related support activities);
4. A description of the character and erodibility of soil(s) and other earth material to be disturbed at the site, including cut/fill material to be used;
5. For construction-related disturbance of five acres or more of total land area:
   i. An estimate of the runoff coefficient of the site, both before and after construction, including a source for the estimate; and
   ii. An estimate of the increase in impervious area after the construction activity is completed;
6. The names and impairment status of receiving state surface waters and a description of the size (drainage area), type, and location of each point source discharge or outfall with connectivity.
   i. If there is no distinguishable point source discharge or outfall to the receiving state surface waters, a description of storm water runoff flow and drainage patterns into the receiving state surface waters.
   ii. If the discharge is to unnamed drainage, the name of the first named waterbody downstream of the site that will receive the discharge.
   iii. If the discharge is to a municipal separate storm sewer system (MS4), the location of the MS4 outlet where the storm sewer discharges into receiving state surface waters.
   iv. If there is no distinguishable point source discharge or outfall to the receiving state surface waters, a description of storm water runoff flow and drainage patterns into the receiving state surface waters.
7. A brief description of the existing natural cover and vegetation at the site and an estimate of the percent density of vegetative ground cover.

3.4 Identification of Potential Pollutant Sources

All potential pollutant sources, including soils, materials, and activities, within the scope of the entire construction project must be evaluated for the potential to contribute pollutants to storm water discharges. The SWPPP must identify those sources determined to have the potential to contribute pollutants to storm water discharges, and these sources must be controlled through BMP selection and implementation, as required in Part 3.5, below.

The permittee must identify all potential pollutant sources within lists provided for soils, materials, and activities within the SWPPP. In addition, the permittee must identify and list the following:

- Other potential pollutant sources from soils, activities, and materials not already identified the SWPPP;
- Other non-storm water discharges if present; and
- Any additional potential pollutant sources.

3.5 Selection of Best Management Practices (BMPs)

The SWPPP must document the selection of BMPs based on the potential pollutant sources identified in Part 3.4 above that have been installed and implemented at the site to achieve the effluent limits in Parts 2.1 and 2.2. All BMPs must be designed, installed, and implemented, and maintained according to published specifications. A copy of specifications must be maintained on-site and be accessible upon request. Specification sources must be identified in the SWPPP and kept up-to-date. Any departures from the specifications must reflect good engineering practices and must be documented in the SWPPP or corresponding inspection reports.

The permittee must identify all selected BMPs within the SWPPP including:

- Erosion control BMPs;
- Sediment control BMPs;
- Run on/runoff control BMPs;
- Administrative controls; and
- Post construction controls.

In addition, the permittee must select and list the following:

- Additional BMPs not already identified in the SWPPP and likely to be used at the construction project;
- Local sediment and erosion controls including a description of requirements;
- BMPs that target and reduce discharges of the identified pollutants of impairment to impaired waterbodies as required under Part 2.2; and
- Sage Grouse controls (The consultation letter attached to the SWPPP will meet the requirements for this section in Part 2.5).

3.6 Dewatering

All dewatering practices and BMPs associated with dewatering must be identified in the SWPPP and SWPPP site map(s) as required under Part 3.10.

- Ground water, surface water, and/or accumulated storm water due to dewatering practices which *will* discharge (or have the potential to discharge) to state surface waters are not authorized under the SWC General Permit and must obtain authorization under the MPDES General Permit for Construction Dewatering (CDGP) or an individual MPDES permit, as applicable. The CDGP applies to discharges that include in-stream dewatering, surface area dewatering, and ground water dewatering (See "Construction Dewatering" definition in Part 5).

3.7 Major Construction Activity and BMP Phasing

A major construction activity is defined as any distinct construction related disturbance or pollutant generating activity that occurs within the schedule of activities associated with the project. Major construction activities are often referred to as construction phases.

For each major construction activity, the SWPPP must:

- Identify the activity;
- Document the activity and associated BMP phasing using a table or narrative description;
- Include a list of all the construction related tasks (i.e. the series of steps) necessary to complete the activity;
- Provide an estimated timeframe (from initiation to completion) of the activity;
- Document the selected BMPs throughout the succession of each major construction activity until the site reaches final stabilization;
- Identify BMP phasing of major construction activities the SWPPP site map(s) as required under Part 3.10.

3.8 Final Stabilization

The SWPPP must clearly describe all procedures and BMPs used to ensure that "final stabilization" (as defined in Part 5) is achieved.

To achieve final stabilization a permittee must:

- Uniformly establish vegetative cover or equivalent permanent physical erosion reduction methods over the entire disturbed area, without any relatively bare areas based on the pre-disturbance conditions;
- Establish vegetative cover to density of at least 70% of pre-disturbance levels, or implement equivalent permanent physical erosion reduction methods;
- For vegetative cover, use perennial plants adapted to site conditions; and
- Utilize final stabilization measures that can provide erosion control equivalent to pre-existing site conditions.

In addition to achieving final stabilization, the permittee must have completed the items listed in Part 1.4 to be eligible to terminate coverage under the General Permit.

3.9 Post-Construction Storm Water Management

The SWPPP must clearly describe any BMPs which will be used to control storm water and potential pollutants in storm water discharges that will occur after construction operations have been completed at the site, including any applicable local requirements. If a temporary BMP will be transitioned to a post-construction BMP, the SWPPP must clearly describe the transition process and how the BMP will be maintained. Where practicable, DEQ supports the use of low impact development (LID) and green infrastructure BMPs that allow for infiltration, evapotranspiration, or capture for reuse storm water runoff generated from the majority of expected storm events post-construction.

3.10 Site Map

The SWPPP must include at least one legible site map/plan of sufficient scale and size which clearly display site conditions. Multiple SWPPP site maps/plans are encouraged for clarity.

a. At a minimum, the SWPPP site maps/plans must include the following:
   1. Site boundaries to include the perimeter of common plans of development;
   2. Locations and types of all dedicated construction activity support areas (including off-site) such as access-related work, earth material borrow areas, equipment staging areas, materials storage areas, temporary concrete or asphalt batch plants, and any areas used for fill placement;
   3. Locations where ground-disturbing activities will occur, noting any BMP phasing of major construction activities;
   4. Preconstruction topography of the site including showing state surface waters which will receive storm water runoff from the site.
   5. Any receiving state surface waters listed as impaired;
   6. Labeled outfalls with drainage pattern(s) and flow directions (use arrows) of storm water and authorized non-storm water flow onto, over, and from the site property before and after major grading activities, including lines showing boundaries between different drainage areas;
   7. Storm water, and allowable non-storm water discharge locations and types, including the locations of any storm drain inlets and where storm water or allowable non-storm water will be discharged to state surface waters;
   8. MS4s including the identification of applicable outlets, where the construction activity's storm water discharges flow into them;
   9. Locations and sources of run-on to the site from adjacent property that may contain potential pollutants (including sediment);
   10. Locations of areas of cut and fill;
   11. Locations of areas which are to remain undisturbed including vegetative buffer areas;
   12. Locations of existing natural cover and vegetation or other pre-existing ground stabilization measures before construction (such as forest, pasture, lawn, pavement, structures);

13. Approximate slopes before and after major grading activities. Note areas of steep slopes both before and after grading;
14. Locations where sediment, soil, or other construction and building materials will be stockpiled;
15. Locations of fueling, vehicle and equipment maintenance, and/or vehicle cleaning and washing areas;
16. Locations of concrete washout and other waste management areas;
17. Locations of ground water or other construction dewatering activities and discharges (see Part 3.6);
18. Designated points on the site where vehicles will exit onto paved roads;
19. Locations of other potential pollutant-generating activities not specified elsewhere;
20. Locations of all structural and non-structural BMPs for potential pollutants other than sediment;
21. Locations and specific types of all temporary or permanent erosion and sediment control BMPs;
22. Locations and specific types of all BMPs, including impoundments or conveyances such as retention and detention ponds, ditches, pipes, and swales;
23. Locations of structures and other impervious surfaces upon completion of construction;
24. Location(s) of the public sign(s);
25. Map scale;
26. North arrow; and
27. Map legend.

3.11 Inspection and BMP Maintenance Procedures

In the SWPPP, the permittee must identify which self-inspection schedule Part 2.3.2 they are following. The SWPPP must identify and clearly describe the inspection and maintenance procedures implemented to maintain BMPs identified in the SWPPP, in good and effective operating condition. These documented procedures must comply with the inspection requirements in Part 2.3 and correspond with BMP maintenance specifications. Refer to Parts 2.3.8, 2.4, 3.5, and 0 for related BMP maintenance requirements.

3.12 SWPPP Revisions and Updates

The permittee must maintain the SWPPP and SWPPP site map(s) to reflect inspections (per Part 2.3) and corrective actions (per Part 2.4).

3.12.1 Conditions Triggering Revisions and Updates

a. The following conditions trigger required revisions and updates to the SWPPP:
   1. When there is a change in design, construction, operation, or maintenance of the site, which would require the implementation of new, additional, or revised BMPs; or
   2. If the SWPPP proves to be ineffective in achieving the general objectives of controlling potential pollutants in storm water discharges associated with construction activity; or
   3. DEQ determines that the BMPs are not properly selected, designed, installed, operated, and/or maintained; or
   4. When BMPs are no longer necessary and are removed.

b. If a permittee is applying for a renewal or modification of their authorization, as described in Part 1.2.3 and 1.2.4, respectively, an updated SWPPP including all associated maps, diagrams, details, plans, and records must be submitted.

3.12.2 Revision and Update Options

The permittee must document how revisions and updates to the SWPPP will be maintained to reflect current site conditions. SWPPP site map(s) must reflect any revisions or updates to the SWPPP or from corresponding inspection reports. Inspection reports may be used to supplement the SWPPP to reflect revisions and updates.

Revisions and updates must be made before changes in the site conditions except for BMP changes addressing installation/implementation. BMP changes addressing installation/implementation must be made as soon as practicable, but in no case more than 72 hours after the changes occur at the site.

The permittee may use any of the three options below to document revisions and updates to the SWPPP:

(1) Revisions and updates directly to the SWPPP and the SWPPP site map(s). Updates to the SWPPP must include additional pages attached the SWPPP which include the time, date, and SWPPP Administrator authorizing the change; or

(2) Revisions and updates reflected through inspection records, and the SWPPP site map(s); or

(3) Revisions and updates reflected through a log, and the SWPPP site map(s). Log entries must include the time and date of the change(s) in the field; an identification of the BMP(s) removed or added; the location(s) of those BMP(s); and the name of the SWPPP Administrator authorizing the change.

4. Standard Conditions

4.1 Duty to Comply

The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Montana Water Quality Act and is grounds for enforcement action; for termination under the General Permit; for revocation and reissuance of a confirmation letter; for a modification requirement; or for denial of coverage under the General Permit (new or renewed). The permittee shall give the department advance notice of any planned changes at the permitted facility or of an activity which may result in permit noncompliance.

4.2 Penalties for Violations of Permit Conditions

The Montana Water Quality Act at MCA 75-5-631 provides that in an action initiated by the department to collect civil penalties against a person who is found to have violated a permit condition of this Act is subject to a civil penalty not to exceed $25,000. Each day of violation constitutes a separate violation.

The Montana Water Quality Act at MCA 75-5-632 provides that any person who willingly or negligently violates a prohibition or permit condition of the Act is guilty of an offense, and upon conviction, is subject to a fine not to exceed $25,000 per day of violation or imprisonment for not more than one year, or both, for the first conviction. Following an initial conviction, any subsequent convictions subject a person to a fine of up to $50,000 per day of violation or by imprisonment for not more than two years, or both.

The Montana Water Quality Act at MCA 75-5-611 provides for administrative penalties not to exceed $10,000 for each day of violation and up to a maximum not to exceed $100,000 for any related series of violations. Except as provided in permit conditions “Bypass of Treatment Facilities” and “Upset Conditions”, nothing in this permit shall be construed to relieve the permittee of the civil or criminal penalties for noncompliance.

4.3 Duty to Reapply

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit. The reapplication must be submitted at least 30 days before the expiration date of this permit.

4.4 Need to Halt or Reduce Activity not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

4.5 Duty to Mitigate

The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

4.6 Proper Operation and Maintenance

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

4.7 Permit Actions

This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

4.8 Property Rights

The issuance of this permit does not convey any property rights of any sort, or any exclusive privilege.

4.9 Duty to Provide Information

The permittee shall furnish to the department, within a reasonable time, any information which the department may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the department, upon request, copies of records required to be kept by this permit.

4.10 Inspection and Entry

The permittee shall allow the head of the department, or an authorized representative upon the presentation of credentials and other documents as may be required by law, to:

- Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
- Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and as otherwise authorized by the Montana Water Quality Act, any substances or parameters at any location; and
- Sample, or monitor at reasonable times for the purpose of assuring permit compliance, any substances or parameters at any location.

4.11 Availability of Reports

Except for data determined to be confidential under 40 CFR Part 2, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the department. As required by the Clean Water Act, applications, permits and effluent data shall not be considered confidential.

4.12 Reporting Requirements- Monitoring and Monitoring Reports

The department may require a permittee to monitor in addition to any conditions in this permit, on a case-by-case basis. If monitoring is required, the department will specify monitoring requirements to include, and not limited to, storm water sampling, analytical testing, and an evaluation of monitoring results, recording, and reporting. Monitoring results must be reported on a discharge monitoring report (DMR) or as required by the department. Monitoring results must be reported at the intervals specified.

If the permittee monitors any pollutant more frequently than required, using approved test procedures, the results of this monitoring must be included in the calculation and reporting of data submitted in the DMR. Calculations for all limitations which require averaging of measurements must utilize an arithmetic mean unless otherwise specified by the department.

4.13 Monitoring and Records- Representative Sampling

Samples and measurements taken for the purpose of monitoring must be representative of the monitored activity.

4.14 Monitoring and Records- Retention of Records

The permittee shall retain records of all monitoring information including all calibrations and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least three years from the date of the sample, measurement, report, or application. This period may be extended by request of the department at any time.

4.15 Monitoring and Records- Records Content

Records of monitoring information must include:

- The date, exact place, and time of sampling or measurements;
- The individual(s) who performed the sampling or measurements;
- The date(s) analyses were performed;
- The individual(s) who performed the analyses;
- The analytical techniques or methods used; and
- The results of such analyses.

4.16 Monitoring and Records- Test Procedures

Monitoring must be conducted according to test procedures approved under Title 40 of the Code of Federal regulations (40 CFR) Part 136, unless other test procedures have been specified in this permit, confirmation letter, or by the department.

4.17 Monitoring and Records-Penalties for Falsification of Reports and Tampering

The Montana Water Quality Act at MCA 75-5-633 provides that any person who knowingly falsifies, tampers with, or renders inaccurate any monitoring device or method, or makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction be punished by a fine of not more than $25,000 per violation, or by imprisonment for not more than six months per violation, or by both.

4.18 Signatory and Authorized Representative Requirements

All applications, reports or information submitted to the department shall be signed and certified in accordance with ARM 17.30.1323.

4.18.1 Signatory Authority

All NOI-SWC application forms (including modifications and renewals), NOT, and PTN documents must be signed by an individual with signatory authority defined below:

a. For a corporation, a responsible corporate officer. A responsible corporate officer means:
   1. A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation; or
   2. The manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding $25 million (in second-quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

b. For a partnership or sole proprietorship, a general partner or the proprietor, respectively; or

c. For a municipality, state, federal, or other public agency, either a principal executive officer or ranking elected official. A principal executive officer of a federal agency includes:
   1. The chief executive officer of the agency; or
   2. A senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.

4.18.2 Duly Authorized Representative

The SWPPP, inspections reports, and other documents required by the General Permit that are not identified as needing the signature of a signatory authority in Part 4.18.1 may be signed by either an individual with signatory authority or a duly authorized representative of that person. A person is a duly authorized representative only if:

a. Authorization is made in writing by an individual with signatory authority (Part 4.18.1);
b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company (a duly authorized representative may thus be either a named individual or any individual occupying a named position.)
c. The written authorization is submitted to the department.

4.18.2.1 Changes to Duly Authorized Representative

If an authorization, described above, is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the above requirements must be submitted to the department prior to or together with any reports, information, or applications to be signed by an authorized representative.

4.18.3 Certification:

Any person signing a document under Part 4.18.1 or 4.18.2 shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

4.19 Reporting Requirements - Planned Changes

The permittee shall give notice to the department as soon as possible of any planned physical alterations or additions to the permitted facility, activity, or operation.

Notice is required only when:

- The alteration or addition to the permitted facility, activity, or operation may meet one of the criteria for determining whether a facility is a new source; or
- The alteration or addition could significantly change the nature or increase the quantity of pollutant discharged. This notification applies to pollutants which are not subject to effluent limitations in the permit.

4.20 Reporting Requirements- Anticipated Noncompliance

The permittee shall give advance notice to the department of any planned changes in the permitted facility/activity/operation which may result in noncompliance with permit requirements. The permittee shall notify as soon as possible by phone and provide with the following information, in writing, within five (5) days of becoming aware of such condition:

- A description of the discharge and cause of noncompliance; and
- The period of noncompliance including exact dates and times, or if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate and prevent recurrence of the non-complying discharge.

4.21 Reporting Requirements- Transfers

Permit coverage is not transferable to any person except after notice is given to the department and a transfer fee is paid. The Permit Transfer Notification (PTN-SWC) form provided by the department must be completed and must be received by the department at least 30 days prior to the anticipated date of transfer. The form must be signed by both the existing owner/operator and the new owner/operator following the signatory requirements of Part 4.18.

4.22 Reporting Requirements- Compliance Schedules

Reports of compliance or noncompliance with, or any progress reports on, interim, and final requirements contained in any compliance schedule of this permit or required by the department shall be submitted no later than 14 days following each schedule date.

4.23 Reporting Requirements- Twenty-four Hour Reporting

The permittee shall report any serious incident of noncompliance affecting the environment. Any information must be provided orally within 24 hours from the time the permittee first becomes aware of the following circumstances:

- Any noncompliance which may seriously endanger health or the environment;
- Any unanticipated bypass which exceeds any effluent limitation in the permit;
- Any upset which exceeds any effluent limitation in the permit; or
- As applicable, violation of a maximum daily discharge limit of any pollutant listed by the department in the General Permit or confirmation letter.

A written submission shall also be provided within five days of the time that the permittee becomes aware of the circumstances. The written submission shall contain:

- A description of the noncompliance and its cause;
- The period of noncompliance, including exact dates and times;
- The estimated time noncompliance is expected to continue if it has not been corrected; and
- Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

4.23.1 Oral Notification

The report shall be made orally to the Water Protection Bureau at (406) 444-5546 or the Office of Disaster and Emergency Services at (406) 324-4777.

4.23.2 Waiver of Written Notification Requirement

The department may waive the written report on a case-by-case basis if the oral report has been received within 24 hours by the Water Protection Bureau, by phone, (406) 444-5546. Written reports shall be submitted to the following address:

Montana Department of Environmental Quality
Water Protection Bureau
PO Box 200901
Helena, Montana 59620-0901

4.24 Reporting Requirements- Other Noncompliance

Instances of noncompliance not required to be reported within 24 hours shall be reported as soon as possible. The reports shall contain the information listed above for written submissions under Part 4.23.

4.25 Reporting Requirements- Other Information

Where the permittee becomes aware that it failed to submit any relevant facts in a permit application package, or submitted incorrect information in a permit application package or any report to the department, it shall promptly submit such facts or information.

4.26 Bypass

Intentional diversions of untreated waste streams from any portion of a treatment facility are prohibited unless:

- The bypass does not cause effluent to exceed effluent limitations and is necessary for essential maintenance to ensure efficient operation; or

- The bypass is unavoidable to prevent loss of life, personal injury, or severe property damage; or
- There are no feasible alternatives;
- And the proper notification is submitted.

Bypass is prohibited and the department may take enforcement action against a permittee for a bypass. If the permittee knows in advance of the need for anticipated bypass, it shall submit prior notice, if possible, at least ten days before the date of the bypass. The department may approve an anticipated bypass, after considering its adverse effects. The permittee shall submit notice of an unanticipated bypass as required under Part 4.23.

4.27 Upset Conditions

An upset may be used as an affirmative defense in actions brought to the permittee for noncompliance with a technology-based effluent limitation. The permittee (who has the burden of proof) must have operational logs or other evidence showing:

- When the upset occurred and its causes;
- That the facility was being operated properly;
- Proper notification was made; and
- Remedial measures were taken as required by the duty to mitigate standard condition.

4.28 Fees

The permittee is required to submit payment of an annual fee as set forth in ARM 17.30.201. If the permittee fails to pay the annual fee within 90 days after the due date for the payment, the department may:

- Impose an additional assessment computed at the rate established under ARM 17.30.201: and,
- Suspend the processing of the application for a permit or authorization or, if the nonpayment involves an annual permit fee, suspend the permit, certificate or authorization for which the fee is required. The department may lift suspension at any time up to one year after the suspension occurs if the holder has paid all outstanding fees, including all penalties, assessments and interest imposed under this sub-section. Suspensions are limited to one year, after which the permit will be terminated.

4.29 Removed Substances

Collected screenings, grit, solids, sludges, or other pollutants removed in the course of treatment shall be disposed of in such a manner so as to prevent any pollutant from entering any waters of the state or creating a health hazard.

4.30 Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Section 311 of the Clean Water Act.

4.31 Severability

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

4.32 Reopener Provisions

This permit may be reopened and modified (following proper administrative procedures) to include the appropriate effluent limitations (and compliance schedule, if necessary), or other appropriate requirements if one or more of the following events occurs:

- Water Quality Standards: The water quality standards of the receiving water(s) to which the permittee discharges are modified in such a manner as to require different permit conditions than contained in this permit.
- Water Quality Standards are Exceeded: If it is found that water quality standards or trigger values in the receiving stream are exceeded either for parameters included in the permit or others, the department may modify the permit conditions or water management plan.
- TMDL or Wasteload Allocation: TMDL requirements or a wasteload allocation is developed and approved by the department and/or EPA for incorporation in this permit.
- Water Quality Management Plan: A revision to the current water quality management plan is approved and adopted which calls for different effluent limitations than contained in this permit.

4.33 Toxic Pollutants

The permittee shall comply with effluent standards or prohibitions established for toxic pollutants which are present in the discharge, within any specified timeframe within rule or thereof, and even if the General Permit or confirmation letter has not yet been modified to incorporate such standard or prohibition for the toxic pollutant.

5. General Definitions and Abbreviations

"Act" means the Montana Water Quality Act, Title 75, Chapter 5, MCA.

"Best management practices" ("BMPs") means a schedule of activities, prohibition of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of state surface waters. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

"Board" means the Montana Board of Environmental Review established by 2-15-3502, MCA.

"CFR" means the Code of Federal Regulations.

"Clean Water Act" means the federal legislation at 33 USC 1251, et seq.

"Construction dewatering" means the action of pumping or actively removing ground water, surface water, and/or accumulated storm water from a construction site or other related activities. MPDES General Permit for Construction Dewatering applies to the discharge of construction dewatering effluent to state surface water with increased sediment and turbidity as the primary pollutants of concern, including:

- *In-stream dewatering*: cofferdams, drill hole or pylon development;
- *Surface area dewatering*: water pumped from disturbed surface areas (foundations, trenches, excavation pits, vaults, sumps, or other similar points of accumulation associated with a construction site or related activities where sediment-laden ground water, surface water, and/or storm water inflow must be removed); and
- *Ground water dewatering*: water discharged from well development, well pump tests, or pumping of ground water from a construction site or other related activities.

"Department" means the Montana Department of Environmental Quality. Established by 2-15- 3501, MCA.

"Disturbance related to construction activity" means areas that are subject to clearing, excavating, grading, stockpiling earth materials, and placement/removal of earth material performed during construction projects.

"Ephemeral stream" means a stream or part of a stream that flows only in direct response to precipitation in the immediate watershed or in response to the melting of a cover of snow and ice and whose channel bottom is always above the local water table.

"EPA" or **"US EPA"** means the United States Environmental Protection Agency.

"Facility or activity" means any MPDES point source or any other facility or activity (including land or appurtenances thereto) that is subject to regulation under the MPDES program.

"Final stabilization" as defined at ARM 17.30.1102(5), means the time at which all soil-disturbing activities at the site have been completed, and a vegetative cover has been established with a density of at least 70% of the pre-disturbance levels, or equivalent permanent, physical erosion reduction methods have been employed. Final stabilization using vegetation must be accomplished using seeding mixtures or forbs, grasses, and shrubs that are adapted to the conditions of the site. Establishment of a vegetative cover capable of providing erosion control equivalent to pre-existing conditions at the site will be considered final stabilization.

"General permit" means a MPDES permit issued under ARM 17.30.1341 authorizing a category of discharges under the Act within a geographical area.

"Indian country" as defined at 40 CFR § 122.2, means (a) all land within the limits of any Indian reservation under the jurisdiction of the United States Government, notwithstanding the issuance of any patent, and, including rights-of-way running through the reservation, (b) all dependent Indian communities within the borders of the United States whether within the original or subsequently acquired territory thereof, and whether within or without the

limits of a state, and (c) all Indian allotments, the Indian titles to which have not been extinguished, including rights-of-way running through the same.

"Infeasible" means not economically possible or economically practicable in light of best industry practices.

"Larger common plan of development or sale (larger common plan)" means a project where multiple separate and distinct construction activities may be taking place at different times and/or schedules but remain related under one common plan. A "common plan" is defined as any announcement or piece of documentation (including, but not limited to a sign, public notice or hearing, sales pitch, advertisement, drawing, engineering plan, permit application, zoning request, or schematic) or physical demarcation (including boundary signs, lot stakes, surveyor markings, etc.) indicating that construction activities may occur within a specific geographic area. Construction activities which form a larger common plan of development or sale may have areas of disturbance which are not physically connected.

"Montana pollutant discharge elimination system (MPDES)" means the system developed by the Board and DEQ for issuing permits for the discharge of pollutants from point sources into state surface waters. The MPDES is specifically designed to be compatible with the federal NPDES program established and administered by the EPA.

"Owner or operator" (or **owner/operator**) as defined at 75-5-103, MCA, means a person who owns, leases, operates, controls, or supervises a point source.

"Point source" as defined at ARM 17.30.1102, means a discernible, confined, and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel, or other floating craft, from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural storm water runoff.

"Pollutant" as defined at ARM 17.30.1102, means dredged spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt, and industrial, municipal, and agricultural wastes discharged into water. The terms "sewage," "industrial waste," and "other wastes" as defined at 75-5-103, MCA, are interpreted as having the same meaning as pollutant.

"Process wastewater" as defined at ARM 17.30.1102, means any water which, during manufacturing or processing, comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, byproduct, or waste product.

"Receiving state surface waters" means the initial surface water body which receives the discharge from the site. See definitions of "state waters" and "surface waters" below.

"Regional Administrator" is the administrator of the EPA Region with jurisdiction over federal water pollution control activities in the State of Montana.

"Runoff coefficient" as defined at ARM 17.30.1102, means the fraction of total rainfall that will appear at the conveyance as runoff.

"Severe property damage" means substantial physical damage to property, damage to treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

"Site" as defined at ARM 17.30.1102, means the land or water area where any facility or activity is physically located or conducted, including adjacent land used in connection with the facility or activity.

"State waters" as defined at 75-5-103, MCA, means a body of water, irrigation system, or drainage system, either surface or underground. The term does not apply to:

- Ponds or lagoons used solely for treating, transporting, or impounding pollutants; or
- Irrigation waters or land application disposal waters when the waters are used up within the irrigation or land application disposal system and the waters are not returned to state waters.

"Storm water" as defined at ARM 17.30.1102, means storm water runoff from precipitation, snowmelt runoff, and surface runoff and drainage.

"Storm water discharge associated with construction activity" as defined at ARM 17.30.1102, means a discharge of storm water from construction activities that result in the disturbance of equal to or greater than one acre of total land area. Construction activities include clearing, grading, excavation, stockpiling earth materials, and other placement or removal of earth material performed during construction projects. Construction activity includes the disturbance of less than one acre of total land area that is a part of a larger common plan of development or sale if the larger common plan will ultimately disturb one acre or more.

- Regardless of the acreage of disturbance resulting from a construction activity, this definition includes any other discharges from construction activity designated by the DEQ pursuant to ARM 17.30.1105(1)(f).
- For construction activities that result in disturbance of less than five acres of total land area, the acreage of disturbance does not include routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of the facility.
- For construction activities that result in disturbance of five acres or more of total land area, this definition includes those requirements and clarifications stated in ARM 17.30.1102(29)(a), (b), (d) and (e).

"Storm Water Pollution Prevention Plan (SWPPP)" as defined at ARM 17.30.1102, means a document developed to help identify sources of pollution potentially affecting the quality of storm water discharges associated with a facility or activity, and to ensure implementation of measures to minimize and control pollutants in storm water discharges associated with a facility or activity. DEQ determines specific requirements and information to be included in a SWPPP based on the type and characteristics of a facility or activity, and on the respective MPDES permit requirements.

"Surface waters" as defined at ARM 17.30.1102, means any waters on the earth's surface, including but not limited to streams, lakes, ponds, reservoirs, and irrigation and drainage systems. Water bodies used solely for treating, transporting, or impounding pollutants shall not be considered surface water.

"Temporary stabilization" means a condition where exposed soils or disturbed areas are provided a temporary vegetative and/or non-vegetative protective cover to prevent erosion and sediment loss. Temporary stabilization may include temporary seeding, geotextiles, mulches, and other techniques to reduce or eliminate erosion until either final stabilization can be achieved or until further construction activities take place to re-disturb this area.

"Total maximum daily load" or **"TMDL"** as defined at 75-5-103, MCA, means the sum of the individual waste load allocations for point sources and load allocations for both nonpoint sources and natural background sources established at a level necessary to achieve compliance with applicable surface water quality standards.

"Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

"Waste load allocation" as defined at ARM 17.30.1102, means the portion of a receiving water's loading capacity that is allocated to one of its existing or future point sources.

"Waste pile" means any non-containerized accumulation of solid, non-flowing waste that is used for treatment or storage.

Montana Department of Environmental Quality

General Permit

For Construction Dewatering

Permit Number MTG070000

MONTANA DEPARTMENT OF ENVIRONMENTAL QUALITY

GENERAL PERMIT
for
CONSTRUCTION DEWATERING

Permit No.: MTG070000

AUTHORIZATION TO DISCHARGE UNDER THE
MONTANA POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with Montana Water Quality Act, Title 75, Chapter 5, Montana Code Annotated (MCA), and the federal Water Pollution Control Act (the "Clean Water Act"), 33 U.S.C. 1251 *et seq*., applicants issued an authorization letter for coverage under this Construction Dewatering General Permit are permitted to discharge in accordance with permit compliance requirements and other conditions set forth herein.

A copy of this General Permit and the letter of authorization from the Department of Environmental Quality (DEQ) must be available at all times. The General Permit is not valid without a current letter of authorization for the dewatering activity.

This permit shall become effective **May 1, 2025.**

This permit and the authorization to discharge shall expire at midnight, **April 30, 2030.**

FOR THE MONTANA DEPARTMENT
OF ENVIRONMENTAL QUALITY



Tatiana Davila, Chief
Water Protection Bureau
Water Quality Division

Issuance Date: 4/1/2025

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ATTACHMENT

Attachment #1: 2025 Notice of Intent Form
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Attachment #3: Large Rivers Table

I. COVERAGE UNDER THIS GENERAL PERMIT

A. Coverage Area

The 2025 Construction Dewatering General Permit (2025-CDGP) applies to discharge of construction dewatering or well development effluent to state surface water in all areas in the State of Montana, except within the boundaries of Indian Reservations.

B. Sources Eligible for Coverage

The following activities are covered by the 2025-CDGP:

- *In-stream dewatering*: cofferdams, drill hole, or pylon development.
- *Surface area dewatering*: water pumped from disturbed surface areas (trenches, excavation pits, sumps, or other excavations associated with construction where sediment-laden ground water or surface water/storm water inflow must be removed); and
- *Ground water dewatering*:
  - *Water discharged from well development or well pump test* if the initial flush cannot be land applied or otherwise contained. CDGP authorization is also needed if a well development or pump test is within an area known or suspected to be contaminated.
  - *Water discharged from pumping ground water from a construction area*. A construction area is the area within the property boundaries of an active construction project. Common methods of dewatering include sumps and wells, generally described as follows:
    - *Sumps*: locally lowers ground water levels. Dewatering through sumps involves pumping ground water out of a lower collection point(s) typically gravity-fed by local ground water.
    - *Wells*: drilled wells, including bored/augured, driven, or jetted, which use vacuum or pumping to lower the ground water at greater depths than sumps at a construction site. The two most common types of wells used for dewatering ground water are:
      - Wellpoints.
      - Deep Wells.

    CDGP authorization is not required for dewatering performed through a wellpoint or deep well that is installed and only operated prior to construction activities in an undisturbed area (i.e. an area not within an active construction site). Because this exemption applies to unaltered groundwater, the owner/operator must control the first flush/initial purge so that sediment-laden water is not discharged into surface water. However, once construction has been initiated at the site, well dewatering activity is no longer exempted and cannot occur without an authorization under the 2025-CDGP.

C. Sources Excluded from Coverage

1. The Montana Department of Environmental Quality (DEQ) may deny a CDGP request for discharge for the following:

   a) The specific source applying for authorization appears unable to comply with the following requirements:
      - effluent limitations or other terms and conditions of the permit;
      - water quality standards established pursuant to 75-5-301, MCA; or
      - discharges that the regional administrator has objected to in writing.

   b) The discharge is different in degree or nature from discharges reasonably expected from sources or activities within the category described in the CDGP.

c) A Montana Pollutant Discharge Elimination System (MPDES) permit or authorization for the same operation has previously been denied or revoked.

d) The discharge is also included within an application or is subject to review under the Major Facility Siting Act, 75-20-101, et seq., MCA.

e) The discharge will be located in an area of unique ecological or recreational significance. Such determination must be based upon considerations of Montana stream classifications, impacts on fishery resources, local conditions at proposed discharge sites, and designations of wilderness areas or of wild and scenic rivers.

2. DEQ may deny a CDGP request for discharge from dewatering activities at or near a contaminated site. If the dewatering activity is proposed to be located near a known or potential site, the applicant must demonstrate that there will not be pollutants in the dewatering effluent discharged at concentrations over the contaminant thresholds as presented in **Table 6** of this permit.

D. Requirements for Authorization

1. Notice of Intent Package

Applicants must submit a CDGP Notice of Intent (NOI-07) package to DEQ and be authorized prior to discharging dewatering effluent that may reach state surface waters. A complete NOI package requires applicants to include the following:

a. *NOI-07 Form:* Once DEQ's online Fees Application and Compliance Tracking System (FACTS) has been updated, applicants will be required to submit construction dewatering NOIs and the applicable items below electronically through the FACTS database. FACTS is located on DEQ's website at https://svc.mt.gov/deq/factspermitting.

Until such time, a hard copy of the updated NOI form and instructions will be available on DEQ's webpage at https://deq.mt.gov/water/assistance or upon request by calling DEQ at (406) 444-5546. See **Attachment #1** for the final 2025 NOI-07.

b. *Dewatering Control Plan:* The initial Dewatering Control Plan must be submitted as part of the NOI-07 package.

c. *Sage Grouse Habitat Executive Order No. 12-2015:* If the operation is in sage grouse core, general, or connectivity habitat, the applicant must include a consultation letter from the Sage Grouse Habitat Conservation Program for new or modified projects. If the operation is outside of sage grouse habitat, a consultation letter is not required. Information regarding the Sage Grouse Habitat Conservation Program can be found online at https://sagegrouse.mt.gov/.

d. *MTNHP and SHPO:* As part of the NOI process, an applicant with a for new or modified projects will be required to provide information from both the Montana Natural Heritage Program (MTNHP) for Species of Concern and the Montana State Historic Preservation Office (SHPO) for a report on any historical, cultural, or archeological resources. These analyses can be obtained from:

a. Montana National Heritage Program https://mtnhp.org/
b. Montana State Historic Preservation Office https://mhs.mt.gov/Shpo/

e. *Required Fees (per billable outfall):*

- New Application: $900 *Includes first annual fee*
- Renewal Application: $400
- Modification: $400

2. New Authorization under the 2025-issued CDGP

The process for obtaining coverage for a new site under the CDGP is as follows:

a. Applicants must submit a complete NOI Package to DEQ at least 30 days prior to the planned dewatering discharge. This includes applicable Sage Grouse Habitat, MTNHP, and SHPO documentation.

b. DEQ will review the NOI package for completeness.

- If there are no deficiencies, DEQ will issue an authorization letter.
- If the NOI package is deficient, DEQ will notify the applicant of the required information. DEQ will issue an authorization letter once the deficient materials are addressed by the applicant.

As of May 1, 2025, applicants are not allowed to discharge to state surface waters without a current authorization letter from DEQ.

3. Renewed Authorization under the 2025-issued CDGP

Continued coverage applies to permittees currently authorized under the 2020-CDGP. DEQ will reissue authorization to existing permittees through the process outlined below:

a. Applicants with an authorization under the 2020-CDGP must submit a complete 2025-CDGP NOI Package to DEQ for continued coverage. The NOI package must be submitted by May 1, 2025.

b. DEQ will review the NOI package for completeness.

- If there are no deficiencies, DEQ will issue a renewed authorization letter.
- If the NOI package is deficient, DEQ will notify the applicant of the required information. DEQ will issue an authorization letter once the deficient materials are addressed by the applicant.

Applicants are not allowed to discharge to state surface waters without a 2025-CDGP authorization letter from DEQ as of May 30, 2025.

4. Terminate Permit Coverage

Permit coverage remains in effect until the expiration date of this General Permit or until DEQ receives notice from the permittee that the point source of discharge has been eliminated. The options for a permittee to terminate permit coverage are listed below:

- The permittee must submit a Request for Termination (RFT) in DEQ's FACTS database with CROMERR-compliant electronic certification by a Signatory Authority. In cases where the use of the FACTS interface is not feasible, the permittee may mail a hardcopy Notice of Termination (NOT) Form with original signature to DEQ. The NOT form is available at http://deq.mt.gov/water/assistance. **Annual fees (calendar year) will accrue until DEQ receives the complete RFT/NOT and sends an acknowledgement of the termination request.**
- Permittees may request to be excluded from coverage under this General Permit by applying for and obtaining an individual MPDES permit. If an individual MPDES permit is issued, coverage under this General Permit will be terminated on the effective date of the individual MPDES permit.

5. Transfer Permit Coverage

DEQ may transfer authorization to a new owner or operator under the General Permit. Both the current owner and the new owner must complete and certify a completed Permit Transfer Notification (PTN) form either electronically on the FACTS site at https://svc.mt.gov/deq/factspermitting or by hardcopy after downloading the PTN form available at http://deq.mt.gov/water/assistance (or available upon request from DEQ) and mail the completed PTN with original signatures and applicable fee to DEQ.

6. Denied Authorizations

If a permittee is denied authorization under the General Permit, DEQ may request additional information and additional application fee and process the request for authorization through the individual MPDES permit requirements unless the applicant withdraws the NOI or modifies the operations to be eligible under the General Permit.

II. EFFLUENT LIMITS, MONITORING REQUIREMENTS & SPECIAL CONDITIONS

A. Effluent Limits

Beginning on May 1, 2025, and lasting through the duration of this General Permit, each permittee requesting coverage under this CDGP will need to meet the applicable turbidity, oil & grease, and chemical use limits described below. All limits apply after treatment and prior to discharge to receiving waters.

1. **Turbidity.** Permittees requesting coverage under this CDGP are required to choose the most applicable turbidity category for each outfall, based on the potential relative impact to the receiving waterbody. **Table 1** presents the categories and associated turbidity limits. The following provides the descriptions of the receiving waterbody categories:

A. Minimal Impact

Construction dewatering discharges under the following subcategories are expected to have minimal impact on the receiving water turbidity:

- **Ephemeral waterbodies** – an "ephemeral stream" means a stream or part of a stream which flows only in direct response to precipitation in the immediate watershed or in response to the melting of a cover of snow and ice and whose channel bottom is always above the local water table. This subcategory can include a "seasonal lake or pond" which means a natural depression in the land surface that periodically holds water from precipitation or snow and ice melt in the immediate watershed.
- **Constructed storm sewer system** – drainage system designed and built solely for the transport of storm water or snow melt. This includes underground stormwater collection systems, road-side ditches, and stormwater retention and detention basins. Constructed storm sewer systems are typically ephemeral in that they only flow in response to rainfall or snow melt.
- **Dry intermittent waterbodies** – dewatering discharge to an "intermittent stream" (means a stream or reach of a stream that is below the local water table for at least some part of the year, and obtains its flow from both surface run-off and groundwater discharge) that **has no ambient water present during the dewatering period.** In addition, to be characterized under the dry intermittent subcategory, the discharge must dissipate and not reach downstream waters. This subcategory includes discharge to dry irrigation canals, dry intermittent streams, and semi-permanent lakes or ponds.

  If the situation changes so that there is ambient water at the time of dewatering, the permittee is responsible for complying with the requirements for waterbodies under the

B-Category, "Increased Risk of Impact" and following the reporting requirements at Part II.A.2 herein.

- **Large rivers** – Direct discharge to specified segments for one of eight large rivers: Big Horn, Clark Fork, Flathead, Kootenai, Madison, Missouri, South Fork Flathead, or Yellowstone River (see **Attachment #3**).

  - **A-Category Exceptions**

    This exemption allows for coverage for A-Category discharges that have turbid ambient waters:

    - **Impaired Waters** – on the 303(d) list for turbidity or sentiment. Identified in the Clean Water Act Information Center (CWAIC) https://clean-water-act-information-center-mtdeq.hub.arcgis.com/.
    - **Turbid ambient waters** – discharge will occur/may occur during periods with ambient receiving water that has a turbidity greater than 100 NTU.

B. Increased Risk of Impact

This category is more restrictive, to ensure protection of potentially sensitive receiving waters. The following waterbodies have an increased risk of being impacted by construction dewatering discharges:

- **Perennial waterbodies** – rivers (other than the eight large rivers listed above), streams, lakes, and reservoirs that have ambient water present all year.
- **Intermittent waterbodies** – dewatering discharge to an "intermittent stream" (means a stream or reach of a stream that is below the local water table for at least some part of the year, and obtains its flow from both surface run-off and groundwater discharge) that has or may have ambient water present during the dewatering period, or the discharge may reach downstream waters. This subcategory includes discharge to dry irrigation canals, dry intermittent streams, and semi-permanent lakes or ponds.
- **Wetlands.**

  - **B-Category Exceptions**

    There are two waterbody classifications that have special considerations and have a specific turbidity limit under the "Increased Risk of Impact" category:

    - **Waterbodies classified as A-Closed or A-1** (see ARM 17.30 Subchapter 6). These waterbodies have 'no increase above background' regulatory requirements and are the most protected classes of waterbodies.

Table 1: Turbidity Categories Based on Receiving Waterbody Impact		
Receiving Water *at Time of Discharge*	Effluent Turbidity Limit (NTU)	
	Maximum Daily Limit	Average Monthly Limit
A. Minimal Impact: ▪ Ephemeral waterbodies ▪ Constructed storm sewer systems ▪ Dry intermittent waterbodies (no ambient water present (1)) ▪ Large Rivers: specific segments of the Big Horn, Clark Fork, Flathead, Kootenai, Madison, Missouri, South Fork Flathead, or Yellowstone River (see Attachment #3)	100	100
➢ **A-Category Exceptions for Turbid Water** ▪ Waterbodies listed as impaired on the 303(d) list for turbidity or sediment. ▪ Discharge will occur/may occur during periods with turbid ambient receiving water that is greater than 100 NTU	(2)	100 (2)
B. Increased Risk of Impact: ▪ Perennial rivers and lakes ▪ Intermittent waterbodies ▪ Wetlands	20	10
➢ **B-Category Exception for Clean Water** ▪ Waterbodies classified as A-Closed or A-1	(3)	10 (3)

Footnotes:

(1) If there is an unexpected change in the ambient conditions (i.e. dry intermittent (A-Category) was selected but ambient flow is present), the permittee is responsible for meeting the B-Category limits and monitoring frequency. Also see below, **Part II.A.2**.

(2) The A-Category exception turbidity limits for turbid water will change based on the relative turbidity of the receiving water (i.e., the effluent must always be at or below the upstream turbidity). The daily maximum discharge turbidity limit is no increase above background. The average monthly effluent quality must meet whichever is more stringent: no increase above average monthly background turbidity or 100 NTU.

(3) The B-Category exception turbidity limits for clean water, which are waterbodies classified as A-Closed or A-1 (see ARM 17.30 Subchapter 6), will change based on the relative turbidity of the receiving water (i.e., the effluent must always be at or below the upstream turbidity). The daily maximum discharge turbidity limit is no increase above background. The average monthly effluent quality must meet whichever is more stringent: no increase above average monthly background turbidity or 10 NTU.

2. **Temporary Category Change Due to Changing Ambient Conditions.** If the applicant selected the "Dry Intermittent Waterbody" subcategory but the dewatering effluent is discharged into running surface water, rather than a dry stretch as permitted, the permittee must indicate the condition in the comment field of the NetDMRs, document the change in the Daily Log including date and time, and comply with the turbidity limits and associated monitoring for waterbodies with "Increased Risk of Impact."

3. **Oil & Grease.** There may be no visible oil film, nor may oil & grease be present in concentrations at or in excess of 10 milligrams per liter. If a visual examination of the discharge

indicates the presence of hydrocarbons, by sheen, odor, or other sign, the permittee is required to take corrective action as specified under the Special Conditions **Part II.D.3** of this permit, including analyzing a grab sample of the discharge in accordance with 40 CFR 136 and ceasing discharge until the source is eliminated.

4. **Chemicals**. No chemicals, other than coagulants and/or flocculants used in accordance with manufacturer's specifications, may be added to, or discharged with, the construction dewatering effluent. Use of coagulants or flocculants, or the presence of contaminants must be reviewed and authorized by DEQ.

B. Monitoring and Reporting Requirements

Monitoring of the effluent must be representative of the volume and nature of the discharge. Effluent quality will be monitored at the discharge location (outfall) after all treatment has occurred, prior to entering the receiving water. Monitoring is only required during periods of discharge to state surface waters.

Monitoring results shall be noted on the daily log beginning the effective date of the authorization. In addition, the monitoring results are required to be reported to DEQ on Discharge Monitoring Reports (NetDMRs) by the 28th of the following month. If no discharge occurs, the permittee shall indicate "no discharge" on the monthly NetDMRs.

Samples shall be collected, preserved, and analyzed in accordance with approved procedures listed in 40 CFR Part 136 and any non-detects must meet the Required Reporting Values (RRVs) listed in Circular DEQ-7 unless otherwise specified. Turbidity grab samples can either be analyzed on-site using a turbidity meter or by sending to a laboratory for analysis.

1. **Monitoring Frequency**. The specific monitoring requirements for each outfall will depend on the category that was selected from **Table 1**, and will be indicated on the authorization letter sent to the permittee. Monitoring requirements for each of the categories are presented in **Tables 2 to 5**, as follows:
   - **Table 2:** A-Category: Minimal impact
   - **Table 3:** A-Category Exceptions
   - **Table 4:** B-Category: Increased Risk of Impact
   - **Table 5:** B-Category Exceptions

Table 2: A-Category "Minimal Impact" Monitoring Requirements

Parameter	Sample Location	Unit	Sample Frequency [1]	Sample Type	Reporting Requirement
Days with Discharge	Effluent	Days	1/Day	Visual	Value
Ambient Flow	Upstream	Y/N	1/Day	Visual	--
Turbidity	Effluent	Y/N [2]	1/Day	Visual	--
		NTU	1/Week [3]	Grab	Daily Max and Monthly Avg
Oil and grease	Effluent	Y/N [4]	1/Day	Visual	--
		mg/L	[4]	Grab	Daily Max

Footnotes:
1) Monitoring is required during any periods with dewatering discharge that reaches state surface water.
2) Turbidity "Yes" indicates a visual observation of elevated turbidity that is suspected to be above the numeric NTU limit. This situation requires the permittee to take and analyze a grab sample of the discharge and take corrective action as specified under the Special Conditions **Part II.D.3**.
3) Turbidity grab samples of the discharge must be taken for analysis in the first four (4) hours of discharge, then at least once per week thereafter.
4) If a visual examination of the discharge indicates the presence of hydrocarbons, by sheen, odor, or other sign, the permittee is required to take corrective action as specified under the Special Conditions **Part II.D.3** including analyzing a grab sample of the discharge in accordance with 40 CFR 136.

Table 3: A-Category Exceptions Turbid Water "No Increase Above Background" Monitoring Requirements

Parameter	Sample Location	Unit	Sample Frequency [1]	Sample Type	Reporting Requirement
Days with Discharge	Effluent	Days	1/Day	Visual	Value
Ambient Flow	Upstream	Y/N	1/Day	Visual	--
Turbidity	Effluent	Y/N [2]	1/Day	Visual	--
	Effluent	NTU	1/Week [3]	Grab	Daily Max and Monthly Avg
	Upstream			Grab	
	Difference [4]			Calculated	
Oil and grease	Effluent	Y/N [5]	1/Day	Visual	--
		mg/L	[5]	Grab	Daily Max

Footnotes:
1) Monitoring is required during any periods with dewatering discharge that reaches state surface water.
2) Turbidity "Yes" indicates a visual observation of elevated turbidity that is suspected to be above the numeric NTU limit. This situation requires the permittee to take and analyze a grab sample of the discharge and take corrective action as specified under the Special Conditions **Part II.D.3**.
3) Turbidity grab samples of the ambient (upstream) condition and the discharge must be taken for analysis in the first four (4) hours of discharge, then at least once per week thereafter, as well as when the visual observation indicates elevated effluent turbidity.
4) The turbidity net difference is the increase over background, calculated by subtracting the upstream turbidity from the effluent turbidity. The turbidity net (difference) must be at or below 0 NTU.
5) If a visual examination of the discharge indicates the presence of hydrocarbons, by sheen, odor, or other sign, the permittee is required to analyze a grab sample of the discharge in accordance with 40 CFR 136, cease discharge until the oil and grease is eliminated, and take corrective action as specified under the Special Conditions **Part II.D.3**.

Table 4: B-Category "Increased Risk of Impact" Monitoring Requirements

Parameter	Sample Location	Unit	Sample Frequency [1]	Sample Type	Reporting Requirement
Days with Discharge	Effluent	Days	1/Day	Visual	Value
Turbidity	Effluent	Y/N [2]	1/Day	Visual	--
		NTU	2/Week [3]	Grab	Daily Max and Monthly Avg.
Oil and grease	Effluent	Y/N [4]	1/Day	Visual	--
		mg/L	[4]	Grab	Daily Max

Footnotes:

1) Monitoring is required during any periods with dewatering discharge that reaches state surface water.
2) Turbidity "Yes" indicates a visual observation of elevated turbidity that is suspected to be above the numeric NTU limit. This situation requires the permittee to take and analyze a grab sample of the discharge and take corrective action as specified under the Special Conditions **Part II.D.3**.
3) Turbidity grab samples of the discharge must be taken for analysis in the first four (4) hours of discharge, then at least twice per week (at least one day apart) thereafter, as well as when the visual observation indicates elevated turbidity.
4) If a visual examination of the discharge indicates the presence of hydrocarbons, by sheen, odor, or other sign, the permittee is required to analyze a grab sample of the discharge in accordance with 40 CFR 136, cease discharge until the oil and grease is eliminated, and take corrective action as specified under the Special Conditions **Part II.D.3**.

Table 5: B-Category Exception for Clean Water "No Increase Above Background" Monitoring Requirements

Parameter	Sample Location	Unit	Sample Frequency [1]	Sample Type	Reporting Requirement
Days with Discharge	Effluent	Days	1/Day	Visual	Value
Receiving Water Flow	Upstream	Y/N	1/Day	Visual	--
Turbidity	Effluent	Y/N [2]	1/Day	Visual	--
	Effluent	NTU	2/Week [4]	Grab	Daily Max and Monthly Avg
	Upstream			Grab	
	Difference [4]			Calculated	
Oil and grease	Effluent	Y/N [5]	1/Day	Visual	--
		mg/L	[5]	Grab	Daily Max

Footnotes:

1. Monitoring is required during any periods with dewatering discharge that reaches state surface water.
2. Turbidity "Yes" indicates a visual observation of elevated turbidity that is suspected to be above the numeric NTU limit. This situation requires the permittee to take and analyze a grab sample of the discharge and take corrective action as specified under the Special Conditions **Part II.D.3**.
3. Turbidity grab samples of the ambient (upstream) condition and the discharge must be taken for analysis in the first four (4) hours of discharge, then at least once per week thereafter, as well as when the visual observation indicates elevated effluent turbidity. Samples must be taken at times representative of the site's construction activity and the nature of the discharge.
4. The turbidity net difference is the increase over background, calculated by subtracting the upstream turbidity from the effluent turbidity, and the net (difference) must be at or below 0 NTU.
5. If a visual examination of the discharge indicates the presence of hydrocarbons, by sheen, odor, or other sign, the permittee is required to analyze a grab sample of the discharge in accordance with 40 CFR 136, cease discharge until the oil and grease is eliminated, and take corrective action as specified in accordance with the Special Conditions **Part II.D.3**.

2. **Oil & Grease.** A daily check for visible signs of oil & grease in the discharge must be conducted. If the visual examination of the discharge indicates the presence of hydrocarbons, by sheen, odor, or other sign, the permittee is required to take corrective action, including analyzing a grab sample of the discharge under 40 CFR 136 and ceasing discharge until the source is eliminated.

3. **Coagulant/ flocculant and Potential Contaminant Discharge**. The permittee shall use coagulant/flocculant as authorized and log the use of it on the daily log (see **Part II.D.1**). If authorized, the permittee shall keep records of potential contaminants and conduct required follow-up sampling and analysis as required (see **Part II.D.1 and 4**).

C. Recordkeeping

The permittee must maintain the following records onsite (hard-copy or electronic):

- 2025-CDGP;
- A copy of the completed and signed NOI-07 package including modification submittals;
- A copy of DEQ's authorization letter;
- Discharge Monitoring Reports (NetDMRs);
- Monitoring Records (lab reports or turbidity readings and equipment calibration);
- Daily visual log;
- Dewatering Control Plan (current version);
- Copies of all reports and reports of noncompliance;
- The Sage Grouse consultation letter, and SHPO and NRIS reports, as applicable; and
- A copy of the termination request and DEQ's confirmation of termination response.

The permittee must maintain the daily records for a period of at least three years and make these records available to DEQ upon request.

D. Special Conditions

1. **Daily log**. Permittees are required to maintain an observation log during the period of permit coverage in accordance with the schedule listed in the monitoring requirements table for the activity and the following:

- When there is no dewatering activity the permittee must include an observation such as "not dewatering" on the log for the extent of permit coverage with no dewatering.
- When there is dewatering but the discharge does not reach surface water, the permittee must include an observation such as "discharge not reaching surface water." This observation must be made at least daily during dewatering.
- When dewatering reaches the surface water, all observations must be included on the log, and this activity is counted as a day of dewatering discharge for the NetDMRs.

An example log is included in **Attachment #2**. The permittee may use the log or develop their own log that contains the following data at a minimum: date and time of observations, identification of the person recording the observation, monitoring results (visual or grab sample), inspection observations as identified in the site's Dewatering Control Plan (see below), any problems observed, and any corrective action performed (including the use of authorized coagulant/ flocculants).

The permittee must maintain records, including the daily log, for a period of at least three years and make these records available to DEQ upon request. The observation log can be paper or

electronic. The daily log is considered a method for the permittee to ensure good operating practices as well as to demonstrate compliance with the effluent limitations.

2. **Dewatering Control Plan (Dewatering Plan).** Any permittee covered under the 2025-CDGP is required to develop a written site-specific Dewatering Plan, submit it as part of the NOI-package, and implement it. The plan must be maintained and available for inspection on-site in either paper or electronic format, and must include:

   a) Evaluation, installation, and maintenance of Best Management Practices (BMPs), including but not limited to:
      i. Run-on prevention and/or ground water exclusion methods;
      ii. Erosion control to prevent surface water/stormwater contamination of site (i.e. soil roughening, riprap, mulching, geotextiles, etc.). Excavated material must be transported and stockpiled in such a manner as to prevent its erosion returning to the receiving stream;
      iii. Treatment at dewatering pump intake (i.e., filtering sump, wrapping submersible pump in filter fabric);
      iv. Sediment control for dewatering discharge (i.e. constructed settling pond, dewatering bags, fiber rolls, vegetated buffers, etc.); and
      v. Proper use of anionic flocculants and coagulants, if needed (including maintaining MSDSs and following manufacturers' recommendations).

   b) Measures taken to prevent first flush/initial purge discharges from entering state surface waters.

   c) Measures taken to prevent spilled or leaking fuels and lubricants from entering the watercourse.

   d) Measures taken to minimize erosion from the discharge through flow dissipation devices such as rip rap, baffles, or other methods, as necessary. The discharge shall not cause or result in erosion to the area of the discharge or the surrounding stream banks.

   e) Discharge monitoring procedures for the site to ensure that monitoring is effective, and must cover all times of discharge (including weekends and holidays if applicable). The Dewatering Plan must include an identification of the person(s) responsible, monitoring frequency, any necessary equipment and its maintenance, including calibration materials, and record-keeping in the daily log.

   f) BMP inspection procedures to prevent breakdowns or failures of the control equipment. The permittee must include the inspection frequency, person(s) responsible, and extent of the inspections (including erosion prevention, dewatering operations, dewatering treatment, and discharge quality), and record-keeping in the daily log. The permittee must also include names/numbers for off-hours notification of responsible personnel in the event of an emergency.

   g) Corrective action protocol.

3. **Corrective Action.** Upon any visual observations of BMP failure, inadequate BMPs, elevated turbidity, or an oil sheen, the following steps must be conducted:

   - Take a grab sample for analysis anytime there is an observation of elevated turbidity, oil and grease, and/or other potential contaminants.
   - Cease discharge of dewatering effluent until the issue is resolved.

- Conduct a site-wide inspection to observe operating conditions and BMP maintenance.
- Address any BMP failures by determining whether there was a failure in design, installation, or maintenance and perform the appropriate measures to fix the failure, including determining whether BMPs should be modified or if additional measures must be taken.
- Document the issues and resolutions in the observation log and update the Dewatering Plan.
- Include a report with the next DMR submittal.

4. **Potential Contamination.** All applicants must determine whether the proposed dewatering activity may be in or near a known area of contamination. Dewatering within such an area is assumed to transfer contaminants into the receiving water, and is not allowed under this CDGP without DEQ approval. For areas in or near an area of contamination, the applicant must provide:
   - Documentation that the relevant regulatory clean-up program (typically within DEQ's Waste Management & Remediation Division) has been consulted. Any jurisdictional remediation program recommendations must be implemented.
   - A list of parameters of concern that may be expected in the dewatering discharge based on the site conditions.
   - Evidence that the expected concentration(s) of the parameter(s) in the proposed dewatering discharge are below the coverage threshold(s) as found below in **Table 6** (*i.e*. below the greater of the RRV or 50% of the lowest water quality standard in Circular DEQ-7).

   Table 6 provides proposed coverage/treatment thresholds for common contaminants.

Table 6: Common Contaminants Thresholds for CDGP Permit Coverage (1)

Parameter (µg/L)	Circular DEQ-7 RRV	50% Lowest Water Quality Std	Coverage Threshold
Benzene	0.6	2.5	**2.5**
Toluene	1	28.5	**28.5**
Ethylbenzene	1	34	**34**
Xylene	3	5,000	**5,000**
Arsenic	1	5	**5**
Nitrate + Nitrite	20	5,000	**5,000**
Naphthalene	10	50	**50**
Pentachlorophenol	5	0.05	**5**
Perchloroethylene (Tetrachloroethylene)	0.7	2.5	**2.5**

(1) For other contaminants, the threshold will be the greater of the RRV or 50% of the lowest water quality standard in Circular DEQ-7.

The expected groundwater concentrations may be an estimate by the remediation program and/or pre-discharge sample analysis conducted by the applicant. Applicants must request that the laboratories analysis be capable of detecting at the threshold or better, or provide an explanation if this is not possible.

If the groundwater concentration, and thus the expected dewatering effluent concentration, is greater than the threshold for any contaminant, DEQ will deny the dewatering project unless treatment is proposed that can reduce concentrations to below the eligibility thresholds. In order to approve the discharge, after-treatment concentrations must be below the **Table 6** coverage threshold and follow-up monitoring may be required.

- If it is not possible to provide laboratory analysis, or an acceptable concentration estimate from the DEQ remediation program at the time of submittal, the applicant may, if authorized, conduct sampling within the first four hours of dewatering discharge with expedited laboratory results. The pre-discharge sample should be taken after treatment. Details on the treatment system used (including pilot system and full-scale) must be included with the NOI.

  DEQ will process the CDGP authorization request *if* laboratory results for all relevant parameters (either Reporting Level (RL) or Method Detection Level (MDL)) show either:

  - non-detect at concentrations meeting the RRV as provided in Circular DEQ-7, or
  - detection at levels below the threshold in **Table 6.**

  The permittee shall include a copy of the lab results with the NOI package submittal. If the laboratory RL or MDL is "non-detect" but is not capable of detecting down to the RRV, a detailed explanation of why the results cannot achieve the required detection level must be included with the analysis. DEQ may require additional information including, but not limited to, additional testing during dewatering.
- If additional tests performed during discharge of dewatering effluent result in concentrations above the threshold, the dewatering discharge to surface water must cease until a solution is found that brings the discharge concentrations below the threshold values.
  - The permittee must notify DEQ's Water Protection Bureau verbally within 24 hours of an elevated concentration at or above the threshold value, and follow-up in writing within five days.
    i. The permittee cannot resume discharging dewatering effluent into state surface waters until DEQ issues a written authorization.
    ii. If contaminants are found in any sample at concentrations above the threshold, and if a solution cannot be found to reduce below the threshold, the discharge is not eligible for coverage under the CDGP.

5. Multiple Outfalls. Construction dewatering projects may have more than one outfall. An "outfall" means a disposal system through which effluent or waste leaves the facility or site. Each outfall will have a unique location (latitude and longitude). Specific outfalls must be identified on the NOI-07 for two reasons:

- **NetDMR reporting**. Limit sets and monitoring requirements are developed for each dewatering outfall depending on the receiving waterbody category (**Table 1**). Construction dewatering discharges from multiple outfalls that go to the same receiving waters or stream segment may be grouped under one outfall for NetDMR reporting and compliance purposes.
- **Fees**. Application fees and annual fees for construction dewatering authorizations are based on the number of billable outfalls. ARM 17.30.201(6)(a) states in relevant part: "… the Department shall assess a fee for each outfall… An application fee for multiple outfalls is not required if there are multiple outfalls from the same source that have similar effluent characteristics, *unless the discharges are to different receiving waters or stream segments*, or result in multiple or variable (flow dependent) effluent limits or monitoring requirements."

Billable outfalls may be based on linear projects, or non-linear projects that discharge into the same waterbody.

a) ***Linear Projects***

EPA's 2022 CGP definition for a linear construction site includes the "construction of roads, bridges, conduits, substructures, pipelines, sewer lines, towers, poles, cables, wires, connectors, switching, regulating and transforming equipment and associated ancillary facilities in a long, narrow area."

For DEQ's 2025-CDGP, any applicant with a linear project may group the potential construction dewatering discharge locations into **billable outfall groups** by size/type of receiving water. The billable outfall groups are:

1. *Large Rivers:* Specific segments of the Big Horn River, Clark Fork River, Flathead River, Kootenai River , Madison River, Missouri River, South Fork Flathead, or Yellowstone River. (See **Attachment #3**.)
2. *Perennial:* Rivers (other than the eight large rivers), streams, or wetlands/ lakes/ reservoirs.
3. *Intermittent*
4. *Ephemeral*

The applicant must list each billable outfall group with its central latitude/longitude on the NOI form. Application fees, annual fees, daily logs, and NetDMR outfalls will be based on the billable outfall groups.

In addition, the applicant must provide an attachment listing each potential discharge location as part of the NOI submittal, including each location (latitude/longitude), name of initial and first-named receiving waterbodies, and the associated billable outfall group.

If, after authorized, the permittee discovers the need for additional discharge locations, the permittee shall re-submit an updated outfall list prior to commencing any discharge to surface waters from a new or changed location. If the discharge location is to a new receiving water group, the permittee must submit a modification request and pay the $900 fee for each new billable outfall.

The required Dewatering Control Plan may be general to all receiving waters if there is sufficient detail to determine the activities planned for any individual location.

b) ***Non-Linear Projects***

For non-linear projects with more than one outfall, such as dewatering within subdivisions, any outfall leading to the same waterbody can be grouped as a billable outfall. However, if two or more outfalls discharge to two separate waterbodies – such as Farmers Canal and Cattail Creek – there are two billable outfalls. **This is a change from the 2020-CDGP for subdivision developers.**

III. STANDARD CONDITIONS

The permittee shall meet the following standard conditions of MPDES permits.

A. Duty to Comply

The permittee shall comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Montana Water Quality Act and is grounds for enforcement action; for permit termination; for revocation and reissuance of a confirmation letter; for a modification requirement; or for denial of coverage under the General Permit (new or renewed). The permittee must give DEQ Department advance notice of any planned changes which may result in permit noncompliance.

B. Penalties for Violations of Permit Conditions

The Montana Water Quality Act provides that any person who violates a permit condition of the Act is subject to civil or criminal penalties not to exceed $25,000 per day or one year in prison, or both, for the first conviction, and $50,000 per day of violation or by imprisonment for not more than two years, or both, for subsequent convictions. MCA 75-5-611(a) also provides for administrative penalties not to exceed $10,000 for each day of violation and up to a maximum not to exceed $100,000 for any related series of violations.

C. Duty to Reapply

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit. The reapplication must be submitted at least 30 days before the expiration date of this permit.

D. Need to Halt or Reduce Activity Not a Defense

It is not a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

E. Duty to Mitigate

The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit that has a reasonable likelihood of adversely affecting human health or the environment.

F. Proper Operation and Maintenance

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems that are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

G. Permit Actions

This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

H. Property Rights

The issuance of this permit does not convey any property rights of any sort, or any exclusive privilege, nor does it authorize any injury to persons or property or invasion of other private rights, or any infringement of state or local law or regulations.

I. Duty to Provide Information

The permittee shall furnish to the Department, within a reasonable time, any information which the Department may request to determine whether cause exists for modifying, revoking and reissuing, or

terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the Department, upon request, copies of records required to be kept by this permit.

J. Inspection and Entry

The permittee shall allow the head of the Department, or an authorized representative upon the presentation of credentials and other documents as may be required by law, to:

1. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and as otherwise authorized by the Montana Water Quality Act, any substances or parameters at any location; and
4. Sample, or monitor at reasonable times for the purpose of assuring permit compliance, any substances or parameters at any location.

K. Availability of Reports

Except for data determined to be confidential under 40 CFR Part 2, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Department. As required by the Clean Water Act, applications, permits and effluent data shall not be considered confidential.

L. Monitoring and Monitoring Reports – Reporting Requirements

The Department may require a permittee to monitor in addition to any conditions in this permit, on a case-by-case basis. If monitoring is required, the Department will specify monitoring requirements to include, and not limited to, storm water sampling, analytical testing, and an evaluation of monitoring results, recording, and reporting. Monitoring results must be reported on a discharge monitoring report (DMR) or as required by the Department. Monitoring results must be reported at the intervals specified.

If the permittee monitors any pollutant more frequently than required, using approved test procedures, the results of this monitoring must be included in the calculation and reporting of data submitted in the DMR. Calculations for all limitations which require averaging of measurements must utilize an arithmetic mean unless otherwise specified by the Department.

M. Monitoring and Records

1. Representative Sampling

Samples and measurements taken for the purpose of monitoring must be representative of the monitored activity.

2. Retention of Records

The permittee shall retain records of all monitoring information including all calibrations and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least three years from the date of the sample, measurement, report, or application. This period may be extended by request of the Department at any time.

3. Records Content

Records of monitoring information must include:

a. the date, exact place, and time of sampling or measurements;

b. the individual(s) who performed the sampling or measurements;
c. the date(s) analyses were performed;
d. the individual(s) who performed the analyses;
e. the analytical techniques or methods used; and,
f. the results of such analyses.

4. Test Procedures – Monitoring and Records

Monitoring must be conducted according to test procedures approved under Title 40 of the Code of Federal regulations (40 CFR) Part 136, unless other test procedures have been specified in this permit, confirmation letter, or by the Department.

5. Penalties for Falsification and Tampering

The Montana Water Quality Act at MCA 75-5-633 provides that any person who knowingly falsifies, tampers with, or renders inaccurate any monitoring device or method, or makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction be punished by a fine of not more than $25,000 per violation, or by imprisonment for not more than six months per violation, or by both.

N. Signatory Requirement

Authorized Representatives: All applications, reports or information submitted to the Department shall be signed and certified as required by ARM 17.30.1323.

1. All permit notices of intent shall be signed as follows:
   a. For a corporation: by a principal executive officer or ranking elected official;
   b. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively;
   c. For a municipality, State, Federal, or other public agency: by either a principal executive officer or ranking elected official.
2. All reports required by the permit and other information requested by the Department shall be signed by a person described above or by a duly authorized representative of that person. A person is considered a duly authorized representative only if:
   a. The authorization is made in writing by a person described above and submitted to the Department; and
   b. The authorization specified either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. A duly authorized representative may thus be either a named individual or an individual occupying a named position.
3. **Changes to authorization:** If an authorization described above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the above requirements must be submitted to the Department prior to or together with any reports, information, or applications to be signed by an authorized representative.
4. **Certification:** Any person signing a document under this section shall make the following certification:

   "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified

personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

O. Reporting Requirements

1. Planned Changes

The permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility, activity, or operation. Notice is required only when:

a. The alteration or addition to the permitted facility, activity, or operation may meet one of the criteria for determining whether a facility is a new source under ARM 17.30.1340(2); or

b. The alteration or addition could significantly change the nature or increase the quantity of pollutant discharged. This notification applies to pollutants which are not subject to effluent limitations in the permit, nor notification requirements under ARM 17.30.1343(1)(a).

2. Anticipated Noncompliance

The permittee shall give advance notice to the Department of any planned changes in the permitted facility/activity/operation which may result in noncompliance with permit requirements. The permittee shall notify as soon as possible by phone and provide with the following information, in writing, within five (5) days of becoming aware of such condition:

a. A description of the discharge and cause of noncompliance; and

b. The period of noncompliance including exact dates and times, or if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate and prevent recurrence of the non-complying discharge.

3. Transfers

This permit is not transferable to any person except after notice to the Department and a transfer fee is paid. The Permit Transfer Notification (PTN) form provided by the Department must be completed and must be received by the Department at least 30 days prior to the anticipated date of transfer. The form must be signed by both the existing owner/operator and the new owner/operator following signatory requirements of **Part III.N** of this Permit.

4. Compliance Schedules

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.

5. Twenty-Four Hour Reporting

The permittee shall report any serious incident of noncompliance affecting the environment. Any information must be provided orally within 24 hours from the time the permittee becomes aware of the circumstances:

a. Any noncompliance which may seriously endanger health or environment;

b. Any unanticipated bypass which exceeds any effluent limitation in the permit;

c. Any upset which exceeds any effluent limitation in the permit; or

d. As applicable, violation of a maximum *daily discharge* limit of any pollutant listed by the Department in the General Permit or confirmation letter [see 40 CFR 122.44(g)].

A written submission must also be provided within five days of the time that the permittee becomes aware of the circumstances. The written submission must contain:

a. A description of the noncompliance and its cause;
b. The period of noncompliance, including exact dates and times;
c. The estimated time noncompliance is expected to continue if it has not been corrected; and,
d. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

Oral Notification: The report shall be made orally to the Water Protection at (406) 444-5546 or the Office of Disaster Emergency Services at (406) 324-4777.

Waiver of Written Notification Requirement: The Department may waive the written report on a case-by-case basis if the oral report has been received within 24 hours by the Water Protection Bureau, by phone, (406) 444-5546. Written reports shall be submitted to the following address:

Montana Department of Environmental Quality
Water Protection Bureau
PO Box 200901
Helena, Montana 59620-0901

6. Other Noncompliance

Instances of noncompliance not required to be reported within 24 hours shall be reported as soon as possible. The reports shall contain the information listed above for written submissions under "Twenty-four Hour Reporting" **(Part III.O.5).**

7. Other Information

Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or any report to the Department, it shall promptly submit such facts or information.

P. Bypass

Intentional diversions of untreated waste streams from any portion of a treatment facility are prohibited unless:

1. the bypass does not cause effluent to exceed effluent limitations and is necessary for essential maintenance to ensure efficient operation; or
2. the bypass is unavoidable to prevent loss of life, personal injury, or severe property damage; or
3. there are no feasible alternatives;
4. and the proper notification is submitted.

Bypass is prohibited and the Department may take enforcement action against a permittee for a bypass. If the permittee knows in advance of the need for anticipated bypass, it shall submit prior notice, if possible, at least ten days before the date of the bypass. The Department may approve an anticipated bypass, after considering its adverse effects.

The permittee shall submit notice of an unanticipated bypass as required under **III.O.5.**

Q. Upset Conditions

An upset may be used as an affirmative defense in actions brought to the permittee for noncompliance with a technology-based effluent limitation. The permittee (who has the burden of proof) must have operational logs or other evidence showing:

1. when the upset occurred and its causes;
2. that the facility was being operated properly;

3. proper notification was made; and
4. remedial measures were taken as required by the duty to mitigate standard condition.

R. Fees

The permittee is required to submit payment of an annual fee as set forth in ARM 17.30.201. If the permittee fails to pay the annual fee within 90 days after the due date for the payment, the Department may impose an additional assessment computed at the rate established under ARM 17.30.201, and suspend the processing of the application for a permit or authorization or, if the nonpayment involves an annual permit fee, suspend the permit, certificate or authorization for which the fee is required. The Department may lift suspension at any time up to one year after the suspension occurs if the holder has paid all outstanding fees, including all penalties, assessments and interest imposed under this section. Suspensions are limited to one year, after which the permit will be terminated.

S. Removed Substances

Collected screenings, grit, solids, sludges, or other pollutants removed in the course of treatment shall be disposed of in such a manner so as to prevent any pollutants from entering any waters of the state or creating a health hazard.

T. Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Section 311 of the Clean Water Act.

U. Severability

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

V. Reopener Provisions

This permit may be reopened and modified (following proper administrative procedures) to include the appropriate effluent limitations (and compliance schedule, if necessary), or other appropriate requirements if one or more of the following events occurs:

1. Water Quality Standards: The water quality standards of the receiving water(s) to which the permittee discharges are modified in such a manner as to require different permit conditions than contained in this permit.
2. Water Quality Standards are Exceeded: If it is found that water quality standards or trigger values in the receiving stream are exceeded either for parameters included in the permit or others, the Department may modify the permit conditions or water management plan.
3. TMDL or Wasteload Allocation: TMDL requirements or a wasteload allocation is developed and approved by the Department and/or EPA for incorporation in this permit.
4. Water Quality Management Plan: A revision to the current water quality management plan is approved and adopted which calls for different effluent limitations than contained in this permit.

W. Toxic Pollutants

The permittee shall comply with effluent standards or prohibitions established for toxic pollutants which are present in the discharge, within any specified timeframe within rule or thereof, and even if the General permit or confirmation letter has not yet been modified to incorporate such standard or prohibition for the toxic pollutant.

IV. DEFINITIONS AND ABBREVIATIONS

"**Act**" means the Montana Water Quality Act, Title 75, Chapter 5, MCA. (ARM 17.30.1304(1))

"**Average monthly limitation**" means the highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month. (ARM 17.30.1304(10))

"Best Management Practices" ("BMPs") means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of state surface waters. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. (ARM 17.30.1102(1))

"**Bypass**" means the intentional diversion of waste streams from any portion of a treatment facility. (ARM 17.30.1304(14))

"**CFR**" means the Code of Federal Regulations.

"**Clean Water Act**" means the federal legislation at 33 USC 1251, et seq.

"**Daily discharge**" means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the daily discharge is calculated as the average measurement of the pollutant over the day. (ARM 17.30.1304(20))

"**Department**" means the Montana Department of Environmental Quality (DEQ). Established by 2-15-3501, MCA. (ARM 17.30.1304(21))

"**Discharge,**" when used without qualification, means discharge of a pollutant. (ARM 17.30.1304(23))

"**Discharge of a pollutant(s)**" means any addition of any pollutant or combination of pollutants to state water from any point source. This definition includes additions of pollutants into waters of the state from: surface runoff which is collected or channeled by man; discharges through pipes, sewers, or other conveyances owned by the state, municipality, or other person which do not lead to a treatment works. This term does not include an addition of pollutants by any indirect discharger (ARM 17.30.1304(24))

"**EPA"** means the United States Environmental Protection Agency. (ARM 17.30.1304(31))

"**Ephemeral Stream**" means a stream or a part of a stream which flows only in direct response to precipitation in the immediate watershed or in response to the melting of a cover of snow and ice and whose channel bottom is always above the local water table. (ARM 17.30.602(10))

"Facility or activity" means any MPDES point source or any other facility or activity (including land or appurtenances thereto) that is subject to regulation under the MPDES program. (ARM 17.30.1304(34))

"**Grab sample**" means a sample that is taken from a waste stream on a one-time basis without consideration of flow rate of the effluent and without consideration of time. (2010 NPDES Permit Writers Manual Exhibit A-2 Glossary)

"**Intermittent Stream**" means a stream or reach of a stream that is below the local water table for at least some part of the year, and obtains its flow from both surface run-off and groundwater discharge. (ARM 17.30.602(13))

"**Maximum Daily Limit**" means the highest allowable discharge of a pollutant during a calendar day. Expressed as units of mass, the daily discharge is cumulative mass discharged over the course of the day. It is the arithmetic average of all measurements taken that day.

"**Mixing zone**" means an area established in a permit or final decision on nondegradation issued by the department where water quality standards may be exceeded, subject to conditions that are imposed by the Department and that are consistent with the rules adopted by the Department. (75-5-103(20) and also means a limited area of a surface water body or a portion of an aquifer, where initial dilution of a discharge takes place and where water quality changes may occur and where certain water quality standards may be exceeded. (ARM 17.30.602(14))

"Montana Pollutant Discharge Elimination System (MPDES)" means the system developed by the Department for issuing permits for the discharge of pollutants from point sources into state surface waters. The MPDES is specifically designed to be compatible with the federal NPDES program established and administered by the EPA. (ARM 17.30.1304(43))

"**Outfall**" means a disposal system through which effluent or waste leaves the facility or site. (ARM 17.30.201(2)). For each outfall, there typically is at least one monitoring location. Although the monitoring location might or might not be at the actual point of discharge, samples taken at the monitoring location should be representative of the discharge.

"Owner or operator" means any person who owns, leases, operates, controls, or supervises a point source. (ARM 17.30.1304(50))

"**Point Source**" means any discernible, confined, or discrete conveyance, including, but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel, or other floating craft, from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural storm water runoff. (ARM 17.30.1304(55))

"**Pollutant**" means dredged spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt, and industrial, municipal, and agricultural wastes discharged into water. The terms "sewage," "industrial waste," and "other wastes" as defined in 75-5-103, MCA, are interpreted as having the same meaning as pollutant. (ARM 17.30.1304(56))

"**Required Reporting Values (RRV)**" means the Department's selection of a laboratory reporting limit that can be met by the majority of local laboratories. In most cases, the RRV is sufficiently sensitive to meet the most stringent numeric water quality standard. (Department Circular DEQ-7)

"Seasonal lake or pond" means a natural depression in the land surface that periodically holds water from precipitation or snow and ice melt in the immediate watershed.

"Semi-permanent lakes or ponds" means a natural depression in the land surface, not including reservoirs, that receives ground water in addition to precipitation runoff from the immediate watershed, and occasionally goes dry.

"Site" means the land or water area where any facility or activity is physically located or conducted, including adjacent land used in connection with the facility or activity. (ARM 17.30.1304(71))

"State Waters" means a body of water, irrigation system, or drainage system, either surface or underground. The term does not apply to: ponds or lagoons used solely for treating, transporting, or impounding pollutants; or, irrigation waters or land application disposal waters when the waters are used up within the irrigation or land application disposal system and the waters are not returned to state waters. (75-5-103(32), MCA)

"Surface waters" means any waters on the earth's surface, including but not limited to streams, lakes, ponds, and reservoirs; and irrigation and drainage systems discharging directly into a stream, lake, pond, reservoir, or other surface water. Water bodies used solely for treating, transporting, or impounding pollutants shall not be considered surface water. (ARM 17.30.602(31))

"Total maximum daily load" or "TMDL" means the sum of the individual waste load allocations for point sources and load allocations for both nonpoint sources and natural background sources established at a level necessary to achieve compliance with applicable surface water quality standards. (75-5-103(35), MCA)

"**TSS**" means the pollutant parameter total suspended solids.

"**Upset**" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation. (ARM 17.30.1304(31))

"Waste load allocation" means the portion of a receiving water's loading capacity that is allocated to one of its existing or future point sources. (75-5-103(37), MCA)

Attachment #1 – Notice of Intent (NOI-07)

Attachment #2: Daily Log Template

Attachment #3: Large Rivers

Large river segments within the state of Montana.

River Name	Segment Description
Big Horn River	Yellowtail Dam to mouth
Clark Fork River	Bitterroot River to state-line
Flathead River	Origin to mouth
Kootenai River	Libby Dam to state-line
Madison River	Ennis Lake to mouth
Missouri River	Origin to state-line
South Fork Flathead River	Hungry Horse Dam to mouth
Yellowstone River	State-line to state-line

Authorization to Discharge Under the

North Dakota Pollutant Discharge Elimination System

Permit Number NDR11-0000

Permit No: NDR11-0000
Effective Date: April 1, 2025
Expiration Date: March 31, 2030

AUTHORIZATION TO DISCHARGE UNDER THE

NORTH DAKOTA POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with Chapter 33.1-16-01 of the North Dakota Department of Environmental Quality rules as promulgated under Chapter 61-28 (North Dakota Water Pollution Control Act) of the North Dakota Century Code,

Facilities both qualifying for and satisfying the requirements identified in Part I of the permit

are authorized to discharge stormwater associated with construction activity

to waters of the state

provided all the conditions of this permit are met.

This permit and the authorization to discharge shall expire at midnight,

March 31, 2030.

Signed this 25 day of March, 2025.

Marty Haroldson
Director
Division of Water Quality

BP 2025.02.05

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I. PERMIT COVERAGE AND LIMITATIONS

A. Discharges Covered

1. This permit applies to all areas within the state of North Dakota, except for those areas defined as Indian Country. Construction activity located within Indian Country within the state of North Dakota must obtain a permit through the United States Environmental Protection Agency. If the construction activity is located with the jurisdiction of the state of North Dakota, and the United States Environmental Protection Agency, a permit must be obtained from both regulatory entities.

2. This permit applies to stormwater discharges associated with construction activity and small construction activity as defined in Title 40 of the Code of Federal Regulations (CFR), Parts 122.26(b)(14)(x) and (b)(15), respectively. The reference to construction activity in this permit includes both large construction activity and small construction activity as described below.

    a. Large construction activity includes clearing, grading and excavation, that disturbs land of equal to or greater than five (5) acres and includes the disturbance of less than five (5) acres of total land area that is a part of a larger common plan of development or sale if the larger common plan will ultimately disturb five (5) acres or more.

    b. Small construction activity includes clearing, grading and excavation, that disturbs land of equal to or greater than one (1) acre, and includes the disturbance of less than one (1) acre of total land area that is part of a larger common plan of development or sale if the larger common plan will ultimately disturb equal to or greater that one (1) and less than five (5) acres.

3. This permit applies to discharges of stormwater from construction activity identified in Part I(A)(1)-(2) associated with oil and gas exploration, production, processing or treatment operations, or transmission facilities resulting in the discharge of a reportable quantity for which notification is required pursuant to 40 CFR 110.6, 40 CFR 117.21, or 40 CFR 302.6 or contributes to a violation of a water quality standard.

4. Stormwater discharges from support activities (e.g., equipment staging yards, material storage areas, excavated material disposal areas, borrow areas) may be covered by this permit as part of a related construction site. The support activities may only be in association with one project. If the support activity is associated with more than one project, a separate stormwater permit (Industrial or mining, extraction or paving material preparation) is required.

5. Certain non-stormwater discharges from facilities covered by this permit and meeting the requirements specified in Part II(A).

6. Stormwater discharges from construction activity covered by the previous permit, issued April 1, 2020, where a notice has been submitted to obtain coverage under this permit.

7. Discharges from dewatering activities related to construction activities (discharges of uncontaminated stormwater, uncontaminated groundwater, and uncontaminated surface water).

8. Local Authority. This permit does not preempt or supersede the authority of local agencies or operators of municipal separate storm sewer systems to prohibit, restrict, or control discharges of stormwater to storm sewer systems or other water courses within their jurisdiction.

B. Discharges Not Covered

1. Stormwater discharges associated with industrial activity from any source other than construction activities described in Part I(A).

2. Post-construction discharges from industrial activity that originate from the site after construction activities have been completed at the site. Industrial and post-construction stormwater discharges may need to be covered by a separate stormwater permit.

3. The placement of fill into waters of the state requiring local, state, or federal authorizations (such as U.S. Army Corps of Engineers Section 404 permits).

4. This permit does not substitute for obligations under the National Environmental Policy Act (NEPA), Endangered Species Act (ESA), Wild and Scenic Rivers Act, or National Historic Preservation Act (NHPA), it is the permittees responsibility to ensure the project and resulting discharges comply with the respective requirements.

5. Discharges to waters for which there is a total maximum daily load (TMDL) allocation are not covered unless you develop a Stormwater Pollution Prevention Plan (SWPPP) that is consistent with the assumptions and requirements in the approved TMDL. To be eligible for coverage under this general permit, the SWPPP must incorporate the conditions applicable to the discharge necessary for consistency with the assumptions, allocations and requirements of the TMDL. If a specific numeric wasteload allocation has been established that would apply to discharges from construction activity, the permittee must incorporate that allocation into the SWPPP and implement necessary steps to meet that allocation. Information about TMDL allocations may be found at the following website: deq.nd.gov/WQ.

6. Stormwater discharges that the department determines will cause or have the reasonable potential to cause or contribute to a violation of the standards for quality for waters of the state (North Dakota Administrative Code [NDAC] 33.1-16-02.1).

7. Discharges from hydrostatic testing, well points, water line disinfection, treatment of refined petroleum contaminated groundwater or surface water, treatment of crude oil contaminated groundwater or surface water, and oil and gas production water.

8. Discharges of wash water using detergents, wastewater, and sanitary waste.

9. Discharges of wastewater from washout of concrete.

10. Discharges of wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds, and other construction materials.

11. Discharges of fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance.

12. Discharges of soaps or solvents used in vehicle and equipment maintenance.

C. Obtaining Coverage and Authorization Effective Date

1. To obtain authorization under this general permit for stormwater discharges you must submit a complete notice of intent (NOI) and develop a SWPPP in accordance with Part II(C) of this permit.

A SWPPP must be in place as a condition of the permit and a copy of the SWPPP must be retained by the permittee.

2. Permit coverage will become effective seven (7) days after you submit a complete NOI unless otherwise notified by the department (based on the department receipt date).

3. Upon the effective date of permit coverage, permittees are authorized to discharge stormwater from eligible activities under the terms and conditions of this permit.

D. Notice of Intent Process

1. Applicants must use a NOI form or electronic NOI to complete the process to obtain coverage under the permit. The NOI form or electronic NOI can be found at: deq.nd.gov/eReporting.aspx. Submission of data contained within the NOI must be in compliance with the electronic reporting requirements found in 40 CFR 127.

2. NOI Content and Conditions.

   a. The owner, or owner jointly with the operator (usually the general contractor), shall submit a completed NOI for this permit. The owner is responsible for compliance with all terms and conditions of this permit. The operator has day to day supervision of construction activities and is jointly responsible with the owner for compliance with the permit conditions as they pertain to the construction activities delegated to the operator.

   b. The NOI shall contain, at a minimum, the following information:

      1) Owner name, mailing address, and phone number;
      2) Project contact name, phone number, and e-mail address;
      3) Project/site name;
      4) Project/site location (street address; section, township, range) and county;
      5) Project/site latitude and longitude;
      6) A brief description of the construction activity;
      7) The anticipated start date and the anticipated completion date for the project (if known);
      8) The estimated total area of the site and the total area of disturbance in acres;
      9) The name of receiving water(s), or the name of the municipal storm sewer system and receiving water; and
      10) The signature of the applicant(s), owner (and operator if co-applicants) signed in accordance with the Signatory Requirements in Part IV(A)(6) of this permit.

   c. A SWPPP (Part II(C)) for the project must be prepared and available for review, upon request, by the department at the time of application. Permittees are not required to submit the SWPPP with the NOI unless otherwise notified by the department.

3. For residential construction activity occurring within a common plan of development (such as a subdivision) subject to the permit requirements, coverage may be obtained by the following:

   a. The owner of the lot(s) shall submit one NOI for all of the owner's construction activity within the common plan of development, or

   b. The operator, such as a homebuilder who may represent one or more lot owners, shall submit one NOI for all of the operator's construction activity within the common plan of development.

Additional phases of the common plan of development may be included under the initial NOI and permit coverage.

In addition, a SWPPP must be developed and implemented for the permittee's activities within the common plan of development. Additional phases of the common plan of development may be included provided the SWPPP is amended to include the additional area or phases.

4. For construction activity associated with oil and gas exploration, production, processing, treatment operations, or transmission facilities, which discharge contaminated stormwater, an NOI may be submitted for individual project sites or for an area of operations such as well field or by county.

E. Notice of Termination (NOT)

1. Permittees wishing to terminate coverage under this permit must submit a Notice of Termination (NOT). The NOT form or electronic NOT can be found at: deq.nd.gov/eReporting.aspx. Submission of data contained within the NOT must be in compliance with the electronic reporting requirements found in 40 CFR 127. Compliance with the conditions of this permit is required until a NOT is submitted to the department.

2. Permittees may only submit a NOT after one of the following conditions have been met:

   a. Final stabilization (Part II(E)) has been achieved on all portions of the site for which the permittee is responsible.

   b. Another owner/operator/permittee has assumed control in accordance with the Part I(F).

   c. For residential construction only, a NOT is not required for each lot that is sold, transferred, or has achieved final stabilization. The permittee must modify the SWPPP to indicate that permit coverage is no longer required for that lot. The SWPPP shall indicate the reason why coverage is no longer needed and the date the lot was sold, transferred, or achieved final stabilization. In order to terminate coverage, all lots under the control of the owner or operator must be sold, transferred, or achieved final stabilization (Part II(E)).

F. Transfer of Ownership or Control

1. Coverage under this permit cannot be transferred from one owner to another. When a new owner assumes control of a construction project, or a portion of the project, or will commence construction of a new project within a larger common plan of development, the new owner must submit a NOI in accordance with Parts I(C) and (D). The previous owner may terminate coverage if the conditions of Part I(E) are met. The department reserves the right to take enforcement for any unpermitted discharges or permit noncompliance.

2. When the operator of a construction project changes, the new operator must submit a written request for permit modification within fourteen (14) days of assuming control of the site or commencing work on-site. Late submittals will not be rejected; however the department reserves the right to take enforcement for any permit noncompliance. Permittees shall ensure either directly or through coordination with other operators that their SWPPP meets all terms and conditions of this permit and that their activities do not interfere with another party's SWPPP.

3. A permit modification request is not required for the legal transfer, sale or closing on a property between permittees covered by this permit. Examples include the sale of a property parcel from a developer to a builder, or the transfer of an easement from a developer to a local government

authority. If the new party is not covered by this permit at the time of transfer or sale, then the new owner/operator must submit a completed NOI in accordance with Parts I(C) and (D).

G. Continuation of Coverage for Existing Permittees After Permit Expiration

1. It is the duty of the permittee to reapply for coverage under this permit to continue coverage and authorization to discharge. Permittees with existing coverage under the 2020 permit shall be covered under, and comply with, this permit until:

   a. A NOI for coverage under the 2025 permit has been submitted to the department no later than June 30, 2025; or
   b. Coverage is otherwise terminated.

2. Permittees with existing coverage under the 2020 permit who miss the June 30, 2025, deadline, and do not submit an NOI to the department by August 29, 2025, will have coverage administratively terminated by the department. Administrative termination will result in the permittee no longer being authorized to discharge under this permit.

H. Electronic Reporting

Prior to December 21, 2025, permittees may elect to electronically submit NOIs and NOTs using the electronic reporting system or hybrid approach (i.e., electronic submission along with a uniquely matched paper submission) instead of solely mailing paper forms. Beginning December 21, 2025, permittees must submit NOIs and NOTs using the electronic reporting system or hybrid approach. Submission of data contained within NOIs and NOTs must be in compliance with the electronic reporting requirements found in 40 CFR 127.

II. STORMWATER DISCHARGE REQUIREMENTS

A. Prohibition of Non-Stormwater Discharges

The discharge of wastewater is not authorized by this permit. There shall be no discharge of wastewater from concrete washout. There shall be no discharge of wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds, and other construction materials. There shall be no discharge of fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance. There shall be no discharge of soaps or solvents used in vehicle and equipment washing.

The following sources of non-stormwater discharges are allowed if they are not a significant source of pollution and are identified in the SWPPP: fire-fighting activity, fire hydrant flushing, potable water line flushing, equipment wash down without detergents or hazardous cleaning products, uncontaminated foundation drains, springs, surface water, lawn watering, chemical treatment of stormwater, and air conditioning condensate. Impervious surface wash water may not be directed into any surface water or storm drain inlet unless appropriate pollution prevention measures have been implemented. Non-stormwater discharges may not come into contact with oil and grease deposits or any other toxic or hazardous materials (unless cleaned up using dry clean-up methods). The SWPPP must include a description of the pollution prevention measures to be implemented while non-stormwater discharges are occurring.

B. Releases in Excess of Reportable Quantities

This permit does not relieve the permittee of the reporting requirements of 40 CFR 110, 40 CFR 117, and 40 CFR 302, nor the reporting requirements found in NDAC 33.1-16-02.1. Any release which meets any reporting requirement shall be reported to the department in accordance with Part IV(A)(7).

C. Stormwater Pollution Prevention Plans

All permittees shall implement a SWPPP for any construction activity requiring this permit until final stabilization is achieved. The SWPPP and revisions are subject to review by the department. The objectives of the SWPPP are to identify potential sources of sediment and other sources of pollution associated with construction activity, and to ensure practices are implemented and maintained to reduce the contribution of pollutants in stormwater discharges from the construction site to waters of the state and storm sewer systems. Stormwater management documents developed under other regulatory programs may be included or incorporated by reference in the SWPPP or used in whole as a SWPPP if it meets the requirements of this part. A partially complete SWPPP is acceptable when it clearly identifies the item(s) to be completed, the person(s) responsible for completing the item(s) and the deadline for completing the item(s). The SWPPP must be completed prior to the start of construction (or the applicable construction phase). Permittees that obtained coverage under the 2020 construction general permit shall amend and implement a SWPPP that meets the requirements of this permit within ninety (90) days of the effective date of this permit.

The SWPPP may identify more than one permittee and may specify the responsibilities of each permittee by task, area, and/or timing. Permittees may coordinate and prepare more than one SWPPP to accomplish this. However, in the event there is a requirement under the SWPPP for which responsibility is ambiguous or is not included in the SWPPP, each permittee shall be responsible for implementation of that requirement. Each permittee is responsible for assuring that their activities do not render another permittee's controls ineffective.

The SWPPP must incorporate the requirements provided in Appendix 1 and shall include the following information.

1. **Site Description**. Each SWPPP shall provide a description of the construction activity and potential sources of pollution as indicated below:

    a. A description of the overall project and the type of construction activity;

    b. Estimates of the total area of the site and the total area that is expected to be disturbed by excavation, grading, grubbing, or other activities during the life of the project;

    c. A proposed timetable/schedule, or chart, of activities that includes major phases/stages, BMP implementation, BMP removal, disturbances, and stabilization for major portions of the site;

    d. A description of the soil within the disturbed area(s);

    e. The name of the surface water(s) and municipal storm sewer system at or near the disturbed area that will receive stormwater runoff from the project site; and

    f. A site map which indicates the following items as applicable (more than one map may be needed). If an item is not applicable, provide rationale describing why the item is not applicable to the construction activity:

        1) Location of project;

2) Project boundaries;
3) Areas of ground disturbance during each phase/stage of the project;
4) Areas where disturbance will not occur, such as avoidance areas (e.g. wetlands, critical habitat, Threatened and Endangered Species, etc);
5) Drainage patterns including flow direction (run-on and runoff);
6) Discharge points and storm sewer system inlets which the site drains to or may be affected by the activity;
7) Location of all temporary and permanent sediment and erosion controls during each particular phase;
8) Location of any stormwater conveyances such as retention ponds, detention ponds, ditches, pipes, swales, stormwater diversions, culverts, and ditch blocks;
9) Location of potential sources of pollution (e.g. portable toilets, trash receptacles, etc.) or areas were potential sources of pollution cannot be located;
10) Location of soil stockpiles;
11) Identify steep slopes;
12) Surface waters, including an aerial extent of wetlands;
13) Location of surface water crossings;
14) Locations where stormwater is discharged to surface waters;
15) Location of dewatering discharge points;
16) Locations where chemical treatment of stormwater will be performed, including discharge points;
17) Fueling locations and storage, vehicle and equipment maintenance areas, designated wash water collection site, lubricant and chemical storage, paint storage, material storage, staging areas, and debris collection area;
18) Location of any impervious surfaces upon completion of construction; and
19) Where included as part of the project, the site maps for off-site concrete/asphalt batch plants, equipment staging areas, borrow sites or excavated fill material disposal sites. Site maps must show items 1 through 18 of this section.

g. Projects that discharge stormwater which flows to a water body listed as impaired under section 303(d) of the Federal Clean Water Act due to sediment, suspended solids or turbidity must identify the water body and impairment in the SWPPP. The department's 303(d) list may be found at the following website under Integrated Reports: deq.nd.gov/WQ

h. For water bodies which have a TMDL, the SWPPP must describe and conform to the Waste Load Allocations (WLA) of the water body. Information about TMDL allocations may be found at the following website: deq.nd.gov/WQ

2. **Narrative.** The SWPPP must include a narrative description of the selected operational controls and sediment and erosion controls as outlined in Part II(C)(3), Part II(C)(4), and Appendix 1 of this permit. When applicable, a description of the requirements for any additional environmental regulations and local requirements related to the project, as it relates to waters of the state, must also be included or incorporated by reference (e.g. The Wild and Scenic Rivers Act, The National Historic Preservation Act, The Endangered Species Act, Fish and Wildlife Coordination Act, National Environmental Policy Act, Section 404 of the Clean Water Act, etc.).

The narrative shall describe at a minimum:

a. The installation, removal (if applicable), and maintenance requirements of selected BMPs for each phase/stage of construction activity;
b. The rationale for the selection of all BMPs (the design should be included where appropriate);
c. Whether selected BMPs are temporary or permanent;

d. Any descriptions of infeasibility or explanations as required in Part II of this permit.

3. **Operational Controls**. The SWPPP shall describe the BMPs used in day-to-day operations on the project site that reduce the contribution of pollutants in stormwater runoff.

   a. The SWPPP must identify a person knowledgeable and experienced in the application of erosion and sediment control BMPs who will oversee the implementation of the SWPPP, and the installation, inspection, and maintenance of the erosion and sediment control BMPs before and during construction until a NOT is filed. A knowledgeable and experienced person is someone who meets the requirements of Part II(C)(3)(e) of this permit.

   b. The owner shall develop a chain of responsibility with all operators on the site to ensure that the SWPPP will be implemented and stay in effect until the construction project is complete, the entire site has undergone final stabilization, and a NOT has been submitted to the department.

   c. The SWPPP must include a description of good housekeeping practices used to maintain a clean and orderly site. The SWPPP shall describe how litter, debris, chemicals and parts will be handled to minimize exposure to stormwater. The SWPPP also shall describe what measures will be used to reduce and remove sediment tracked off site by vehicles or equipment. In addition, the SWPPP shall describe methods which will be used to reduce the generation of dust that could be discharged in stormwater from the project.

   d. The SWPPP shall describe spill prevention and response procedures where potential spills can occur. Specific handling procedures, storage requirements, spill containment, cleanup procedures, and disposal must be identified.

      The potential discharge of hazardous substances in stormwater discharges shall be minimized by including measures detailed in the SWPPP to prevent and respond to releases of hazardous substances. If a reportable quantity release occurs, the SWPPP shall be revised to prevent the reoccurrence of such a release.

   e. The SWPPP shall outline how employees and responsible parties shall be trained on the implementation of the SWPPP. Training must be provided at least annually, as new employees or responsible parties are hired, or as necessary to ensure compliance with the SWPPP and the general permit. Employees and responsible parties include individuals who are responsible for design, installation, maintenance, and repair of stormwater controls and conducting inspections.

      1) On-site personnel must understand the requirements of this permit as it pertains to their role in implementing the SWPPP. On-site personnel must know:

         a. The purpose of the SWPPP, requirements of the SWPPP, and how the SWPPP will be implemented;

         b. The location of all BMPs identified in the SWPPP that pertain to their role; and

         c. Correct installation, function, maintenance, and removal (if applicable) of BMPs identified in the SWPPP that pertain to their role.

      2) Personnel responsible for performing site inspections must understand when inspections must be conducted (Part III(A)), what must be inspected (Part III(A)(1)), how to record findings, and when to initiate and properly document corrective actions.

3) Maintenance personnel must understand when maintenance must be performed on BMPs in order to maintain properly functioning BMPs and what needs to be recorded for corrective actions/maintenance records in accordance with Part III(A)(7) of this permit.

f. The SWPPP must describe how concrete grindings, slurry and wash water will be managed. Wastewater from concrete washout, cleanout or washout of stucco, paint, form release oil, curing compound, joint compound, and other construction materials shall not be discharged to waters of the state, storm sewer systems, or curb and gutter systems.

g. The SWPPP shall describe any dewatering activities planned at the site. Dewatering or basin draining (e.g., pumped discharges, trench/ditch cuts for drainage) related to the permitted activity must be managed with appropriate BMPs, such that the discharge does not adversely affect the receiving water. The following conditions apply to dewatering activities:

1. Dewatering is limited to uncontaminated stormwater, surface water, and groundwater that may collect on-site and those sources identified in Part II(A) if they are not a significant source of pollution. A separate permit must be obtained to discharge water from other sources such as hydrostatic testing of pipes, tanks, or other similar vessels; disinfection of potable water lines; pump testing of water wells; and the treatment of refined petroleum contaminated groundwater or surface water.

2. When dewatering basins and impoundments, utilize structures or BMPs which allow for draw down to occur from the surface of the water, unless infeasible. If infeasible, documentation must be provided in the SWPPP. In addition, you must describe what BMP(s) will be used in its place.

3. Chemical treatment of dewatering activities for sediment removal must be conducted in accordance with the chemical manufacturer's specifications. Treatment chemicals must be appropriately selected for the anticipated soil particle size and characteristics of the stormwater (pH, turbidity, flow rate of stormwater flowing into the chemical treatment system, etc.). A description of the chemical treatment process must be included in the SWPPP. Permittees shall ensure the selection and management of chemicals minimize the potential for harmful effects in the discharge. The following information must be included in the SWPPP.

a. Material Safety Data Sheet/Safety Data Sheet (MSDS/SDS);
b. Proposed water additive discharge concentration;
c. Discharge frequency (i.e., number of hours per day and number of days per year);
d. Monitoring point for product discharge;
e. Type of removal treatment, if any, that the water additive receives prior to discharge;
f. Product function (e.g., coagulant, flocculant, etc.);
g. A 48-hour LC_{50} or EC_{50} for a North American freshwater planktonic crustacean (*Ceriodaphnia* sp., *Daphnia* sp., or *Simocephalus* sp.); and
h. Results for a toxicity test for one other North American freshwater aquatic species (other than a planktonic crustacean).

4. **Erosion and Sediment Controls**. Erosion and sediment controls and stabilization requirements must be implemented for each major phase of site activity (e.g., clearing, grading, building, and landscaping phases). A description of the erosion and sediment controls and site stabilization methods must be provided in accordance with Part II(C)(2) of this permit. Erosion and sediment controls, and site stabilization must conform to the requirements provided in Appendix 1. The description and implementation of controls shall address the following minimum components:

a. The selection of erosion and sediment controls, and site stabilization shall consider the following:

   1) The expected amount, frequency, intensity, and duration of precipitation events. Permittees may state that selected erosion and sediment controls and site stabilization methods are industry standards;

   2) The nature of stormwater run-on and runoff from the site as well as changes during, and as a result of, construction activity. This includes changes to impervious surfaces, slopes, seasonal changes, and drainage features on-site;

   3) Channelized flow must be handled in order to minimize erosion at outlets and to minimize impacts to downstream receiving waters;

   4) Soil types (wind and water erodibility, and settling time); and

   5) Seasonal conditions.

b. Sediment basins, or an appropriate combination of equivalent sediment controls such as smaller sediment basins and/or sediment traps, silt fences, fiber logs, vegetative buffer strips, berms, etc., are required for all down slope boundaries of the disturbance area and for those side slope boundaries as may be appropriate for site conditions. Erosion protection is required to minimize channel and streambank erosion and scour in the immediate vicinity of discharge points.

c. Temporary or permanent erosion protection and stabilization (such as cover crop planting or mulching) must be initiated immediately, as described in Appendix 1(A), for all exposed soil areas where activities have been completed or temporarily ceased.

d. All control measures must be properly selected, installed and maintained in accordance with the manufacturer's specifications and good engineering practices. If inspection or other information indicates a control has been used inappropriately or incorrectly, the permittee must replace or modify the control for site situations. Corrective actions must be made prior to the next anticipated rainfall event or within 24 hours of discovery (whichever comes first) or as soon as field conditions allow. Documentation must be provided in the maintenance records if field conditions do not allow access along with a plan of action for performing maintenance activities.

   The permittee may deviate from the manufacturer's specifications and erosion and sediment control requirements in Appendix 1 if they provide justification for the deviation and document the rationale for the deviation in the SWPPP. Any deviation must provide equivalent erosion and sediment control.

e. If sediment escapes from the site, off-site accumulations of sediment must be removed in a manner and frequency sufficient to minimize off-site impacts as outlined in Appendix 1(B). The SWPPP must be modified to prevent further sediment deposition off site.

f. Stormwater controls are expected to withstand and function properly during precipitation events of up to the 2-year, 24-hour storm event. Visible erosion and/or off-site sediment deposition from such storm events should be minimal. The 2-year, 24-hour storm event is based on NOAA Atlas 14, Volume 8, Version 2, Midwestern States 2013. The 2-year, 24-hour rainfall event in North Dakota ranges from about 1.76 inches in the west to 2.50 inches in the east (NOAA Atlas 14, Volume 8, Version 2, Midwestern States 2013).

g. For projects that discharge stormwater which flows to a water body for which there is a TMDL allocation the SWPPP must be consistent with the assumptions, allocations, and requirements in the approved TMDL. If a TMDL specifies certain BMPs or controls to meet a WLA applicable to the project's discharges, the BMPs or controls must be incorporated into the SWPPP. Information about TMDL allocations may be found at the following website: deq.nd.gov/WQ

6. **Maintenance**. The SWPPP shall describe preventative maintenance practices used to ensure the proper operation of erosion and sediment control devices and equipment used or stored on site. The SWPPP must indicate, as appropriate, the maintenance or clean out interval for sediment controls.

7. **Inspections**. The SWPPP must provide for site inspections as outlined in Part III. The permittee shall ensure that personnel conducting site inspections are familiar with permit conditions and the proper installation and operation of control measures. Inspectors must be knowledgeable in their role of the SWPPP, as outlined in Part II(C)(3)(e) of this permit.

8. **SWPPP Review and Revisions**.

   a. The owner, or owner jointly with the operator, shall sign the SWPPP in accordance with Part IV(A)(6). The SWPPP shall be retained on site for the duration of activity as outlined in Part III(B).

   b. The permittee shall make the SWPPP available upon request to the department, EPA, or, in the case of discharges to a municipal storm sewer system, the operator of the municipal system.

   c. The permittee shall amend the SWPPP whenever there is a change in design, construction, operation, operational control, maintenance, or BMPs. The SWPPP shall be amended if the plan is found to be ineffective in controlling pollutants present in stormwater. The SWPPP shall include a description of the amendment process.

D. Local Requirements

All stormwater discharges and dewatering activities must comply with the requirements, policies, or guidelines of municipalities and other local agencies as applicable to the construction site. Any discharges to a storm sewer, ditch or other water course under the jurisdiction of a municipality must comply with any specific conditions or BMPs required by the municipality or agency.

E. Final Stabilization

The permittee(s) must ensure final stabilization of the site. Permittees should submit a NOT within 30 days after final stabilization has been achieved, or another owner/operator (permittee) has assumed control according to Part I(F) for all areas of the site that have not undergone final stabilization. Final stabilization can be achieved in the following ways.

1. All soil disturbing activities at the site have been completed and soils not covered by permanent structures or cover are stabilized by a uniform perennial vegetative cover with a density of 70 percent of the pre-existing cover over the entire pervious surface area, or other equivalent means necessary to prevent soil failure under erosive conditions and;

   a. All drainage ditches, constructed to drain water from the site after construction is complete, must be stabilized to preclude erosion;

b. All temporary erosion prevention and sediment control BMPs (such as silt fence) must be removed as part of the site final stabilization; and

c. The permittee(s) must remove all sediment from conveyances, temporary sedimentation basins that will be used as permanent water quality management basins, and other post-construction stormwater management features. Sediment must be stabilized to prevent it from being washed into basins, conveyances, drainage ways, or features, or discharging off-site to surface waters. The cleanout of permanent basins must be sufficient to return the basin to design capacity.

d. All construction materials, waste and waste handling devices are removed and properly disposed, and all equipment and vehicles used during construction are removed, unless intended for long-term use following construction.

e. All potential pollutants and pollutant-generating activities associated with construction have been removed.

2. For areas of the state where the average annual rainfall is less than 20 inches (per NOAA Atlas 14, Volume 8, Version 2, Midwestern States 2013), all soil disturbing activities at the site have been completed and erosion control measures (e.g., degradable rolled erosion control product) and stabilization methods are selected, designed, and installed along with an appropriate seed base to provide erosion control for at least three years and achieve 70 percent of the pre-existing vegetative cover within three (3) years without active maintenance. Sites must meet the criteria outlined in items 1(a), (b), and (c) above.

3. Disturbed areas on land used for agricultural purposes that are restored to their pre-construction agricultural use are not subject to these final stabilization criteria. If the construction activity removed standing crop, the area must be restored in accordance with the landowner.

   Areas disturbed that were not previously used for agricultural activities, such as buffer strips immediately adjacent to waters of the state, and areas which are not being returned to their pre-disturbance use must meet the final stabilization criteria in (1) or (2) above.

4. For residential construction only, final stabilization may be achieved when soil is stabilized (see Appendix 1(A)(3)) and down gradient perimeter control for individual lots has been implemented and the residence has been transferred to the homeowner. Additionally, the permittee must distribute a “homeowner fact sheet” to the homeowner to inform the homeowner of the need for, and benefits of, final stabilization. The permittee also must demonstrate that the homeowner received the fact sheet.

5. Coverage under an individual or alternative general NDPDES permit has been obtained.

III. SELF MONITORING AND REPORTING

A. Inspection and Maintenance Requirements

1. All erosion prevention and sediment control BMPs must be inspected to ensure integrity and effectiveness. Erosion and sediment control measures and stabilized areas shall be observed to ensure they are operating correctly and in serviceable condition. Inspections shall include areas used for storage of materials, permanent stormwater control measures, vehicle maintenance areas, and dewatering activities. These areas shall be inspected for evidence of, or the potential for, pollutants entering a drainage system. If necessary, the SWPPP shall be revised based on the observations and deficiencies noted during the inspection.

2. Inspections shall be performed by or under the direction of the permittee. Inspections shall be performed at least once every 14 calendar days and within 24 hours after any storm event of greater than 0.25 inches of rain per 24-hour period. Rainfall inspections do not take the place of the scheduled once every 14-calendar day inspection unless the rainfall inspection occurs on the same day as the once every 14-calendar day inspection. Inspections are only required during normal working hours. The permittee shall use a rain gauge on-site or utilize the nearest National Weather Service precipitation gauge station. Rain gauge locations or stations must be representative of the site.

    a. "Within 24 hours after any storm event greater than 0.25 inches rain per 24-hour period" means that you are required to conduct an inspection within 24 hours once a storm event has produced 0.25 inches, even if the storm event is still continuing. If there is a storm event at your site that continues for multiple days, and each day of the storm produces 0.25 inches or more rain, you are required to conduct an inspection within 24 hours of the first day of the storm and within 24 hours after the end of the storm.

3. There may be times when a site inspection may not be practical at the specified time. Adverse climatic conditions, such as flooding, high winds, tornadoes, electrical storms, site access constraints, etc., may prohibit inspections. The permittee must include a description of why the inspection(s) could not be performed at the designated time in the next inspection record. If an inspection is delayed due to adverse weather conditions or rain events outside normal working hours, an inspection must be conducted during the next working day, or as conditions allow.

4. Some erosion and sediment control measures may require more frequent inspection based on location (e.g., sensitive areas or waters of the state) or as a result of recurring maintenance issues. Erosion or sediment control measures found in need of maintenance between inspections must be repaired or replaced with appropriate measures as soon as practicable. Erosion and sediment control measures which require more frequent inspection based on location or as a result of recurring maintenance issues must be identified in the SWPPP.

5. All inspections must be recorded. The record shall summarize the scope of the inspection, major observations relating to the SWPPP, and any corrective actions taken. These records (or reports) must be retained in accordance with Part III(B). Records (or reports) of each inspection activity shall include:

    a. Date of inspections;

    b. Name of person(s) conducting inspections;

    c. Findings of inspections, including recordings or imagery if utilized, and recommendations and time frame for corrective actions;

    d. Date and amount of all rainfall events greater than 1/4 inch (0.25 inches) in 24 hours;

    e. Documentation that the SWPPP has been amended when changes are made to BMPs in response to inspections; and

    f. Signature of person(s) conducting the inspection or other means used to verify an inspector (e.g., work order or preventative maintenance schedule completion).

6. All erosion and sediment control measures and other protective measures must be maintained in effective operating condition. Stabilized areas and pollution prevention measures also must be maintained in effective operating condition. Corrective actions and maintenance activities shall be arranged and accomplished in accordance with Appendix 1 or as soon as practicable.

7. Corrective actions (maintenance activities) must be recorded and these records must be retained in accordance with Part III(B). Records for maintenance activity shall include:

    a. Best Management Practice corrected;

    b. Date of corrective action;

    c. Name of person(s) performing corrective actions;

    d. Corrective actions taken, including recordings or imagery if utilized; and

    e. Corrective actions/maintenance records shall be signed or use another means to verify corrective actions/maintenance were completed (e.g., work order or preventative maintenance schedule completion).

8. Completed areas that have been stabilized but do not meet the 70 percent perennial vegetative cover criteria for final stabilization may be inspected once per month. Inspections may be suspended for parts of the construction site that meet final stabilization requirements of Part II(E) of this permit. The SWPPP must update to identify any areas which meet this condition.

9. Inspections may be suspended where earthwork has been suspended due to frozen ground conditions. The required inspections and maintenance must resume as soon as runoff occurs or the ground begins to thaw at the site. The permittee must record freeze/thaw and runoff dates as part of the inspection records.

10. Dewatering activities shall be inspected daily. The inspection must include the dewatering site, areas where BMPs are being implemented and the discharge location. A record (or report) shall be maintained to document the inspections of the dewatering operation and actions taken to correct any problems that may be identified. Records shall contain at a minimum:

    a. Date of inspections;

    b. Name of person(s) conducting inspections;

    c. Approximate times dewatering started and ended (run time) on the day of inspection;

    d. Estimates of the rate of discharge (pump rate) on the day of discharge;

    e. Findings of inspections, including recordings or imagery if utilized, and recommendations and time frame for corrective actions;

    f. Corrective actions taken (including dates and party completing maintenance activities);

    g. Documentation that the SWPPP has been amended when changes are made to the dewatering activity in response to inspections; and

h. Signature of person(s) conducting inspections and maintenance or other means used to verify an individual (e.g., work order or preventative maintenance schedule completion).

B. Records Location

The SWPPP, site inspection records, corrective actions/maintenance records, and this general permit shall be kept at the site of the construction activity in a field office, trailer, shed, vehicle that is on-site during normal working hours, or other reasonable on-site location. If the site does not have a reasonable on-site location, then the documents must be retained at a readily available alternative location; preferably with the individual responsible for overseeing the implementation of the SWPPP. Electronic copies of records are acceptable if the records can be accessed on-site. If the site is inactive, then the documents may be stored at a local office. Permittees should avoid using personal electronic devices for storing electronic records. The NOI and coverage letter from the department are not required to be kept at the site. All records and documentation must be retained in accordance with Part IV(A)(5).

IV. STANDARD CONDITIONS

A. COMPLIANCE RESPONSIBILITIES

1. **Duty to Comply**
   The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

2. **Proper Operation and Maintenance**
   The permittee shall at all times maintain in good working order and operate as efficiently as possible all treatment or control facilities or systems installed or used by the permittee to achieve compliance with the terms and conditions of this permit. If necessary to achieve compliance with the conditions of this permit, this shall include the operation and maintenance of backup or auxiliary systems.

3. **Planned Changes**
   The department shall be given advance notice of any planned changes at the permitted facility or of an activity which may result in permit noncompliance. Any anticipated facility expansions, production increase, or process modifications which might result in new, different, or increased discharges of pollutants shall be reported to the department as soon as possible. Changes which may result in a facility being designated a "new source" as determined in 40 CFR 122.29(b) shall also be reported.

4. **Duty to Provide Information**
   The permittee shall furnish to the department, within a reasonable time, any information which the department may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the department, upon request, copies of records required to be kept by this permit. When a permittee becomes aware that it failed to submit any relevant facts or submitted incorrect information in a permit application or any report, it shall promptly submit such facts or information.

5. **Records Retention**
   All records and documentation required by this permit shall be kept by the permittee for at least three years from the date that permit coverage expires or is terminated or longer if requested by the department or EPA.

6. **Signatory Requirements**
   NOIs and NOTs shall be signed by a responsible corporate officer for a corporation; a general

partner or the proprietor for a partnership or sole proprietorship; or a principal executive officer or ranking elected official for a municipality, State, Federal, or other public agency.

The SWPPP shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:

a. The authorization is made in writing by a person described above and included in the SWPPP; and

b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility, such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters.

A copy of the written authorization must be submitted to the department upon request. If an authorization under 6. Signatory Requirements is no longer accurate for any reason, a new authorization satisfying the above requirements must be included in the SWPPP.

All inspection reports and maintenance records shall be signed in accordance with Part III(A)(5).

NOIs, NOTs, SWPPPs, or information submitted to the department shall be signed and certified. Any person signing a NOI, NOT, SWPPP, or other information submitted to the department under this section shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

7. **Twenty-four Hour Notice of Noncompliance Reporting**
   a. The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally as soon as possible, but no later than twenty-four (24) hours from the time the permittee first became aware of the circumstances. The oral report shall be made the department at 701.328.5210.

   b. A written submission shall also be provided within five days of the time that the permittee became aware of the circumstances. The written submission shall contain:

      1) A description of the noncompliance and its cause;

      2) The period of noncompliance, including exact dates and times;

      3) The estimated time noncompliance is expected to continue if it has not been corrected; and

      4) Steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.

   Written reports shall be submitted using the electronic reporting system or mailed to the department at the following address:

ND Department of Environmental Quality
Division of Water Quality
4201 Normandy Street
Bismarck ND 58503-1324

The department may waive the written report on a case-by-case basis if the oral report has been received within 24 hours by the department at 701.328.5210 as identified above.

8. **Bypass of Treatment Facilities**
   a. Prohibition of Bypass. Bypass is prohibited, and the department may take enforcement action against a permittee for bypass, unless:

      1) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

      2) There were no feasible alternatives to the bypass. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of preventive maintenance.

      The department may approve an anticipated bypass, after considering its adverse effects, if the department determines that it will meet the two (2) conditions listed above.

9. **Upset Conditions**
   An upset constitutes an affirmative defense to an action brought for noncompliance with erosion and sediment or site stabilization methods if the requirements of the following paragraph are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

   A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

   a. An upset occurred and the permittee can identify its cause(s);

   b. The permitted activity was, at the time being, properly operated;

   c. The permittee submitted notice of the upset as required under 7. Twenty-four Hour Notice of Noncompliance Reporting and

   d. The permittee complied with any remedial measures required under 10. Duty to Mitigate.

   In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

10. **Duty to Mitigate**
    The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment. The permittee, at the department's request, shall provide accelerated or additional monitoring as necessary to determine the nature and impact of any discharge.

11. **Removed Materials**
    Collected screenings, grit, solids, sludges, or other pollutants removed in the course of treatment shall be managed or disposed of in such a manner to prevent any pollutant from entering any waters of the state or creating a health hazard.

12. **Duty to Reapply**
    Any request to have this permit renewed must be done in accordance with Part I(G).

B. GENERAL PROVISIONS

1. **Inspection and Entry**
   The permittee shall allow department and EPA representatives, at reasonable times and upon the presentation of credentials if requested, to enter the permittee's premises to inspect the construction activity and monitoring equipment, to sample any discharges, and to have access to and copy any records required to be kept by this permit.

2. **Availability of Reports**
   Except for data determined to be confidential under 40 CFR Part 2, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the department and EPA. As required by the Act, permit applications, permits, and effluent data shall not be considered confidential.

3. **Transfers**
   This permit is not transferable.

4. **New Limitations or Prohibitions**
   The permittee shall comply with any effluent standards or prohibitions established under Section 306(a), Section 307(a), or Section 405 of the Act for any pollutant (toxic or conventional) present in the discharge or removed substances within the time identified in the regulations even if the permit has not yet been modified to incorporate the requirements.

5. **Permit Actions**
   This permit may be modified, revoked and reissued, or terminated for cause. This includes the establishment of limitations or prohibitions based on changes to Water Quality Standards, the development and approval of waste load allocation plans, the development or revision to water quality management plans, or the establishment of prohibitions or more stringent limitations for toxic or conventional pollutants and/or sewage sludges. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

6. **Need to Halt or Reduce Activity Not a Defense**
   It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

7. **State Laws**
   Nothing in this permit shall be construed to preclude the institution of legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable state law or regulation preserved under Section 510 of the Act.

8. **Oil and Hazardous Substance Liability**
   Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Section 311 of the Act.

9. **Property Rights**
   The issuance of this permit does not convey any property rights of any sort, nor any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations.

10. **Severability**
    The provisions of this permit are severable, and if any provision of this permit or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances and the remainder of this permit shall not be affected thereby.

11. **General Permits**
    Coverage under this permit may be modified, revoked and reissued, or terminated for cause. The department may require permittees covered by this permit to apply and obtain an individual or alternative general permit if:

    1. The discharge is not in compliance with the conditions of the general permit.

    2. Conditions or standards have changed so that the discharge no longer qualifies for a general permit.

    3. Information becomes available which indicates that the permittee's discharge has a reasonable potential to contribute to an exceedance of a water quality standard.

    When an individual NDPDES permit is issued to a permittee otherwise subject to this permit or the permittee is approved for coverage under an alternative NDPDES general permit, the applicability of this permit to the permittee is automatically inactivated upon the effective date of the individual permit or coverage under the alternative general permit.

V. DEFINITIONS

"**303(d) list**" or "**section 303(d) list**" means a list of North Dakota's water quality-limited waters needing total maximum daily loads or TMDLs developed to comply with section 303(d) of the Clean Water Act. A copy of the list is available on the state's web site at: deq.nd.gov/WQ

"**Act**" means the Clean Water Act.

"**Bankfull**" means the channel is filled to the top of one or both of its banks.

"**BMP**" or "**best management practices**" means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the state. BMPs also include treatment requirements, operating procedures and practices to control construction site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

"**Bypass**" means the intentional diversion of waste streams from any portion of a treatment facility.

"**Common plan of development or sale**" means a contiguous area where multiple separate and distinct land disturbing activities may be taking place at different times, on different schedules, but under one proposed plan. One plan is broadly defined to include design, permit application, advertisement or physical demarcation indicating that land-disturbing activities may occur.

"**Construction activity**" means construction activity as defined in 40 CFR part 122.26(b)(14)(x) and small construction activity as defined in 40 CFR part 122.26(b)(15). This includes a disturbance to the land that results in a change in topography, existing soil cover (both vegetative and non-vegetative), or the existing soil topography that may result in accelerated stormwater runoff, leading to soil erosion and movement of sediment into surface waters or drainage systems. Examples of construction activity may include clearing, grading, filling and excavating. Construction activity includes the disturbance of less than one acre of total land area that is part of a larger common plan of development or sale if the larger common plan will ultimately disturb one (1) acre or more. Construction activity does not include routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of the facility.

"**Department**" means the North Dakota Department of Environmental Quality, Division of Water Quality.

"**Energy dissipation**" means methods employed at pipe outlets to prevent erosion. Examples include, but are not limited to: concrete aprons, riprap, splash pads, and gabions that are designed to prevent erosion.

"**Indian country**" means (1) All land within the limits of any Indian reservation under the jurisdiction of the United States Government, notwithstanding the issuance of any patent, and including rights-of-way running through the reservations; (2) All dependent Indian communities within the borders of the United States whether within the originally or subsequently acquired territory thereof, and whether within or without the limits of a state; and (3) All Indian allotments, the Indian titles to which have not been extinguished, including rights-of-way running through the same.

"**Infeasible**" means not technologically possible or not economically practicable and achievable in light of best industry practices.

"**Immediately**" means as soon as practicable, but no later than the end of the next work day, following the day when the earth-disturbing activities have temporarily or permanently ceased.

"**Large construction activity**" means land disturbance of equal to or greater than five (5) acres. Large construction activity also includes the disturbance of less than one acre of total land area that is part of a larger common plan of development or sale, if the larger common plan will ultimately disturb equal to or greater that

five acres.

"**Normal wetted perimeter**" means the area of a conveyance, such as a ditch, channel, or pipe that is in contact with water during flow events that are expected to occur once every year.

"**Non-stormwater discharges**" means discharges other than stormwater. The term includes both process and non-process sources. Process wastewater sources that require a separate NDPDES permit include, but are not limited to industrial processes, domestic facilities and cooling water. Non-stormwater sources that may be addressed in this permit include, but are not limited to: fire-fighting, fire hydrant flushing, potable water line flushing, equipment wash down without detergents or hazardous cleaning products, uncontaminated foundation drains, springs, surface water, lawn watering, chemical treatment of stormwater and air conditioning condensate.

"**Operator**" means the person (usually the general contractor) designated by the owner who has day to day operational control and/or the ability to modify project plans and specifications related to the SWPPP. The person must be knowledgeable in those areas of the permit for which the operator is responsible and must perform those responsibilities in a workmanlike manner.

"**Owner**" means the person or party possessing the title of the land on which the construction activities will occur; or if the construction activity is for a lease holder, the party or individual identified as the lease holder; or the contracting government agency responsible for the construction activity.

"**Permanently ceased**" means clearing and excavation within any area of your construction site that will not include permanent structures has been completed.

"**Permanent Cover**" means final stabilization. Examples include grass, gravel, asphalt, and concrete.

"**Severe property damage**" means substantial physical damage to property, damage to best management practices which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in construction.

"**Significant materials**" includes, but is not limited to: raw materials; fuels; materials such as solvents, detergents, and plastic pellets; finished materials such as metallic products; hazardous substances designated under Section 101(14) of CERCLA; any chemical the facility is required to report pursuant to Section 313 of Title III of SARA; fertilizers; pesticides; and waste products such as ashes, slag and sludge that have the potential to be released with stormwater discharges.

"**Significant spills**" includes, but is not limited to: releases of oil or hazardous substances in excess of reportable quantities under Section 311 of the Clean Water Act (see 40 CFR 110.10 and CFR 117.21) or Section 102 of CERCLA (see 40 CFR 302.4).

"**Small construction activity**" means land disturbance of equal to or greater than one acre and less than five acres. Small construction activity also includes the disturbance of less than one acre of total land area that is part of a larger common plan of development or sale, if the larger common plan will ultimately disturb equal to or greater than one and less than five acres.

"**Stabilized**" means the exposed ground surface has been covered by appropriate materials such as mulch, staked sod, riprap, erosion control blanket, or other material that prevents erosion from occurring. Grass seeding alone is not stabilization. Snow cover and frozen ground conditions are not considered stabilized.

"**Steep Slopes**" means slopes which are 3:1 (Horizontal:Vertical) or greater in grade.

"**Stormwater**" means stormwater runoff, snow melt runoff, and surface runoff and drainage.

"**Stormwater associated with industrial activity**" means stormwater runoff, snow melt runoff, or surface runoff and drainage from industrial activities as defined in 40 CFR 122.26(b)(14).

"**Stormwater associated with small construction activity"** means the discharge of stormwater from:

(i) Construction activities including clearing, grading, and excavating that result in land disturbance of equal to or greater than one acre and less than five acres. Small construction activity also includes the disturbance of less than one acre of total land area that is part of a larger common plan of development or sale if the larger common plan will ultimately disturb equal to or greater than one and less than five acres. Small construction activity does not include routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of the facility.

(ii) Any other construction activity designated by EPA or the Department, based on the potential for contribution to a violation of a water quality standard or for significant contribution of pollutants to waters of the state.

"**Temporarily ceased**" means clearing, grading, and excavation within any area of the site that will not include permanent structures, will not resume (i.e., the land will be idle) for a period of 14 or more calendar days, but such activities will resume in the future.

"**Temporary erosion protection**" means methods employed to prevent erosion. Examples of temporary cover include; mulch, straw, erosion control blanket, wood chips, tackifiers, and erosion netting.

"**Upset**" means an exceptional incident in which there is unintentional and temporary noncompliance with permit requirements because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed erosion and sediment controls or site stabilization methods, inadequate erosion and sediment controls or site stabilization methods, lack of preventive maintenance, or careless or improper operation.

"**Waters of the state**" means any and all surface waters that are contained in or flow in or through the state of North Dakota as defined in NDCC 61-28-02. This definition includes all water courses, even if they are usually dry.

Appendix 1 – Requirements for Best Management Practices

Requirements for designing, implementing, and maintaining erosion and sediment controls, stabilization, operational controls, and dewatering practices.

A. Erosion and Sediment Control Practices

1. Sediment basins, or an appropriate combination of equivalent sediment controls such as smaller sediment basins and/or sediment traps, silt fences, fiber logs, vegetative buffer strips, berms, etc., are required for all down slope boundaries of the disturbance area and for those side slope boundaries as may be appropriate for site conditions. Erosion protection is required to minimize channel and streambank erosion and scour in the immediate vicinity of discharge points.

2. Sites using temporary (or permanent) sediment basins must meet the following requirements:

   a. Sediment basins shall be designed for a calculated volume of runoff from a 2-year, 24-hour storm per acre drained to the basin and provides not less than 1,800 cubic feet of sediment storage below the invert of the outlet pipe from each acre drained to the basin; or

   b. Basins shall be sized to provide 3,600 cubic feet of sediment storage below the invert of the outlet pipe per acre drained to the basin if calculations are not performed.

   c. Basin outlets must be designed to avoid short-circuiting and the discharge of floating debris. Basins must be designed with the ability to allow complete basin drawdown for maintenance activities. Basins must release the storage volume in at least 24 hours. Outlet structures must be designed to withdraw water from the surface, unless not practicable. If not practicable, rationale must be provided in the SWPPP. The basin must have a stabilized emergency overflow to prevent failure of pond integrity. Energy dissipation must be provided for the basin outlet.

3. Erosion, sediment, and stabilization practices shall be provided. Erosion, sediment, and stabilization practices include such things as: silt fences, fiber logs, stabilized earth berms, vegetative buffer strips, erosion control blankets, mulch, hydro-seeding combined with mulch or tackifiers, etc.

4. All exposed soil areas must be stabilized (see definitions). Stabilization must be initiated immediately where activities have been permanently or temporarily ceased on any portion of the site and will not resume for a period exceeding fourteen (14) calendar days. Stabilization must be completed as soon as practicable, but no later than fourteen (14) calendar days after the initiation of soil stabilization. Temporary stockpiles without significant silt, clay or organic components (e.g., clean aggregate stockpiles, demolition concrete stockpiles, sand stockpiles) or intended for structural use (e.g., structural fill) are exempt from this requirement.

   a. For slopes with a grade of 3:1 or greater, stabilization must be initiated immediately once activities have been completed or temporarily ceased. Stabilization must be completed as soon as practicable, but no later than seven (7) calendar days after the initiation of soil stabilization.

5. Temporary soil stockpiles must have effective sediment controls, and cannot be placed in surface waters, including stormwater conveyances such as curb and gutter systems, or conduits and ditches.

6. The normal wetted perimeter of any temporary or permanent drainage ditch that drains water from a construction site, or diverts water around a site, must be stabilized at least 200 linear feet from the property edge, or from the point of discharge to any surface water. Stabilization shall be completed prior to connection with a surface water. Any remaining portion of the temporary or permanent drainage

ditch must be stabilized within fourteen (14) calendar days for portions which construction activities have temporarily or permanently ceased.

7. If stabilization requirements cannot be met due to circumstances beyond the control of the permittee, the permittee must initiate stabilization in areas of the site as soon as conditions or circumstances allow. The permittee must document in the SWPPP the conditions or circumstances which prevented the stabilization requirements from being met and develop and implement a stabilization plan to meet the stabilization requirements. The stabilization plan must be included with the SWPPP. Permittees are responsible for implementing stabilization during frozen ground conditions if the site was not stabilized prior to the ground freezing.

8. Stream diversions, or any temporary or permanent drainage ditch or trench which will have continuous flow, shall be stabilized with appropriate controls prior to connection with any surface water. The entire area (channel and bank) of the stream diversion or temporary or permanent drainage ditch, or trench, must be appropriately stabilized to bankfull height.

9. While working in or around surface waters, sediment and erosion controls must be used above the anticipated level of the surface water. Floating silt curtain does not satisfy the down slope and side slope boundary requirements in Part II(C)(4)(b) of this permit, unless the construction activity is on or below the elevation of the surface water. Floating silt curtain must be placed as close to shore as possible. Sediment controls must be installed where exposed soils drain to the surface water immediately after construction activity along the waterline has been completed.

10. Pipe and culvert outlets must be provided with energy dissipation prior to connection with a surface water.

11. Splash pads and/or downspout extensions must be provided for roof drains to prevent erosion from roof runoff.

12. All storm drain inlets in the immediate vicinity of the construction site must be protected by appropriate BMPs during construction until all disturbed areas and stockpiles with the potential to discharge to the inlet have been stabilized. This includes storm drain inlets which may be affected by sediment tracked onto paved surfaces by vehicles or equipment.

13. Inlet protection devices are a last line of control – erosion and sediment control practices must be used on site. Inlet protection devices must conform to local ordinances or regulations. In general, inlet protection devices need to provide for adequate drainage to prevent excessive roadway flooding. Inlet protection may be removed for a particular inlet if a specific concern (i.e., street flooding/freezing, snow removal) has been identified and documented in the SWPPP. In this situation, additional erosion and sediment control practices, or stabilization methods must be used to supplement the loss of the inlet protection device to prevent sediment from entering the storm sewer system.

14. Vegetated buffers must have a minimum width of 1 foot for every 5 feet of disturbed area that drains to the buffer. The width of the buffer shall have a slope of 5 percent or less and the area draining to the buffer shall have a slope of 6 percent or less. Buffers shall consist of dense grassy vegetation, 3 to 12 inches tall with uniform coverage over 90 percent of the buffer. Woody vegetation shall not be counted for the 90 percent coverage. No more than 10 percent of the overall buffer may be comprised of woody vegetation. Additional erosion and sediment controls must be provided when a vegetated buffer does not meet these conditions or concentrated flows within the buffer bring about erosion.

15. A 50-foot natural buffer or equivalent erosion and sediment controls must be provided when a project is within 50 feet of a surface water and stormwater flows to the surface water. If equivalent erosion and sediment controls are used, rationale for using equivalent controls must be provided in the SWPPP.

    If working within 100 feet of a surface water listed as impaired for sediment, suspended solids or turbidity, a 100-foot natural buffer or equivalent sediment and erosion controls must be provided. If equivalent erosion and sediment controls are to be used, rationale for using equivalent controls must be provided in the SWPPP.

16. Minimize the duration of exposed soils on steep slopes in accordance with the stabilization provisions of this permit.

17. In areas where vegetation is used to establish final stabilization or where infiltration practices will be installed, use techniques that rehabilitate and condition compacted soils to support vegetative growth before seeding or planting. Minimizing soil compaction is not required where the intended function of a specific area of the site dictates that it be compacted.

18. Preserve topsoil unless infeasible. Preserving topsoil is not required where the intended function of a specific area of the site dictates that the topsoil be disturbed or removed.

B. Maintenance Requirements for Erosion and Sediment Controls

1. All erosion prevention and sediment control BMPs must be inspected to ensure integrity and effectiveness. All nonfunctional BMPs must be repaired, maintained, or replaced with functional BMPs. Corrective actions must be made prior to the next anticipated rainfall event or within 24 hours of discovery (whichever comes first), or as soon as field conditions allow access. Documentation must be provided in the maintenance records if field conditions do not allow access along with a plan of action for performing maintenance activities.

   Permittees must investigate and comply with the following inspection and maintenance requirements:

   a. All control devices similar to, and including, silt fence or fiber rolls must be repaired, replaced, or maintained when they become nonfunctional (torn from posts, visible tears, etc.). Collected sediment must be removed as it approaches 1/2 of the above ground capacity of the control device.

   b. Fiber rolls must be replaced when 1/2 of the original above ground height of the device when it was installed has been lost as a result of flattening or other damage.

   c. Sedimentation basins must be drained and the sediment removed when the depth of sediment collected in the basin reaches 1/2 the storage volume. Drainage and removal must be completed within 72 hours of discovery, or as soon as field conditions allow access. Documentation must be provided in the maintenance records if field conditions do not allow access along with a plan of action for performing maintenance activities.

   d. Maintenance and cleaning of inlet protection devices must be performed when sediment accumulates, the filter becomes clogged, and/or performance is compromised.

2. Surface waters, including drainage ditches and conveyance systems, must be inspected for evidence of sediment deposited by erosion. Permittees must remove all deltas and sediment deposits in surface waters, drainage ways, catch basins, and other drainage systems. Areas where sediment removal results in exposed soil must be stabilized. Removal and stabilization must take place immediately, but no more than, seven (7) calendar days after the discovery unless precluded by legal, regulatory or

physical access constraints. Permittees shall use all reasonable efforts to obtain access. If precluded, removal and stabilization shall take place immediately, but no more than, seven (7) calendar days after obtaining access. Permittees are responsible for contacting all local, regional, state, and federal authorities, and receiving any applicable permits prior to conducting any work.

3. Vehicle tracking of sediment from the site must be minimized by BMPs. This may include having a designated egress with aggregate surfacing from the site or by designating off-site parking. Permittees are responsible for (or making the arrangements for) street sweeping and/or scraping if BMPs are not adequate to prevent sediment from being tracked onto the street from the site.

   Construction site egress locations must be inspected for evidence of sediment being tracked offsite by vehicles or equipment onto paved surfaces. Accumulations of tracked and deposited sediment must be removed from all off-site paved surfaces by the end of the work day, shift or if applicable, within a shorter time specified by local authorities or the department.

4. If sediment escapes the construction site, off-site accumulations of sediment must be removed in a manner and at a frequency sufficient to minimize off-site impacts (e.g., fugitive sediment in streets could be washed into storm sewers by the next rain event and/or pose a safety hazard to users of public streets). BMPs shall be used to minimize further impacts of off-site accumulations of sediment until the off-site accumulations are removed. Impervious surface wash water may not be directed into any surface water or storm drain inlet unless appropriate pollution prevention measures have been implemented.

5. Vegetative buffers must be inspected for proper distribution of flows, sediment accumulation and signs of rill formation. If a buffer becomes silt covered, contains rills, or is otherwise rendered ineffective, other control measures shall be implemented. Eroded areas shall be repaired and stabilized within 24 hours of discovery, or as soon as conditions allow access. Documentation must be provided in the maintenance records if field conditions do not allow access along with a plan of action for performing maintenance activities.

C. Operational Controls

1. Properly handle construction debris and waste materials.

   a. Debris and waste must be handled appropriately until disposal. Litter and debris shall be collected and stored to reduce the potential for wind and water to carry the materials off-site or leachate discharging from a site. Collected material shall be taken to the appropriate facility for disposal or recycling.

   b. Liquid or soluble materials including oil, fuel, paint, and any other hazardous substances must be properly stored, to prevent spills, leaks or other discharges. Restricted access to storage areas must be provided to prevent vandalism. Storage and disposal of liquid or soluble material must be in compliance with applicable regulations.

2. Minimize the exposure of building materials, building products, landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste and other materials present on the site to precipitation and to stormwater. Minimization of exposure is not required in cases where the exposure to precipitation and to stormwater will not result in a discharge of pollutants, or where exposure of a specific material or product poses little risk of stormwater contamination (such as final products and materials intended for outdoor use).

3. Wash water must be collected in leak-proof containers or leak-proof pits. Containers or pits must be designed and maintained so that overflows cannot occur due to inadequate sizing, precipitation events, or snowmelt. Wash water containments must be cleaned out (solids and liquid) before 80 percent of storage capacity is attained.

4. Minimize the discharge of pollutants from equipment and vehicle washing, wheel wash water, and other wash waters. Wash waters must be treated in a sediment basin or alternative control that provides equivalent or better treatment prior to discharge.

5. BMPs used in surface waters must be cleaned immediately upon removal from surface waters to prevent the transfer of aquatic nuisance species.

6. Fueling operations must be managed to minimize spills or leaks. Collected spill or leak material must be disposed in compliance with applicable regulations.

7. Storage structures for petroleum products and other chemicals shall have adequate leak and spill protection to prevent any spilled materials from entering waters of the state or storm sewer systems.

D. Dewatering Practices

4. Operate the discharge to minimize the release of sediment and provide adequate energy dissipation where necessary to minimize erosion due to the discharge.

5. Discharges must not lead to the deposition of sediment within stormwater conveyance systems or surface waters.

6. Discharges must not cause or potentially cause a visible plume within a surface water body.

7. Basins and impoundments shall be dewatered utilizing structures or BMPs which allow for draw down to occur from the surface of the water, unless infeasible. If infeasible, replacement BMP(s) that provide equivalent treatment shall be used instead.

8. Discharges from the chemical treatment of stormwater must not cause a violation of the standards of quality for waters of the state (NDAC 33.1-16-02.1).

Authorization to Discharge Under the

North Dakota Pollutant Discharge Elimination System

Permit Number NDG070000

Permit No: NDG070000
Effective Date: April 01, 2025
Expiration Date: March 31, 2030

AUTHORIZATION TO DISCHARGE UNDER THE NORTH DAKOTA POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with Chapter 33.1-16-01 of the North Dakota Department of Health rules as promulgated under Chapter 61-28 (North Dakota Water Pollution Control Act) of the North Dakota Century Code,

operations engaged in temporary discharge activities

are authorized to discharge from locations throughout the state of North Dakota

to Waters of the State

provided all the conditions of this permit are met.

This permit and the authorization to discharge shall expire at midnight,

March 31, 2030.

Signed this 24 day of March, 2025.

Marty Haroldson
Director
Division of Water Quality

BP 2025.02.05

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DEFINITIONS Standard Permit BP 2019.05.29

1. "**Act**" means the Clean Water Act.

2. "**Average monthly discharge limitation**" means the highest allowable average of "daily discharges" over a calendar month, calculated as the sum of all "daily discharges" measured during a calendar month divided by the number of "daily discharges" measured during that month.

3. "**Average weekly discharge limitation**" means the highest allowable average of "daily discharges" over a calendar week, calculated as the sum of all "daily discharges" measured during a calendar week divided by the number of "daily discharges" measured during that week.

4. "**Best management practices**" (BMPs) means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the United States. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage areas.

5. "**Bypass**" means the intentional diversion of waste streams from any portion of a treatment facility.

6. "**Composite**" sample means a combination of at least 4 discrete sample aliquots, collected over periodic intervals from the same location, during the operating hours of a facility not to exceed a 24-hour period. The sample aliquots must be collected and stored in accordance with procedures prescribed in the most recent edition of Standard Methods for the Examination of Water and Wastewater.

7. "**Daily discharge**" means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the "daily discharge" is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the "daily discharge" is calculated as the average measurement of the pollutant over the day.

8. "**Department**" means the North Dakota Department of Environmental Quality, Division of Water Quality.

9. "**DMR**" means discharge monitoring report.

10. "**EPA**" means the United States Environmental Protection Agency.

11. "**Geometric mean**" means the n^{th} root of a product of n factors, or the antilogarithm of the arithmetic mean of the logarithms of the individual sample values.

12. "**Grab**" for monitoring requirements, means a single "dip and take" sample collected at a representative point in the discharge stream.

13. "**Instantaneous**" for monitoring requirements, means a single reading, observation, or measurement. If more than one sample is taken during any calendar day, each result obtained shall be considered.

14. "**Maximum daily discharge limitation**" means the highest allowable "daily discharge."

15. "**Salmonid**" means of, belonging to, or characteristic of the family Salmonidae, which includes the salmon, trout, and whitefish.

16. "**Sanitary Sewer Overflows (SSO)**" means untreated or partially treated sewage overflows from a sanitary sewer collection system.

17. "**Severe property damage**" means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

18. "**Total drain**" means the total volume of effluent discharged.

19. "**Upset**" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

DEFINITIONS Whole Effluent Toxicity (WET) BP 2023.01.05

1. "**Acute toxic unit**" ("TUa") is a measure of acute toxicity. TUa is the reciprocal of the effluent concentration that causes 50 percent of the organisms to die by the end of the acute exposure period (i.e., 100/"LC50").

2. "**Chronic toxic unit**" ("TUc") is a measure of chronic toxicity. TUc is the reciprocal of the effluent concentration that causes no observable effect on the test organisms by the end of the chronic exposure period (i.e., 100/"IC25").

3. "**Inhibition concentration**", ("IC"), is a point estimate of the toxicant concentration that causes a given percent reduction (p) in a non-quantal biological measurement (e.g., reproduction or growth) calculated from a continuous model (e.g., Interpolation Method).

4. "**LC50**" means the concentration of toxicant (e.g., effluent) which is lethal to 50 percent of the organisms exposed in the time period prescribed by the test.

5. "**No observed effect concentration**", ("NOEC"), is the highest concentration of toxicant (e.g., effluent) to which organisms are exposed in a chronic toxicity test [full life-cycle or partial life-cycle (short term) test], that causes no observable adverse effects on the test organisms (i.e., the highest concentration of effluent in which the values for the observed responses are not statistically significantly different from the controls).

6. **"Static Non-Renewal Test"**, the test organisms are exposed to the same test solution for the duration of the test.

7. **"Static-Renewal Test"**, the test organisms are exposed to a fresh solution of the same concentration of sample every 24 h or other prescribed interval, either by transferring the test organisms from one test chamber to another, or by replacing all or a portion of solution in the test chambers.

8. **"Toxicity Reduction Evaluation (TRE)"**, is a site-specific study conducted in a step-wise process to identify the causative agents of effluent toxicity, isolate the source of toxicity, evaluate the effectiveness of toxicity control options, and then confirm the reduction in effluent toxicity after the control measures are put in place.

OUTFALL DESCRIPTION

Outfall 001 – Active. Final Outfall. Temporary discharge activities

PERMIT SUBMITTALS SUMMARY

Coverage Point	Submittal	Frequency	First Submittal Date
001, etc.	Discharge Monitoring Report	Quarterly	July 31, 2025
New Applicants	Notice of Intent	1/permit cycle	30 days prior to start of discharge

SPECIAL CONDITIONS

Daily Logs

The permittee shall maintain a log relating to the authorized discharge(s). The following information shall be included in the summaries if not already reported on the appropriate discharge monitoring report forms:

a. Flow information and dates discharges;

b. sample results;

c. records of visual observations;

d. notations of any problems relating to treatment of the discharge; and

e. name of receiving water.

COVERAGE UNDER THIS PERMIT

Applicability of General Permit

Under this general permit, authorization to discharge relatively uncontaminated waters from temporary discharge activities into the waters of the State of North Dakota may be granted. Such activities include hydrostatic testing of pipes, tanks or other similar vessels; disinfection of potable water lines; pump testing of water wells; dewatering of swimming pools and similar structures; construction dewatering; the treatment of gasoline or diesel contaminated ground water; and other short-term discharges. The water discharged from any of these activities must not contribute non-conventional or toxic pollutant loadings to waters of the state.

Temporary dewatering activities as related to construction activities may be covered under the 2025 Construction – Stormwater permit NDR110000. The department determined that if construction dewatering activities are discharging relatively uncontaminated water using items outlined in their Stormwater Pollution Prevention Plan (SWPPP) then there is no need to administratively provide multiple permits for the same activities. This concept may change as rules and regulations change for stormwater activities.

Request for Authorization-Notice of Intent (NOI)

To be eligible for authorization to discharge under this general permit, the owner, operator, and/or authorized agent of any facility conducting temporary dewatering activities must fulfill the requirements of a Notice of Intent (NOI) by submitting a Short Form C (SFN 8319 (03/2022 to the department at the address listed at least 30 days prior to the anticipated stare of any discharge. NOI's can also be submitted to the department electronically through the departments electronic reporting system. The department will then have 30 days to grant discharge authority, deny discharge authority, or request additional information. If the department fails to act on any request within the 30-day period, the facility is automatically covered under the permit. The department may waive, at its discretion, the 30-day period in special cases.

The NOI shall contain, at a minimum, the following information:

a. The name, address, and descriptive location of the facility.

b. The name of principal in charge of operation of the facility.

c. The name of receiving waters.

d. The location of the discharge point(s).

e. A brief description of the type of activity resulting in the discharge.

f. A map or schematic diagram showing the general area and/or routing of the activity.

g. The anticipated total volume to be discharged.

h. The anticipated average and maximum rates of discharge.

i. The anticipated dates of discharge.

j. For hydrostatic testing only, the type (size and material) of pipe or vessel, whether the pipe or vessel has been used or is of virgin material and a description of the fluid normally transported through the pipeline or contained in the vessel.

k. For hydrostatic testing only, the source of water to be used in the testing. If water is to be obtained from a well, (other than used for potable water supply) or from an impoundment, the concentration of total dissolved solids or the specific conductance of this water shall be reported.

l. Describe briefly what measures will be taken to minimize, within practical means, the effects of the discharge on water quality in the receiving waters. A list of BMPs can be found in Table 1.

The department may waive, at its discretion, some of the items listed above and/or the five-day period in special cases.

Authorization to Discharge

Coverage under this permit does not convey approval to discharge to any ditch, storm sewer, private property, or other method of routing the effluent from the site of discharge to the waters of the state. It shall be the permittee's responsibility to seek, apply for and obtain any additional authorizations necessary to initiate the discharge proposed in the permittee's NOI. If the process of obtaining all the authorizations

necessary to initiate the discharge results in changes to the permittee's NOI, the permittee shall modify the NOI and resubmit to the department. The permittee is not authorized to discharge wastewater other than the type and at the location specified in the NOI.

Discharges Not Covered

Temporary discharges associated with process wastewater or any water containing sanitary waste is not covered under this permit.

Any discharge not permitted correctly by local, state, or federal agencies (such as the U.S. Army Corps of Engineers Section 404 permits) is not covered under this permit.

This general permit does not substitute for obligations under the National Environmental Policy Act (NEPA), Endangered Species Act (ESA), or the National Historic Preservation Act (NHPA), it is your responsibility to ensure the project and resulting discharges comply with the respective requirements.

Discharges to waters for which there is a total maximum daily load (TMDL) allocation for sediment and/or parameters associated with sediment transport are not covered unless you develop a Pollution Prevention Plan that is consistent with the assumptions, allocations and requirements in the approved TMDL. If a specific numeric waste load allocation has been established that would apply to the project's discharges, the permittee(s) must incorporate that allocation into the Pollution Prevention Plan and implement necessary steps to meet that allocation.

Request for Discharge of Water Treatment Additives

In the event a permittee proposes to discharge water additives, the permittee shall submit a request to discharge water additives to the department for review. Written notice from the department to discharge such additives at specified levels shall be obtained prior to discharge by the permittee. Additional monitoring and reporting may be required as a condition for approval to discharge the additive.

A request to discharge water additives shall include all of the following water additive usage and discharge information:

a. Safety Data Sheet (SDS);

b. the proposed water additive discharge concentration;

c. the discharge frequency (i.e. number of hours per day and number of days per year);

d. the monitoring point from which the product is to be discharged;

e. the type of removal treatment, if any, that the water additive receives prior to discharge;

f. product function (i.e. microbiocide, flocculant, etc.);

g. a 48-hour LC_{50} or EC_{50} for a North American freshwater planktonic crustacean (either *Ceriodaphnia* so., *Daphnia* sp. or *Simocephalus* sp.); and

h. the results of toxicity test for one other North American freshwater aquatic species (other than a planktonic crustacean).

Notice of Termination (NOT)

Permittees wanting to terminate coverage under this permit must submit a Notice of Termination (NOT) or other written request identifying the facility, reason why the permit is no longer needed and signed in accordance with the signatory requirement of the permit. NOT's can also be submitted through the department's electronic reporting system. Compliance with the conditions of this permit is required until an official termination letter from the department is received.

POLLUTION PREVENTION PLAN

Instead of monitoring for total suspended solids, the permittee may request to develop and implement a pollution prevention plan before beginning temporary discharge activities. The plan must detail the best management practices (BMPs) the permittee will undertake to reduce or eliminate any discharge of pollutants. The following table lists examples of best management practices for temporary discharge activities.

Table 1: Examples of Best Management Practices

Best Management Practice	Description of Practice
Block and Gravel Inlet Protection	• Used in small drainage areas before the area has been permanently stabilized • Where there is danger of silting in an inlet
Buffer Zones	• Floodplains, next to wetlands, along stream banks, and on steep, unstable slopes
Check Dams	• Across swales or drainage ditches to reduce the velocity of flow
Dust Control	• Used where open dry areas of soil are anticipated on the site
Drainage Swale or Earth Dike	• Divert upslope flows from disturbed areas and to divert runoff to a stabilized outlet • To reduce the length of slope the runoff will cross • At the perimeter of the construction site to prevent sediment-laden runoff from leaving the site • To direct sediment-laden runoff to a sediment trapping device
Excavated Gravel Inlet Protection	• Used in small drainage areas before the area has been permanently stabilized • Where there is danger of silting in an inlet • Where ponds around the inlet structure could be a problem to traffic on site
Filter Berm	• A temporary ridge of gravel or crushed rock • Retains sediment on-site by slowing and filtering runoff while allowing water to be discharged from the site.
Filter Fabric Inlet Protection	• Used in small drainage areas before the area has been permanently stabilized • Where there is danger of silting in an inlet
Filter Fence	• A low fence made of filter cloth and fencing material • Filters runoff water before discharge
Geotextiles	• Stabilize the flow on channels and swales • Used on recently planted slopes to protect seedlings

	until they become established
Mulching	• Areas where slopes are steeper than 2:1 • Where runoff is flowing across the area • When seedings need protection from bad weather
Permanent Seeding and Planting	• Areas where soils are unstable because of their texture, structure, water table, winds, or slopes • Filter strips, buffer areas, vegetated swales, steep slopes, and stream banks
Pipe Slope Drain	• On slopes before permanent stormwater drainage structures have been installed • Where diversion measures have been used to concentrate flows
Sediment Pond	• Small ponding area either diked or excavated • Allows sediment to settle out before discharge
Silt Fence	• Immediately upstream of the point(s) of runoff discharge from a site before flow becomes concentrated • Below disturbed areas where runoff may occur in the form of overland flow
Stabilized Construction Entrance	• Wherever vehicles are leaving a construction site and enter onto a public road • At any unpaved entrance/exit where there is rick of transporting mud or sediment onto paved roads
Temporary Sediment Trap	• At the outlet of the perimeter controls installed during the first stage of construction • At the outlet of any structure which concentrates sediment-laden runoff, e.g. at the discharge point of diversions, channels, slope drains, or other runoff conveyances • Above a stormwater inlet that is in line to receive sediment-laden runoff
Temporary Seeding	• Areas which have been disturbed by construction and which are likely to be redisturbed, e.g. denuded areas, soil stockpiles, dikes, dams, sides of sediment basins, and temporary road banks
Vegetative Buffer	• An area of growing vegetation between the discharge and the receiving waters • Filters runoff and minimizes erosion
Note: *Information obtained from the Environmental Protection Agency's* ***"Stormwater Management for Construction Activities: Developing Pollution Prevention Plans and Best Management Practices"*** *(September 1992)*	

Deadlines for Plan Preparation and Compliance

If the permittee develops a pollution prevention plan instead of sampling, the plan must be developed and implemented prior to the start of dewatering. The permittee must receive approval from the department that the Pollution Prevention Plan has been accepted or sampling will be required for any discharges.

Signature and Plan Review

The plan shall be signed in accordance with the signatory requirements and retained on-site at the location which generates a permitted discharge.

The permittee shall make plans available upon request to the department or in the case of a discharge through a municipal separate storm sewer system, to the operator or the municipal system.

The department may notify the permittee at any time that the plan does not meet the minimum requirements of this permit. Such notification shall identify those provisions of the permit which are not being met by the plan and identify which provisions require modifications in order to meet the minimum requirements. Within 7 days of notification, the permittee shall make the required changes to the plan and shall submit to the department a written certification that the requested changes have been made.

Keeping Plans Current

The permittee shall amend the plan whenever there is a change in design, construction, operation, maintenance, or BMPs. The plan shall also be amended if the plan proves to be ineffective in controlling pollutants present in the discharge. The plan shall also include a description of the amendment process.

I. LIMITATIONS AND MONITORING REQUIREMENTS

A. Discharge Authorization

During the period beginning on the effective date of this permit and the effective date of an individual coverage letter and lasting until the expiration of this permit or termination of the individual coverage, the permittee is authorized to discharge pollutants from the outfall(s) as specified to the following: **Waters of the State of North Dakota.**

This permit authorizes the discharge of only those pollutants resulting from facility processes, waste streams, and operations that have been clearly identified in the permit application process.

B. Effluent Limitations and Monitoring

1. The permittee must limit and monitor all discharges as specified below:

Table 2: Effluent associated with disinfection of potable water lines, swimming pools and similar structures.

Parameter	Effluent Limitations			Monitoring Requirements	
	Avg. Monthly Limit	Avg. Weekly Limit	Daily Maximum Limit	Sample Frequency	Sample Type
Total Suspended Solids (TSS)	*	*	100 mg/l	Weekly	Grab
pH, SU	Shall remain between 6.5 to 9.0 for all Class I and IA waters; Shall remain between 6.0 to 9.0 for all Class II and Class III waters.			Weekly	Grab
Total Residual Chlorine [b]	*	*	0.05 mg/l	[a]	Grab
Flow, MGD	Report	*	Report	Daily	Instantaneous or Calculated
Total Drain, MG	*	*	Report	Quarterly	Calculated

Notes: See Table 7

Table 3: Effluent associated with pump testing of water wells.

Parameter	Effluent Limitations			Monitoring Requirements	
	Avg. Monthly Limit	Avg. Weekly Limit	Daily Maximum Limit	Sample Frequency	Sample Type
Total Suspended Solids (TSS)	*	*	100 mg/l	Weekly	Grab
pH, SU	Shall remain between 6.5 to 9.0 for all Class I and IA waters; Shall remain between 6.0 to 9.0 for all Class II and Class III waters.			Weekly	Grab
Total Radium (uranium-bearing wells)	5pCi/l	*	*	[a]	Grab
Flow, MGD	Report	*	Report	Daily	Instantaneous or Calculated
Total Drain, MG	*	*	Report	Quarterly	Calculated

Notes: See Table 7

Table 4: Effluent associated with construction dewatering

Parameter	Effluent Limitations			Monitoring Requirements	
	Avg. Monthly Limit	Avg. Weekly Limit	Daily Maximum Limit	Sample Frequency	Sample Type
Total Suspended Solids (TSS)	*	*	100 mg/l	Weekly	Grab
pH, SU	Shall remain between 6.5 to 9.0 for all Class I and IA waters; Shall remain between 6.0 to 9.0 for all Class II and Class III waters.			Weekly	Grab
Oil & Grease – Visual [c]	*	*	*	Daily	Visual
Oil and Grease [c]	*	*	10 mg/l	Conditional	Grab
Flow, MGD	Report	*	Report	Daily	Instantaneous or Calculated
Total Drain, MG	*	*	Report	Quarterly	Calculated

Notes: See Table 7

Table 5: Effluent produced from the treatment of contaminated ground or surface water from remediation activities.

Parameter	Effluent Limitations			Monitoring Requirements	
	Avg. Monthly Limit	Avg. Weekly Limit	Daily Maximum Limit	Sample Frequency	Sample Type
Total Suspended Solids (TSS)	*	*	100 mg/l	Weekly	Grab
pH, SU	Shall remain between 6.5 to 9.0 for all Class I and IA waters; Shall remain between 6.0 to 9.0 for all Class II and Class III waters.			Weekly	Grab
Benzene	For direct discharges, the concentration shall not exceed 5 µg/l.			[a]	Grab
Total BTEX [d]	For direct discharges, the concentration shall not exceed 100 µg/l.			[a]	Grab
Total Petroleum Hydrocarbons [e]	A limit of 1 mg/l shall apply to water classification for domestic water supply. Otherwise the limit shall be 10 mg/l.			[a]	Grab
Oil & Grease – Visual [c]	*	*	*	Daily	Visual
Oil and Grease [c]	*	*	10 mg/l	Conditional	Grab

Table 5: Effluent produced from the treatment of contaminated ground or surface water from remediation activities.					
Parameter	**Effluent Limitations**			**Monitoring Requirements**	
	Avg. Monthly Limit	**Avg. Weekly Limit**	**Daily Maximum Limit**	**Sample Frequency**	**Sample Type**
Flow, MGD	Report	*	Report	Daily	Instantaneous or Calculated
Total Drain, MG	*	*	Report	Quarterly	Calculated
Notes: See Table 7					

Table 6: Effluent produced from the hydrostatic testing of pipes, tanks or other vessels					
Parameter	**Effluent Limitations**			**Monitoring Requirements**	
	Avg. Monthly Limit	**Avg. Weekly Limit**	**Daily Maximum Limit**	**Sample Frequency**	**Sample Type**
Total Suspended Solids (TSS)	*	*	100 mg/l	Weekly	Grab
pH, SU	Shall remain between 7.0 to 9.0 for all Class I and IA waters; Shall remain between 6.0 to 9.0 for all Class II and Class III waters.			Weekly	Grab
Benzene [f]	For direct discharges, the concentration shall not exceed 5 µg/l.			[a]	Grab
Total BTEX [d, f]	For direct discharges, the concentration shall not exceed 100 µg/l.			[a]	Grab
Total Residual Chlorine [b]	*	*	0.05 mg/l	[a]	Grab
Total Petroleum Hydrocarbons [e]	A limit of 1 mg/l shall apply to water classification for domestic water supply. Otherwise the limit shall be 10 mg/l.			[a]	Grab
Oil & Grease – Visual [c]	*			*	*
Oil and Grease [c]	*	*	10 mg/l	Conditional	Grab
Flow, MGD	Report	*	Report	Daily	Instantaneous or Calculated
Total Drain, MG	*	*	Report	Quarterly	Calculated
Notes: See Table 7					

Table 7: Notes	
*.	This parameter is not limited. However, the department may impose limitations based on sample history and to protect the receiving waters.
a.	Sample frequency shall be assigned based on the type of activity and what type of treatment is being provided. Sample frequencies may consist of daily, weekly, monthly, or quarterly.
b.	Total residual chlorine shall be analyzed if chlorinated water is used during the hydrostatic test. The analysis for TRC shall be conducted using reliable devises (Equivalent to EPA Method 330.5 DPD-Spectrophotometric). The method achieves a method detection limit of less than 0.05 mg/l. In the calculation of average TRC concentrations, those analytical results that are less than the method detection limit shall be considered to be zero for calculation purposes. If all individual analytical results that would be used in the calculations are below the method detection limit, then "< 0.05 mg/l" shall be reported on the quarterly Discharge Monitoring Report (DMR). Otherwise, report the calculated value.
c.	In the event that an oil sheen or floating oil is observed in the discharge, a grab sample shall be immediately taken, analyzed and reported. The sample shall not exceed 10 mg/l. Any noncompliance shall be reported as required to the department
d.	BTEX shall be measured as the sum of benzene, ethyl benzene, toluene, and xylene. EPA methods 602, 624, or 1624 shall be used for the measurement of benzene, ethyl benzene, and toluene. EPA methods 8260 or equivalent method shall be used for the measurement of xylene including ortho-, meta-, and para-xylene. (Note: Depending on Regional/State policy, EPA method 8260 may be used a substitute or equivalent for the CWA methods 602, 624, or 1624 required under the CWQ in 40 CFR Part 136.)
e.	Acceptable methods for this parameter are 1664 in the latest edition of Standard Methods for the Examination of Water and Wastewater and EPA SW846 Method 8015 (modified) for Total Purgeable Petroleum Hydrocarbons.
f.	This parameter shall be analyzed if the discharge is from hydrostatic test water from the testing of used pipes, tanks, or other similar vessels which have or may have contained petroleum products.

II. MONITORING, RECORDING, AND REPORTING REQUIREMENTS BP 2019.05.29

A. Representative Sampling (Routine and Non-Routine Discharges)

All samples and measurements taken shall be representative of the monitored discharge.

In order to ensure that the effluent limits set forth in this permit are not violated at times other than when routine samples are taken, the permittee must collect additional samples at the appropriate outfall whenever any discharge occurs that may reasonably be expected to cause or contribute to a violation that is unlikely to be detected by a routine sample. The permittee must analyze the additional samples for those parameters limited under **Part I Effluent Limitations and Monitoring** requirements of this permit that are likely to be affected by the discharge.

The permittee must collect such additional samples as soon as the spill, discharge, or bypassed effluent reaches the outfall. The samples must be analyzed in accordance with B. Test Procedures. The permittee must report all additional monitoring in accordance with D. Additional Monitoring.

B. Test Procedures

The collection and transportation of all samples shall conform with EPA preservation techniques and holding times found in 40 CFR 136. All laboratory tests shall be performed by a North Dakota certified laboratory in conformance with test procedures pursuant to 40 CFR 136, unless other test procedures have been specified in this permit or approved by EPA as an alternate test procedure under 40 CFR 136.5. The method of determining the total amount of water discharged shall provide results within 10 percent of the actual amount.

C. Recording of Results

Records of monitoring information shall include:

1. the date, exact place and time of sampling or measurements;
2. the name(s) of the individual(s) who performed the sampling or measurements;
3. the name of the laboratory;
4. the date(s) and time(s) analyses were performed;
5. the name(s) of the individual(s) who performed the analyses;
6. the analytical techniques or methods used; and
7. the results of such analyses.

D. Additional Monitoring

If the discharge is monitored more frequently than this permit requires, all additional results, if in compliance with B. Test Procedures, shall be included in the summary on the Discharge Monitoring Report.

E. Reporting of Monitoring Results

1. Monitoring results shall be summarized and reported to the department using Discharge Monitoring Reports (DMRs). If no discharge occurs during a reporting period, "No Discharge" shall be reported. The permittee must submit DMRs electronically using the electronic information reporting system unless requirements in subsection 3 are met.
2. Prior to December 21, 2020, the permittee may elect to electronically submit the following compliance monitoring data and reports instead of mailing paper forms. Beginning December 21, 2020, the permittee must report the following using the electronic reporting system:
    a. General permit reports [e.g., notices of intent (NOI); notices of termination (NOT); no exposure certifications (NOE)];
    b. Municipal separate storm sewer program reports;
    c. Pretreatment program reports;
    d. Sewer overflow/bypass event reports; and
    e. Clean Water Act 316(b) annual reports.

3. The permittee may seek a waiver from electronic reporting. To obtain a waiver, the permittee must complete and submit an Application for Temporary Electronic Reporting Waiver form (SFN 60992) to the department. The department will have 120 days to approve or deny the waiver request. Once the waiver is approved, the permittee may submit paper versions of monitoring data and reports to the department.

   a. One of the following criteria must be met in order to obtain a waiver. The department reserves the right to deny any waiver request, even if they meet one of the criteria below.

      1. No internet access,

      2. No computer access,

      3. Annual DMRs (upon approval of the department),

      4. Employee turnover (3-month periods only), or

      5. Short duration permits (upon approval of the department).

   All reports must be postmarked by the last day of the month following the end of each reporting period. All original documents and reports required herein shall be signed and submitted to the department at the following address:

   ND Department of Environmental Quality
   Division of Water Quality
   918 East Divide Ave
   Bismarck ND 58501-1947

F. Records Retention

All records and information (including calibration and maintenance) required by this permit shall be kept for at least three years or longer if requested by the department or EPA.

III. COMPLIANCE RESPONSIBILITIES

A. Duty to Comply

The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

B. Proper Operation and Maintenance

The permittee shall at all times maintain in good working order and operate as efficiently as possible all treatment or control facilities or systems installed or used by the permittee to achieve compliance with the terms and conditions of this permit. If necessary to achieve compliance with the conditions of this permit, this shall include the operation and maintenance of backup or auxiliary systems.

C. Planned Changes

The department shall be given advance notice of any planned changes at the permitted facility or of an activity which may result in permit noncompliance. Any anticipated facility expansions, production increase, or process modifications which might result in new, different, or increased discharges of pollutants shall be reported to the department as soon as possible. Changes which may result in a facility being designated a "new source" as determined in 40 CFR 122.29(b) shall also be reported.

D. Duty to Provide Information

The permittee shall furnish to the department, within a reasonable time, any information which the department may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the department, upon request, copies of records required to be kept by this permit. When a permittee becomes aware that it failed to submit any relevant facts or submitted incorrect information in a permit application or any report, it shall promptly submit such facts or information.

E. Signatory Requirements

All applications, reports, or information submitted to the department shall be signed and certified.

All permit applications shall be signed by a responsible corporate officer, a general partner, or a principal executive officer or ranking elected official.

All reports required by the permit and other information requested by the department shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:

The authorization is made in writing by a person described above and submitted to the department; and

The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility, such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters.

If an authorization under E. Signatory Requirements is no longer accurate for any reason, a new authorization satisfying the above requirements must be submitted to the department prior to or together with any reports, information, or applications to be signed by an authorized representative.

Any person signing a document under this section shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

F. Twenty-four Hour Notice of Noncompliance Reporting

1. The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally as soon as possible, but no later than twenty-four (24) hours from the time the permittee first became aware of the circumstances. The following occurrences of noncompliance shall be included in the oral report to the department at 701.328.5210:

    a. Any lagoon cell overflow or any unanticipated bypass which exceeds any effluent limitation in the permit under G. Bypass of Treatment Facilities;

    b. Any upset which exceeds any effluent limitation in the permit under H. Upset Conditions; or

    c. Violation of any daily maximum effluent or instantaneous discharge limitation for any of the pollutants listed in the permit.

2. A written submission shall also be provided within five days of the time that the permittee became aware of the circumstances. The written submission shall contain:

   a. A description of the noncompliance and its cause;

   b. The period of noncompliance, including exact dates and times;

   c. The estimated time noncompliance is expected to continue if it has not been corrected; and

   d. Steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.

Reports shall be submitted to the address in **Part II.E. Reporting of Monitoring Results**. The department may waive the written report on a case by case basis if the oral report has been received within 24 hours by the department at 701.328.5210 as identified above.

All other instances of noncompliance shall be reported no later than at the time of the next Discharge Monitoring Report submittal. The report shall include the four items listed in this subsection.

G. Bypass of Treatment Facilities

1. Bypass not exceeding limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to any of the following provisions in this section.

2. Bypass exceeding limitations-notification requirements.

   a. Anticipated Bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten (10) days before the date of bypass.

   b. Unanticipated Bypass. The permittee shall submit notice of an unanticipated bypass as required under F. Twenty-four Hour Notice of Noncompliance Reporting.

3. Prohibition of Bypass. Bypass is prohibited, and the department may take enforcement action against a permittee for bypass, unless:

   a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

   b. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and

   c. The permittee submitted notices as required under the 1. Anticipated Bypass subsection of this section.

   The department may approve an anticipated bypass, after considering its adverse effects, if the department determines that it will meet the three (3) conditions listed above.

H. Upset Conditions

An upset constitutes an affirmative defense to an action brought for noncompliance with technology-based permit effluent limitations if the requirements of the following paragraph are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

1. An upset occurred and the permittee can identify its cause(s);

2. The permitted facility was, at the time being, properly operated;

3. The permittee submitted notice of the upset as required under F. Twenty-four Hour Notice of Noncompliance Reporting and

4. The permittee complied with any remedial measures required under I. Duty to Mitigate.

In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

I. Duty to Mitigate
The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment. The permittee, at the department's request, shall provide accelerated or additional monitoring as necessary to determine the nature and impact of any discharge.

J. Removed Materials
Collected screenings, grit, solids, sludges, or other pollutants removed in the course of treatment shall be buried or disposed of in such a manner to prevent any pollutant from entering any waters of the state or creating a health hazard. Sludge/digester supernatant and filter backwash shall not be directly blended with or enter either the final plant discharge and/or waters of the state. The permit issuing authority shall be contacted prior to the disposal of any sewage sludges. At that time, concentration limitations and/or self-monitoring requirements may be established.

K. Duty to Reapply
Any request to have this permit renewed should be made six months prior to its expiration date.

IV. GENERAL PROVISIONS

A. Inspection and Entry
The permittee shall allow department and EPA representatives, at reasonable times and upon the presentation of credentials if requested, to enter the permittee's premises to inspect the wastewater treatment facilities and monitoring equipment, to sample any discharges, and to have access to and copy any records required to be kept by this permit.

B. Availability of Reports
Except for data determined to be confidential under 40 CFR Part 2, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the department and EPA. As required by the Act, permit applications, permits, and effluent data shall not be considered confidential.

C. Transfers
This permit is not transferable except upon the filing of a Statement of Acceptance by the new party and subsequent department approval. The current permit holder should inform the new controller, operator, or owner of the existence of this permit and also notify the department of the possible change.

D. New Limitations or Prohibitions
The permittee shall comply with any effluent standards or prohibitions established under Section 306(a), Section 307(a), or Section 405 of the Act for any pollutant (toxic or conventional) present in the discharge

or removed substances within the time identified in the regulations even if the permit has not yet been modified to incorporate the requirements.

E. Permit Actions

This permit may be modified, revoked and reissued, or terminated for cause. This includes the establishment of limitations or prohibitions based on changes to Water Quality Standards, the development and approval of waste load allocation plans, the development or revision to water quality management plans, changes in sewage sludge practices, or the establishment of prohibitions or more stringent limitations for toxic or conventional pollutants and/or sewage sludges. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

F. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

G. State Laws

Nothing in this permit shall be construed to preclude the institution of legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable state law or regulation preserved under Section 510 of the Act.

H. Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Section 311 of the Act.

I. Property Rights

The issuance of this permit does not convey any property rights of any sort, nor any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations.

J. Severability

The provisions of this permit are severable, and if any provision of this permit or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances and the remainder of this permit shall not be affected thereby.

V. BENEFICIAL REUSES

A. Irrigation

Discharged water may be used for irrigation provided soil and water compatibility testing confirms the water is suitable for irrigation. Wastewater used for irrigation shall be applied at a rate which would allow complete infiltration and not result in ponding or runoff from the irrigated area.

Agricultural land may be irrigated as well as forage crops used for livestock consumption or pastures. Public properties such as golf courses or parks may be irrigated.

Runoff that occurs from irrigated areas shall be monitored at the frequencies and with the types of measurements described in Part I.B.

The permittee shall maintain monitoring records indicating the location and usage (e.g., park or agricultural) of the land being irrigated, the dates irrigation occurred, the amount of wastewater used, and the total flow. In addition, monitoring records must include results from collected samples

B. Construction

Discharged water may be used for construction purposes such as soil compaction, dust suppression and washing aggregate, provided the wastewater is applied in a manner that does not result in runoff or ponding.

Runoff that occurs from the application areas shall be monitored at the frequencies and with the types of measurements described in Part. I.B.

The permittee shall maintain monitoring records indicating the location and usage of the land where application occurs, the dates application occurred, the amount of wastewater used, and the total flow. In addition, monitoring records must include results from collected samples.

C. Oil and Gas Production (including Hydraulic Fracturing)

The specific user of the discharged water may determine the specific treatment requirements for receiving wastewater.

The permittee shall maintain monitoring records indicating the specific user, the amount of wastewater used, and the total flow. In addition, monitoring records must include results from collected samples.

D. Other Uses as Approved

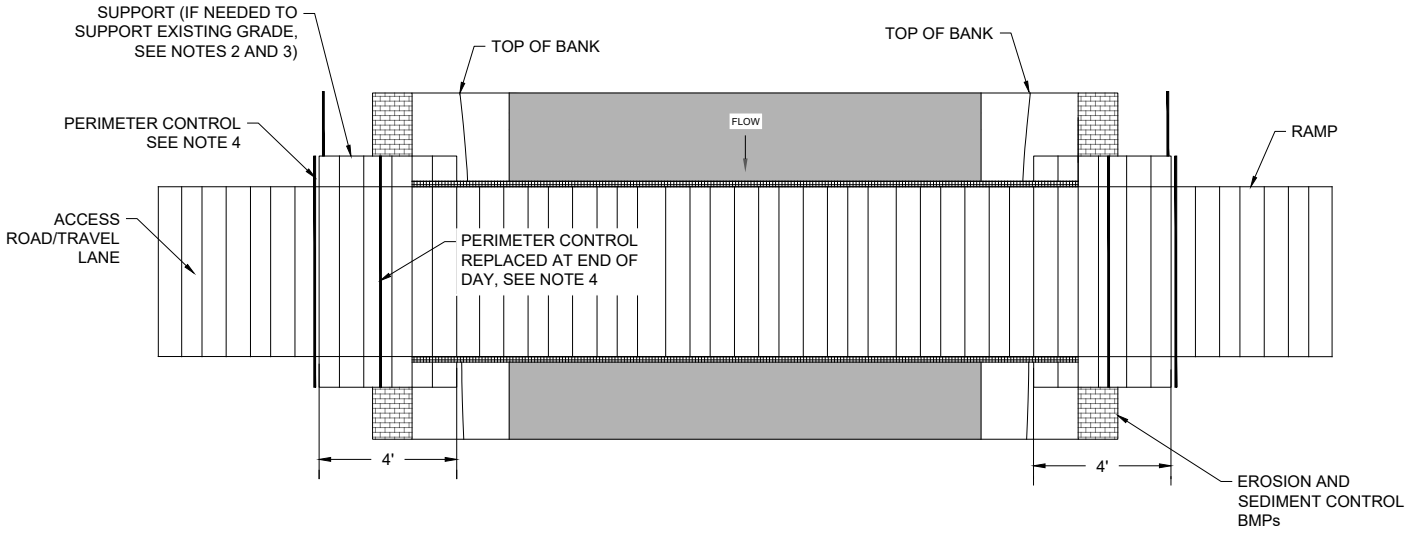
The permittee must consult with the department before beneficially reusing wastewater for purposes not identified in this permit.

NORTH PLAINS CONNECTOR PROJECT

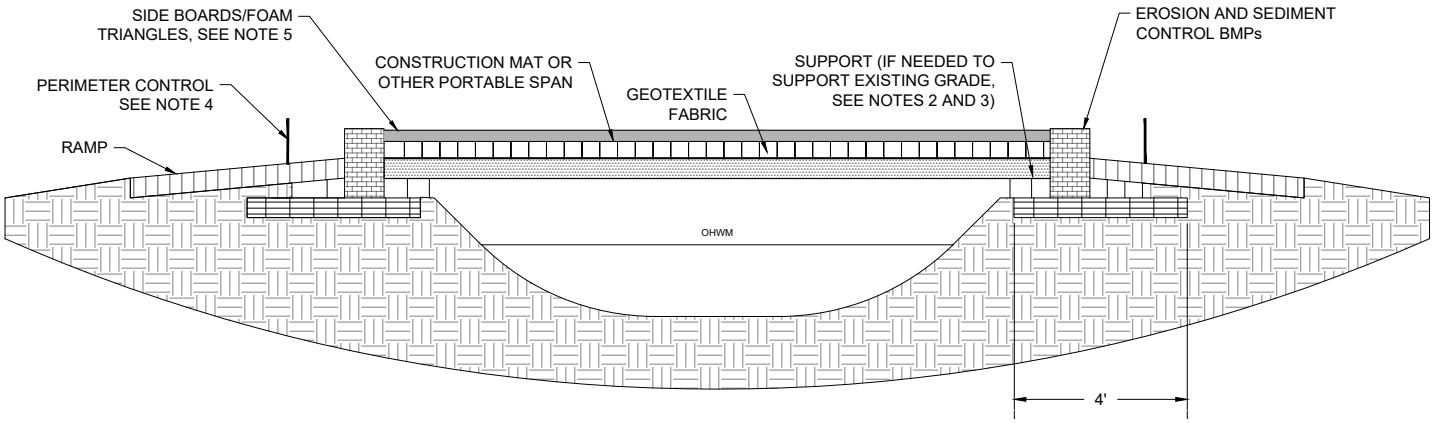
ATTACHMENT M

Typicals

PLAN
NO SCALE



PROFILE
NO SCALE



NOTES:
1. INSPECT BRIDGE OPENING PERIODICALLY AND REMOVE ANY DEBRIS RESTRICTING FLOW.
2. INSPECT THE BRIDGE ELEVATION SO BRIDGE REMAINS SUPPORTED ABOVE THE ORDINARY HIGH WATER MARK (OHWM).
3. THE BRIDGE MUST SPAN ABOVE OHWM TO OHWM.
4. EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE INSPECTED AND MAINTAINED IN ACCORDANCE WITH THE GOVERNING JURISDICTION'S REQUIREMENTS.
5. SIDEBOARDS WILL BE INSTALLED ON TEMPORARY BRIDGES TO MINIMIZE THE POTENTIAL FOR SEDIMENT TRANSPORT AND AFFIXED TO THE OUTSIDE OF THE BRIDGE. GEOTEXTILE FABRIC, OR EQUIVALENT, MUST ALSO BE ADEQUATELY SECURED TO THE UNDERSIDE OF THE BRIDGE TO PREVENT MATERIAL FROM FALLING THROUGH THE BRIDGE DECK. THE GEOTEXTILE FABRIC OR AN EQUIVALENT SHOULD BE SECURED TO THE BOTTOM OF THE BRIDGE AND WRAPPED AROUND THE SIDEBOARDS IN A CONTINUOUS FASHION.

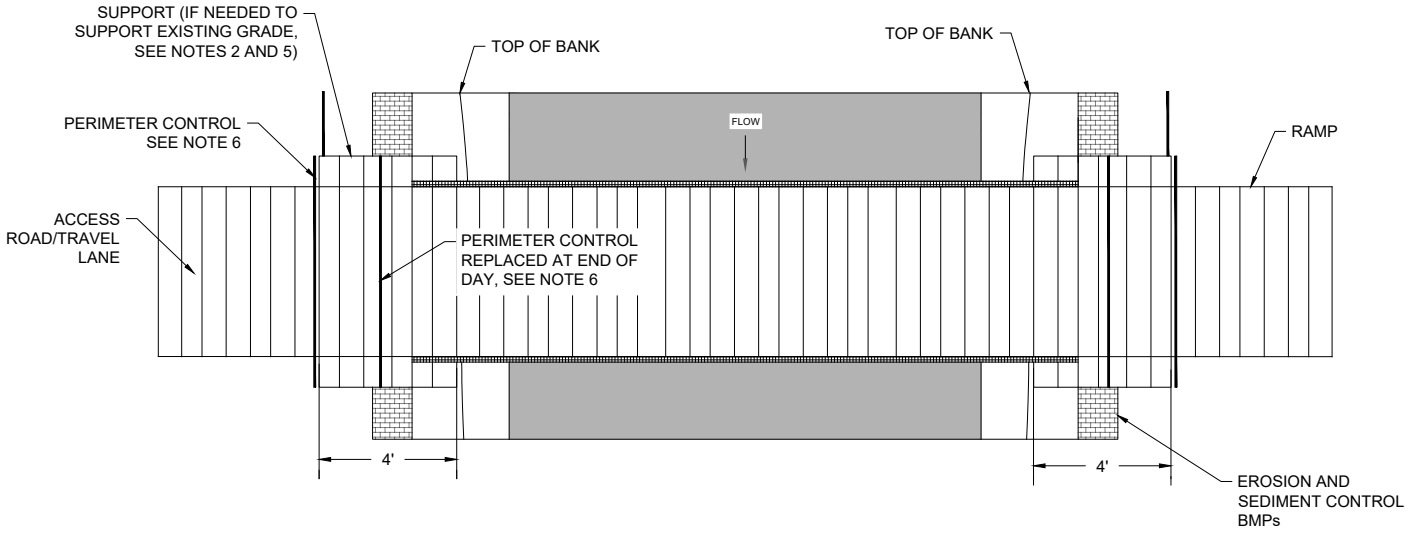
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TYPICAL CLEAR SPAN BRIDGE

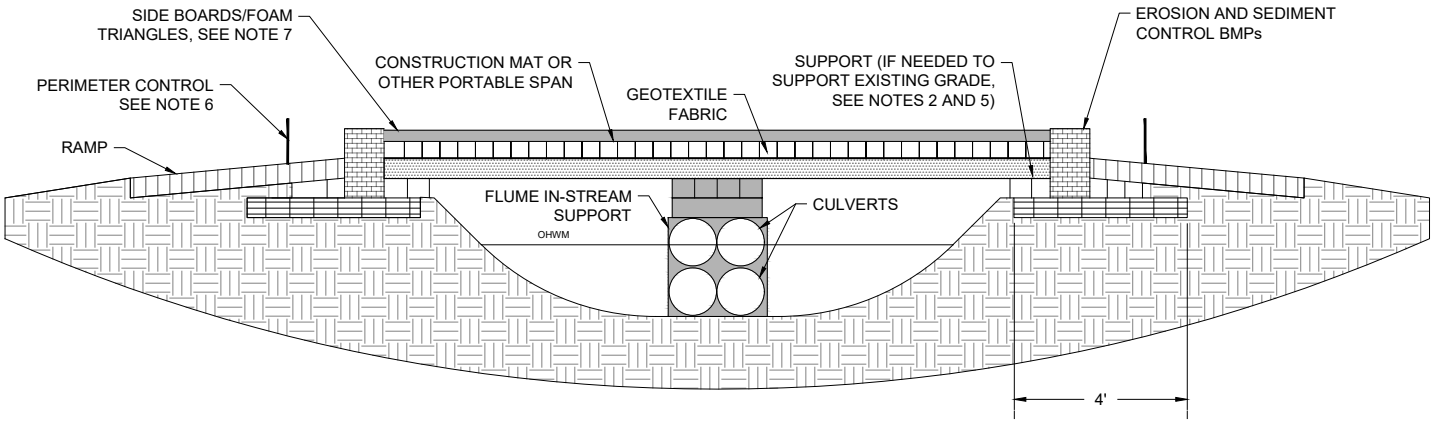
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PLAN
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PROFILE
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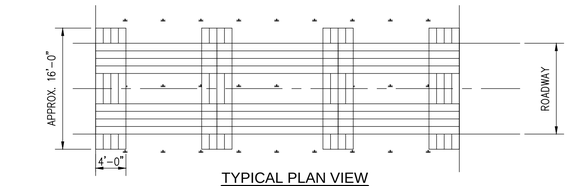
NOTES:
1. INSPECT BRIDGE OPENING PERIODICALLY AND REMOVE ANY DEBRIS RESTRICTING FLOW.
2. INSPECT THE BRIDGE ELEVATION SO BRIDGE REMAINS SUPPORTED ABOVE THE ORDINARY HIGH WATER MARK (OHWM).
3. THE CULVERT SUPPORT MUST BE PLACED ON THE STREAM BOTTOM AND MAY NOT BE SUPPORTED WITH FILL.
4. THE BRIDGE MUST SPAN ABOVE OHWM TO OHWM.
5. ADDITIONAL SUPPORT MUST BE ADDED ON TOP OF BANK AND UNDER SPAN IF INITIAL SUPPORT STARTS TO SETTLE.
6. EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE INSPECTED AND MAINTAINED IN ACCORDANCE WITH THE GOVERNING JURISDICTION'S REQUIREMENTS.
7. SIDEBOARDS WILL BE INSTALLED ON TEMPORARY BRIDGES TO MINIMIZE THE POTENTIAL FOR SEDIMENT TRANSPORT AND AFFIXED TO THE OUTSIDE OF THE BRIDGE. GEOTEXTILE FABRIC, OR EQUIVALENT, MUST ALSO BE ADEQUATELY SECURED TO THE UNDERSIDE OF THE BRIDGE TO PREVENT MATERIAL FROM FALLING THROUGH THE BRIDGE DECK. THE GEOTEXTILE FABRIC OR AN EQUIVALENT SHOULD BE SECURED TO THE BOTTOM OF THE BRIDGE AND WRAPPED AROUND THE SIDEBOARDS IN A CONTINUOUS FASHION.

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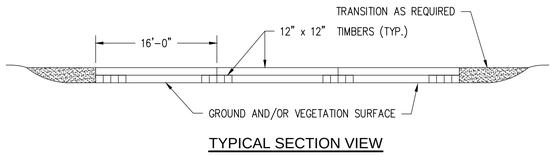
TYPICAL NON-CLEAR SPAN BRIDGE

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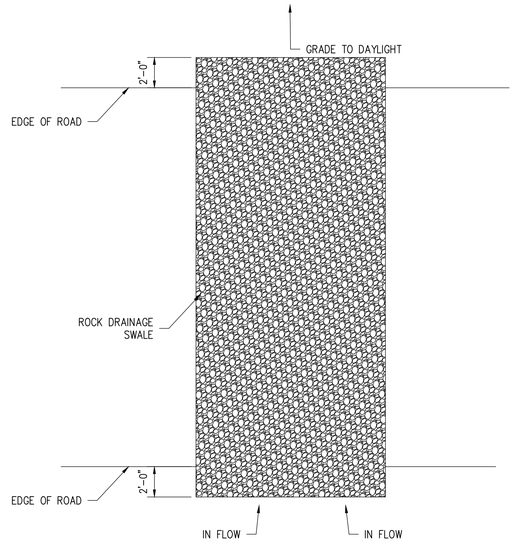


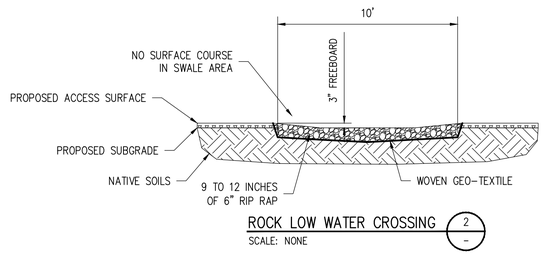
TYPICAL PLAN VIEW



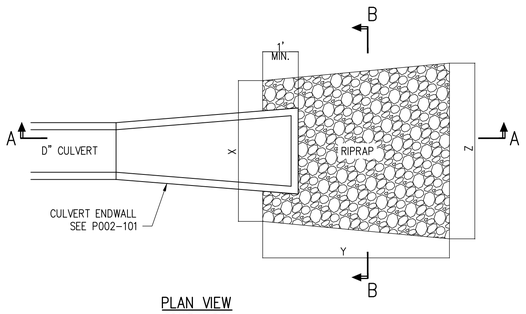
TYPICAL SECTION VIEW

TYPE 4 ACCESS ROAD – MATTED WETLAND CROSSING (1)
SCALE: NONE

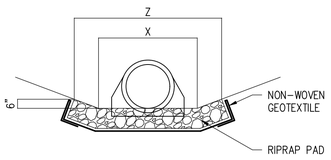




ROCK LOW WATER CROSSING (2)
SCALE: NONE



PLAN VIEW
SCALE: N.T.S.



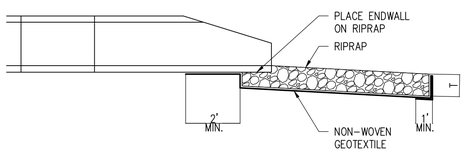
SECTION B–B
SCALE: N.T.S.

DIMENSION TABLE

D	X	Y	Z	T	D_{50}
15"	4.5'	16'	18'	18"	9"
18"	4.5'	16'	18'	18"	9"
24"	6'	20'	22'	24"	18"

NOTES:

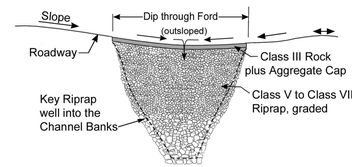
1. CULVERTS GREATER THAN 18" IN DIAMETER SHALL HAVE SAFETY GRATES AS SHOWN ON P002-102.
2. WHERE CULVERTS ARE PLACED IN DITCHES, RIPRAP SHALL CONFORM TO SHAPE OF DITCH.



SECTION A–A
SCALE: N.T.S.

CULVERT DETAIL (4)
SCALE: NONE

Chapter 5—Low-Water Crossing Types: Pros, Cons, Idiosyncrasies, and Anecdotes

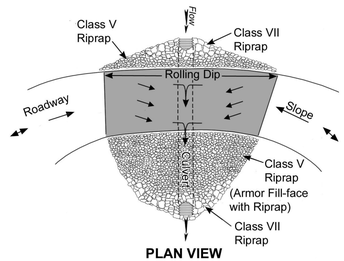


PROFILE VIEW

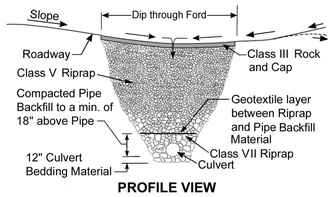
ROCKFILL FORD (WITHOUT PIPE) FOR DEBRIS-PRONE HEADWATER CHANNELS

SAMPLE NOTES:

1. Dip shall drain to center of Rolling Dip and outside edge of Road.
2. Larger rock shall be placed towards the bottom of the slopes.
3. Class III rock, plus aggregate surfacing, shall be placed on Roadway, and Class V & VII rock on slopes.
4. Riprapped bottom of slopes shall be as wide, or wider, than the floodplain area.
5. Pipe Capacity shall be for a Q_5 to a Q_{25} flow (Low to High Standard Road). Entire Ford shall pass a Q_{100} flow.
6. In new FP-03 Specifications, Old Class III = Class 2; Old Class V = Class 3; Old Class VII = Class 4 Riprap.

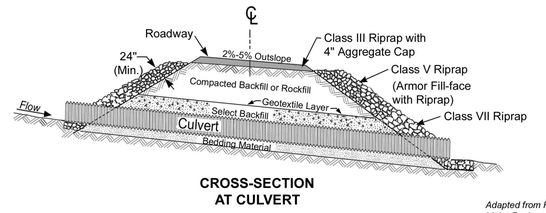


PLAN VIEW



PROFILE VIEW

VENTED ROCKFILL FORD WITH PIPES, (USED ESPECIALLY TO RETRO-FIT UNDERSIZED CULVERTS OR PREVENT STREAM DIVERSION)



CROSS-SECTION AT CULVERT

Adapted from Region One, Idaho Panhandle National Forest.

TYPICAL ROCK FORD OPTIONS

Figure 5.10—Sketches of various types of rockfill fords with design details.

TYPICAL ROCK FORD (3)
SCALE: NONE

PRELIMINARY

FILE LOCATION: N:\SHARED\01 ECI\GRID UNITED\02 PROJECTS\GU-012 NORTH PLAINS CONNECTOR (500+ KV HVDC)\NORTH PLAINS T-LINE\300 DESIGN\320 CIVIL AND STRUCTURAL\325 SITE DESIGN\GRADING DETAILS.DWG LAST SAVED BY: bdparks 11/6/2023 1:58 PM PLOTTED BY: Barron D. Parks 11/6/2023 2:00 PM

"Engineering with Distinction"
ELECTRICAL CONSULTANTS, INC.
BILLINGS, MONTANA

NO	REVISION	DATE	BY	APR
OA	PRELIMINARY	11/06/23	BP	NRF

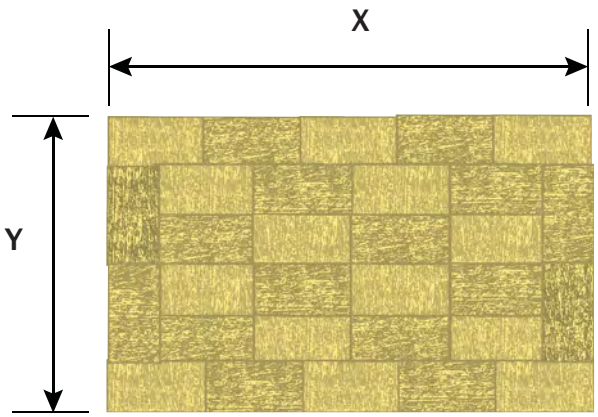
GRID UNITED

ENGINEERING RECORD		DATE
DRAWN	B. PARKS	11/06/23
DESIGNED	N. FOSTER	10/30/23
CHECKED	N. FOSTER	11/06/23
APPROVED		
DWG SCALE: NONE	PLT SCALE: 1:1	

NORTH PLAINS CONNECTOR

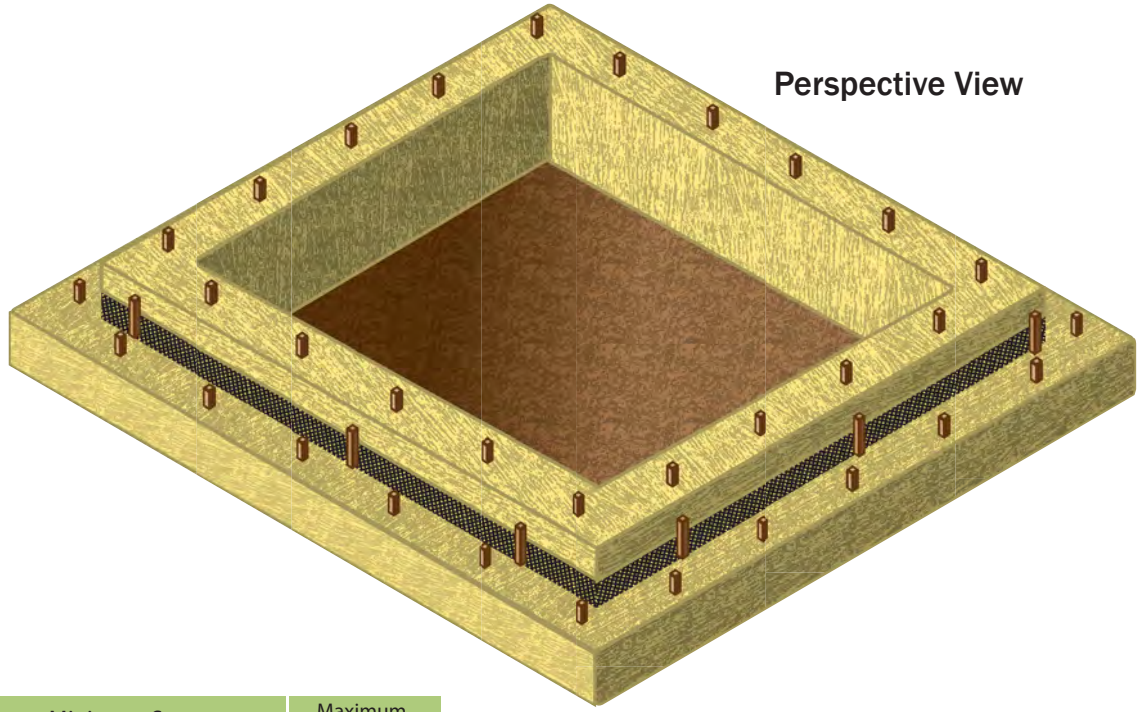
ACCESS ROAD DETAILS

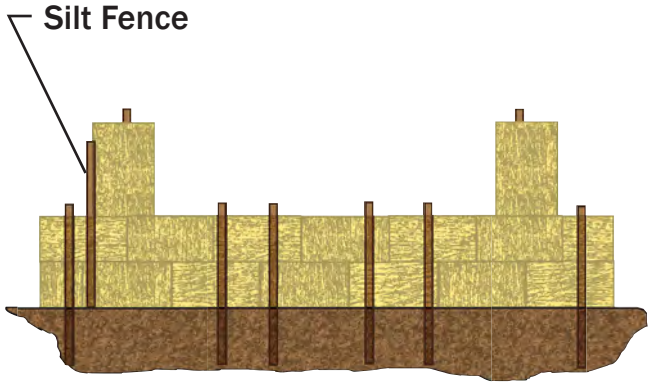
DWG. NAME: NPC-D-P002-1 | REVISION NO : OA



1. Arrange the straw bales to the X and Y dimensions specified below.

2. If bottom of structure is not lined with straw bales (Option 1), line entire structure with geotextile filter fabric.





Minimum Sump Dimensions (ft.)		Maximum Pumping Rate (gal./min.)
X	Y	
10	20	300
15	20	350
20	20	400
20	25	450
25	25	500
25	30	550
30	30	660



For environmental review purposes only.

Standard Best Management Practices

Straw Bale Dewatering Structure

Figure

NORTH PLAINS CONNECTOR PROJECT

ATTACHMENT N

Seed Mixes

BLM Seed Mix

The holder shall seed all disturbed areas with the seed mixture listed below. There shall be no primary or secondary noxious weed seed in the seed mixture. Seed shall be tested, and the viability testing of seed shall be done in accordance with State law(s) and within six months prior to purchase. Commercial seed shall be either certified or registered seed. The seed mixture container shall be tagged in accordance with State law(s) and available for inspection by the authorized officer.

Seed shall be planted using rangeland drill spaced no greater than 6 inches and equipped with a depth regulator to ensure proper depth of planting. The seed mixture shall be evenly and uniformly planted over the disturbed area. Smaller/heavier seeds have a tendency to drop to the bottom of the drill and are planted first. The holder shall take appropriate measures to insure this does not occur. Where drilling is not possible, seed shall be broadcast, and the area shall be raked or chained to cover the seed. When broadcasting the seed, the pounds per acre noted below are to be doubled. The seeding will be repeated until a satisfactory stand is established as determined by the authorized officer. Evaluation of growth will not be made before completion of the second growing season after seeding. The authorized officer is to be notified a minimum of seven (7) days prior to seeding of the project.

Seed Mixture - Western wheatgrass and Wyoming big sagebrush must be included in the mix. Thickspike wheatgrass or Montana wheatgrass may be substituted only when western wheatgrass is unavailable. The combination of seed must include all growth forms (grasses, forbs, and shrubs). The percent of each species is the maximum percent of the total mix, for example on a clayey site, the selected grass species must make up 70% of the total seed mix, however individually they cannot make up more than indicated for each species (e.g., individually western wheatgrass may account for no more than 25% of the total seed mix). The seed mixture shall be planted at a rate of 30-50 small seeds plus 20-25 medium seeds plus 15-20 large seeds per square foot, totaling 65 to 95 live seeds per square foot, or 2,831,400 to 4,138,200 live seeds per acre. Seeding should be completed on a prepared seedbed, between October 15 and May 15; when conditions are appropriate.

To calculate total amount of Pure Live Seed needed *per acre* for each species use the following equation:

$$\frac{\text{(Pounds of Pure Live Seed per acre)} \times \text{(percent of mix)}}{\text{(Germination rate)} \times \text{(Purity of seed)}}$$

Add totals for each species to be planted and multiply by the number of acres to be seeded to determine the amount of seed necessary for the proposed project area.

Table 1. Seed mix group for ESD

ESD	MCFO Group	ESD	MCFO Group
Clayey	Clay-based	Silty-saline	Saline
Clayey-Steep		Saline lowlands	
Dense clay		Saline uplands	
Thin clayey		Saline overflow	
Shallow clay		Sands	Sands/Gravel
Shale		Sandy	
Shallow	Shallow	Sandy-steep	
Shallow loam		Gravel	
Thin Silty		Shallow to Gravel	
Very shallow		Wet meadow	Wet
Silty	Silty/Loamy	Subirrigated	
Loamy		Overflow	
Silty-steep			

MCFO Group: Clay-based

Grasses: 70% of total mix (Choose at least 4, one of which must be Western wheatgrass):

Common Name	Scientific Name	Percent of Total Mix	Pounds PLS/acre
Buffalograss	*Bouteloua dactoloides*	up to 5%	15
Bluebunch wheatgrass	*Pseudoroegneria spicata*	up to 25%	7
Green needlegrass	*Nassella viridula*	up to 25%	6
Needle-and-thread	*Hesperostipa comata*	up to 10%	9
Plains muhly	*Muhlenbergia cuspidata*	up to 5%	4
Prairie junegrass	*Koeleria macrantha*	up to 5%	1
Sandberg's bluegrass	*Poa secunda*	up to 5%	1
Threadeaf sedge	*Carex filifolia*	up to 5%	5
Western wheatgrass	***Pascopyrum smithii***	**up to 25%**	10

Forbs: 10% of total mix (choose at least 4, two of which are nitrogen fixers*):

Common Name	**Species of Seed**	**Percent of Total Mix**	**Pounds PLS/acre**
American vetch	*Vicia americana**	up to 5%	3
Black Sampson	*Echinacea angustifolia*	up to 5%	7
Blanket flower	*Gaillardia aristata*	up to 5%	6
Buckwheat spp	*Eriogonum spp.*	up to 5%	1
Dotted gayfeather	*Liatris punctata*	up to 5%	7.5
Milkvetch spp	*Astragalus spp.**	up to 5%	8
Purple prairie clover	*Dalea purpurea**	up to 5%	3.5
Scarlet globemallow	*Sphaeralcea coccinea*	up to 5%	2
Silvreleaf scurfpea	*Psoralea argophylla**	up to 5%	4

Shrubs: 20% of total mix (Choose at least 2, one of which must be Wyoming big sagebrush):

Common Name	**Species of Seed**	**Percent of Total Mix**	**Pounds PLS/acre**
Gardner's saltbush	*Atriplex gardneri*	up to5%	1
Winterfat	*Krascheninnikovia lanata*	up to10%	6
Wyoming big sage	***Artemisia tridentata var. wyomingensis***	**up to10%**	**0.5**

MCFO Group: Silt/Loam

Grasses: 80% of total mix (Choose at least 4, one of which must be western wheatgrass):

Common Name	Scientific Name	Percent of Total Mix	Pounds PLS/acre
Big bluestem	*Andropogon gerardii*	up to 5%	8
Blue grama	*Bouteloua gracilis*	up to 5%	2
Bluebunch wheatgrass	*Pseudoroegneria spicata*	up to 20%	7
Green needlegrass	*Nassella viridula*	up to 20%	6
Little bluestem	*Schizachyrium scoparium*	up to 5%	4
Needle-and-thread	*Hesperostipa comata*	up to 20%	9
Needleleaf sedge	*Carex duriuscula*	up to 5%	5
Plains muhly	*Muhlenbergia cuspidata*	up to 5%	4
Prairie junegrass	*Koeleria macrantha*	up to 10%	1
Sandberg's bluegrass	*Poa secunda*	up to 10%	1
Sideoats grama	*Bouteloua curtipendula*	up to 5%	6
Threadleaf sedge	*Carex filifolia*	up to 5%	5
Western wheatgrass	***Pascopyrum smithii***	**up to 20%**	**10**

Forbs: 15% of total mix (Choose at least 4, two of which are nitrogen fixers*):

Common Name	Species of Seed	Percent of Total Mix	Pounds PLS/acre
American vetch	*Vicia americana**	up to 5%	3
Black Sampson	*Echinacea angustifolia*	up to 5%	7
Blanket flower	*Gaillardia aristata*	up to 5%	6
Buckwheat spp.	*Eriogonum spp.*	up to 5%	1
Dotted gayfeather	*Liatris punctata*	up to 5%	7.5
Milkvetch spp	*Astragalus spp.**	up to 5%	8
Hood's phlox	*Phlox hoodii*	up to 5%	6
Penstemon spp.	*penstemon spp.*	up to 5%	2.5
Purple prairie clover	*Dalea purpurea**	up to 5%	3.5
Scarlet globemallow	*Sphaeralcea coccinea*	up to 5%	2
Silvreleaf scurfpea	*Psoralea argophylla**	up to 5%	4

Shrubs: 5% of total mix (Choose at least 2, one of which is Wyoming big sagebrush):

Common Name	Species of Seed	Percent of Total Mix	Pounds PLS/acre
Prairie rose	*Rosa woodsii*	up to 5%	4
Silver sagebrush	*Artemisia cana*	up to 5%	0.5
Wyoming big sage	***Artemisia tridentata var. wyomingensis***	**up to 5%**	**0.5**
Yucca	*Yucca glauca*	up to 5%	8

MCFO Group: Sand/Gravel

Grasses: 75% of total mix (Choose at least 4, one of which must be western wheatgrass):

Common Name	Scientific Name	Percent of Total Mix	Pounds PLS/acre
Blue grama	*Bouteloua gracilis*	up to 5%	2
Bluebunch wheatgrass	*Pseudoroegneria spicata*	up to 15%	7
Little bluestem	*Schizachyrium scoparium*	up to 5%	4
Needle-and-thread	*Hesperostipa comata*	up to 15%	9
Prairie junegrass	*Koeleria macrantha*	up to 10%	1
Prairie sandreed	*Calamovilfa longifolia*	up to 15%	4
Sand bluestem	*Andropogon hallii*	up to 10%	9
Indian ricegrass	*Achnatherum hymenoides*	up to 5%	5
Sandberg's bluegrass	*Poa secunda*	up to 10%	1
Threadleaf sedge	*Carex filifolia*	up to 15%	5
Western wheatgrass	**Pascopyrum smithii**	**up to 20%**	**10**

Forbs: 15% of total mix (Choose at least 4, two of which are nitrogen fixers*):

Common Name	Species of Seed	Percent of Total Mix	Pounds PLS/acre
Black Sampson	*Echinacea angustifolia*	up to 5%	7
Dotted gayfeather	*Liatris punctata*	up to 5%	7.5
Hood's phlox	*Phlox hoodii*	up to 5%	6
Purple prairie clover	*Dalea purpurea**	up to 5%	3.5
Scarlet globemallow	*Sphaeralcea coccinea*	up to 5%	2
Silvreleaf scurfpea	*Psoralea argophylla**	up to 5%	4
White prairie clover	*Dalea candida**	up to 5%	4

Shrubs: 10% of total mix (Choose at least 2, one of which is Wyoming big sagebrush):

Common Name	Species of Seed	Percent of Total Mix	Pounds PLS/acre
Prairie rose	*Rosa woodsii*	up to 5%	4
Silver sagebrush	*Artemisia cana*	up to 5%	0.5
Skunkbush sumac	*Rhus trilobata*	up to 5%	2
Winterfat	*Krascheninnikovia lanata*	up to 5%	6
Wyoming big sage	***Artemisia tridentata var. wyomingensis***	**up to 5%**	**0.5**
Yucca	*Yucca glauca*	up to 5%	8

MCFO Group: Saline

Grasses: 60% of total mix (Choose at least 4, one of which must be Western wheatgrass):

Common Name	Scientific Name	Percent of Total Mix	Pounds PLS/acre
Alkali cordgrass	*Spartina gracilis*	up to 15%	6
Alkali sacaton	*Sporobolus airoides*	up to 15%	1
Inland saltgrass	*Distichlis spicata*	up to 20%	1.5
Needle-and-thread	*Hesperostipa comata*	up to 5%	9
Nuttall's alkaligrass	*Puccinellia nuttalliana*	up to 10%	1
Sandberg's bluegrass	*Poa secunda*	up to 5%	1
Western wheatgrass	***Pascopyrum smithii***	**up to 20%**	**10**

Forbs: 10% of total mix (Choose at least 4, one of which is a nitrogen fixer*):

Common Name	Species of Seed	Percent of Total Mix	Pounds PLS/acre
American vetch	*Vicia americana**	up to 5%	3
Buckwheat spp.	*Eriogonum spp.*	up to 5%	1
Dotted gayfeather	*Liatris punctata*	up to 5%	7.5
Milkvetch spp.	*Astragalus spp.**	up to 5%	8
Purple prairie clover	*Dalea purpurea**	up to 5%	3.5
Scarlet globemallow	*Sphaeralcea coccinea*	up to 5%	2
Silvreleaf scurfpea	*Psoralea argophylla**	up to 5%	4

Shrubs: 30% of total mix (Choose at least 2, one of which is Wyoming big sagebrush):

Common Name	Species of Seed	Percent of Total Mix	Pounds PLS/acre
Greasewood	*Sarcobatus vermiculatus*	up to10%	0.5
Gardner's saltbush	*Atriplex gardneri*	up to5%	1
Winterfat	*Krascheninnikovia lanata*	up to15%	6
Wyoming big sage	***Artemisia tridentata var. wyomingensis***	**up to10%**	**0.5**

MCFO Group: Shallow

Grasses: 75% of total mix (Choose at least 4, one of which must be western wheatgrass):

Common Name	Scientific Name	Percent of Total Mix	Pounds PLS/acre
Blue grama	*Bouteloua gracilis*	up to 5%	2
Bluebunch wheatgrass	*Pseudoroegneria spicata*	up to 20%	7
Green needlegrass	*Nassella viridula*	up to 15%	6
Little bluestem	*Schizachyrium scoparium*	up to 5%	4
Needle-and-thread	*Hesperostipa comata*	up to 15%	9
Plains muhly	*Muhlenbergia cuspidata*	up to 10%	4
Prairie junegrass	*Koeleria macrantha*	up to 10%	1
Prairie sandreed	*Calamovilfa longifolia*	up to 15%	4.5
Sandberg's bluegrass	*Poa secunda*	up to 10%	1
Sideoats grama	*Bouteloua curtipendula*	up to 5%	6
Threadleaf sedge	*Carex filifolia*	up to 5%	5
Western wheatgrass	***Pascopyrum smithii***	**up to 20%**	**10**

Forbs: 10% of total mix (Choose at least 4, two of which are nitrogen fixers*):

Common Name	Species of Seed	Percent of Total Mix	Pounds PLS/acre
Black Sampson	*Echinacea angustifolia*	up to 5%	7
Hood's phlox	*Phlox hoodii*	up to 5%	6
Penstemon spp.	*penstemon spp.*	up to 5%	2.5
Purple prairie clover	*Dalea purpurea**	up to 5%	3.5
Silvreleaf scurfpea	*Psoralea argophylla**	up to 5%	4
White prairie clover	*Dalea candida**	up to 5%	4

Shrubs: 15% of total mix (Choose at least 2, one of which is Wyoming big sagebrush):

Common Name	Species of Seed	Percent of Total Mix	Pounds PLS/acre
Prairie rose	*Rosa woodsii*	up to 5%	4
Skunkbush sumac	*Rhus trilobata*	up to 5%	2
Winterfat	*Krascheninnikovia lanata*	up to 10%	6
Wyoming big sage	***Artemisia tridentata var. wyomingensis***	**up to 5%**	**0.5**
Yucca	*Yucca glauca*	up to 5%	8

MCFO Group: Wet

Grasses: 80% of total mix (Choose at least 4, one of which must be western wheatgrass):

Common Name	Scientific Name	Percent of Total Mix	Pounds PLS/acre
Big bluestem	*Andropogon gerardii*	up to 15%	8
Prairie cordgrass	*Spartina pectinata*	up to 25%	6
Slender wheatgrass	*Elymus trachycaulus*	up to 25%	7
Western wheatgrass	***Pascopyrum smithii***	**up to 25%**	**10**

In Wet meadow and Subirrigated site these additional species are available

Baltic rush	*Juncus arcticus littoralis*	up to 5%	5
Clustered field sedge	*Carex praegracilis*	up to 5%	5
Nebraska sedge	*Carex nebrascensis*	up to 5%	5
Slender rush	*Juncus tenuis*	up to 20%	5
Wooly sedge	*Carex pellita*	up to 5%	5

Forbs: 10% of total mix (Choose at least 2):

Common Name	Species of Seed	Percent of Total Mix	Pounds PLS/acre
Field mint	*Mentha arvense*	up to 5%	1
Horsemint	*Monarda fistulosa*	up to 5%	1.5
Aster spp.	*Symphyotrichum spp.*	up to 5%	1
Northwest cinquefoil	*Potentilla gracilis*	up to 5%	2

Shrubs: 10% of total mix (Choose at least 2, one of which must be Chokecherry):

Common Name	Species of Seed	Percent of Total Mix	Pounds PLS/acre
Chokecherry	***Prunus virginiana***	**up to5%**	**10**
Golden currant	*Ribes aureum*	up to 5%	0.5
Wood's rose	*Rosa woodsii*	up to 5%	4
Silver buffaloberry	*Sheperdia argentea*	up to 5%	0.5
Peachleaf willow	*Salix amygdaloides*	up to 5%	0.5

MCFO Group: Badlands
Select all species

Common Name	Scientific Name	Percent of Total Mix	Pounds PLS/acre
Blue grama	*Bouteloua gracilis*	5%	0.6
Inland saltgrass	*Distichlis spicata*	5%	1.5
Slender wheatgrass	*Elymus trachycaulus*	5%	1.5
Western wheatgrass	*Pascopyrum smithii*	30%	7.0
Indian ricegrass	*Achnatherum hymenoides*	20%	5.0
Needle-and-thread	*Hesperostipa comata*	10%	3.0
Buckwheat spp	*Eriogonum spp.*	5%	1.0
Scarlet globemallow	*Sphaeralcea coccinea*	5%	2
American vetch	*Vicia americana*	5%	3
Wyoming big sage	*Artemisia tridentata* spp. *wyomingensis*	10%	0.5

USFS Seed Mix

#37-28A Seed Mixture (Revised 04/15/2016)

Seeding Rate Guidelines
Scenario #13 All Sites

			A	B	C	D	E
Species	**Preferred Cultivar, Ecotype, or Germplasm**	**Common Name**	**% of Mix**	**Number Seed per lb.**	**Number Seed per ft²**	**Number Seed per acre**	**Drilled PLS lb./acre**
Cool Season Grasses:							
Elymus canadensis	Mandan	Canada wildrye	0.15	115,000	7.5	326,700	2.8
Nassella viridula	Lodorm	Green needlegrass	0.20	180,000	10.0	435,600	2.4
Pascopyrum smithii	Rodan	Western wheatgrass	0.25	112,000	12.5	544,500	4.9
Warm Season Grasses							
Bouteloua gracilis	Bad River	Blue grama	0.10	750,000	5.0	217,800	0.3
Calamovilfa longifolia	Goshen	Prairie sandreed	0.10	275,000	5.0	217,800	0.8
Schizachyrium scoparium	Badlands	Little bluestem	0.10	286,000	5.0	217,800	0.8
Alternate Warm Season (for one of above species)							
Bouteloua curtipendula	Pierre	Sideoats grama	0.10	180,000	5.0	217,800	1.2
Forbs							
Dalea purpurea	Local	Purple prairieclover	0.04	290,000	1.8	78,408	0.25
OR							
Dalea candida	Antelope	White prairieclover	0.04	278,000	1.8	78,408	0.3
Helianthus pauciflorus	Bismarck	Stiff sunflower	0.03	85,000	1.4	60,984	0.7
OR							
Solidago rigida	Local	Stiff goldenrod	0.03	656,000	1.4	60,984	0.1
Echinacea angustifolia	Bismarck	Purple coneflower	0.03	120,000	1.4	60,984	0.5
OR							
Ratibida columnifera	Local	Prairie coneflower	0.03	737,000	1.4	60,984	0.1
Totals			100%		49.6	Forbs Alternate Forbs	13.4 (12.5)

Seeding Rates Formulas

A - % of Mix
B - Number of seeds per lb.
C - Number of seeds per ft² (C = A x 50)
D - Number of seeds per acre (D = C x 43560)
E - Drilled Pure Live Seed (PLS) lb./acre (E = D / B)
(SEE BACK PAGE)

- Use of Pure Live Seed (PLS) for calculating seed mixtures.
  - Planting is based on approximately 50 seed per square foot and/or 12-16 pounds PLS per acre.
  - All of the seed mixtures in this guide reflect the rate of PLS for each species per acre. These rates were derived using three basic figures: percent of each species desired by composition, number of seeds per pound according to species, and total number of PLS per square foot.
  - The following equation should be used to calculate how much seed is needed to provide the required pounds of PLS needed.

    % Purity x Germination Rate % = % PLS
    Pounds of PLS Desired divided by %PLS = Pounds of Seed Required

    An example of this is: 10 lbs. of PLS is required. The given seed lot for this species has a purity of 95% and a germination rate of 85%. How many pounds of seed will be necessary to have 10 PLS?

    .95 (Purity) x .85 (germination rate) = .81 (% PLS)
    10 (required poundage) divided by .81 (%PLS) = 12.3
    12.3 pounds of seed will be necessary to provide 10 lbs PLS of seed.

- Cultivars listed in the second column are preferred, but local seed collections grown for harvest are acceptable if performance and origin are certified or documented. **All seed sources should be derived from local collections and grown in a general area extending 300 miles north and 200 miles south of the area to be reclaimed**, within similar elevation and precipation zones as western North Dakota, i.e., from Jamestown on the east to Billings, MT on the west.

- It is vital that seed suppliers provide the most consistent and reliable sources of locally produced seed in order to meet the standards for native seed mixes used for reclamation work.

- Seeding depth should be 1/4 inch or less for drilled seed.

- For broadcast seeding, multiply pounds of each species seeded by 1.5. The seed bed should be thoroughly worked and firm.

- The best average seeding dates for cool and warm season mixes is May – June. Note that seeding in the fall during the dormant period is discouraged, as it is likely to result in poor establishment of warm season species. However; if seeding during the dormant period in the fall is necessary, Forest Service staff reserve the right to evaluate the seeding in the spring, and where establishment appears weak or poor, may recommend inter-seeding with warm season species.

- The seed mix may need to be adjusted due to site characteristics and/or lack of available seed for some species. In the latter case, adjust the species seeding rates by the formulas below table to obtain approximately 50 seed per square foot and/or 12-16 lbs. of PLS per acre for drilled seed and 18-24 lbs. per acre for broadcast seeding.

- Note: The following steps/documents are required per Conditions of Approval #28 B, Certification & Reporting
  1. Report of Seeding (#37-28B)
  2. Certification of Seed Mixture from the Seed Company, and seed tags from bags or a copy of seed tags for all planted material must be submitted to the appropriate Medora or McKenzie Ranger Districts.

- Call the appropriate Medora or McKenzie Ranger Districts with any questions.
  - Medora Ranger District: 701-227-7800.
  - McKenzie Ranger District: 701-842-8500

North Dakota Department of Trust Lands Seed Mix

NORTH DAKOTA
BOARD OF UNIVERSITY & SCHOOL LANDS
(ND Department of Trust Lands)

Native Grass Seeding Specifications

Species	lbs. PLS*/acre
Western wheatgrass	8
Slender wheatgrass	5
Green needlegrass	4
Side-oats grama	2
	19

*PLS - Pure Live Seed (based on 50 PLS/sq. feet)

1. The seed bed should be firmly packed (footprints left in the soil should be less than 1/2 inch deep).

2. An early spring seeding (before May 24th) is preferred. A dormant fall seeding (after October 20th) is acceptable.

3. A cover crop of oats at 10 lbs. PLS/acre must be seeded on the disturbed area.

4. A drill designed specifically for native grass seeding will give the best seeding results. The seed should be planted at a depth of 1/2 to 1 inch. Precaution must be taken not to plant the seed too deeply in the soil or poor germination will result.

5. On areas where equipment cannot be used, broadcast seed and rake or drag to cover seed. Where seed is broadcast, double the seeding rate.

6. Use only North Dakota certified seed.

Caution: Be sure to clean out the drill before seeding to avoid any contamination with smooth brome grass or crested wheatgrass that may remain in the drill from previous use on private land. These are invasive grasses in native prairie and are not allowed on school trust lands. Contamination with or use of crested wheatgrass or smooth brome will result in the applicant being required to spray out the grass and reseed with the above native grass seed mixture. Sweet clover and alfalfa are also not allowed – only the above native grass seed mixture may be used for revegetation on school trust land.