



**ROVER PIPELINE**

An ENERGY TRANSFER Company

***ROVER PIPELINE LLC***

***Rover Pipeline Project***

***Waters of the United States  
Delineation Report***

***United States Army Corps of Engineers  
Buffalo District***

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## **LIST OF ACRONYMS**

cm	centimeters
CWA	Clean Water Act
GPS	Global Positioning System
NRCS	Natural Resources Conservation Service
NWI	National Wetlands Inventory
OHWM	Ordinary High Water Mark
PAB	Palustrine Aquatic Bed
PEM	Palustrine Emergent
PFO	Palustrine Forested
Project	Rover Pipeline Project
PSS	Palustrine Scrub-Shrub
PUB	Palustrine Unconsolidated Bottom
Rover	Rover Pipeline LLC
U.S.	United States
USACE	United States Army Corps of Engineers
USDA	United States Department of Agriculture
USGS	United States Geological Survey

## **1.0 Introduction**

Rover Pipeline LLC (Rover) will be seeking to construct, own, and operate the proposed Rover Pipeline Project (Project). The Rover Pipeline Project, as currently proposed, is a new natural gas pipeline system that will consist of approximately 711 miles of Supply Laterals and Mainlines, 10 compressor stations, and associated meter stations and other aboveground facilities that will be located in parts of West Virginia, Pennsylvania, Ohio, and Michigan. The Project will extend from the vicinity of New Milton, Doddridge County, West Virginia to Livingston County, Michigan.

TRC delineated Waters of the U.S. pursuant to Section 10 of the Rivers and Harbors Act and Section 404 of the Clean Water Act (CWA) within the proposed Project area (see Section 1.1 for methodology) from June to October 2014. The Project occurs within the United States Army Corps of Engineers (USACE) Pittsburgh, Buffalo, Huntington, and Detroit Districts; however, this report describes only those Waters of the U.S. delineated within the Buffalo District in Ohio. The Project as currently proposed will consist of the following components and facilities within the USACE Buffalo District in Ohio:

- The Mainline and Market Segment;
- Two new Compressor Stations (CSs): Mainline CS 3 in Crawford County and Defiance CS in Defiance County; and
- Various new valves, receipt and delivery meter stations, and receiver sites.

## **1.1 Methods**

Wetland scientists conducted field surveys from June to October 2014 within the proposed Project area, to determine the presence of federal and state jurisdictional wetlands and waters. The study area generally consisted of a 400-foot-wide corridor along the proposed pipeline route, 100 percent of the permanent footprint and temporary workspaces for aboveground facilities, and a 50-foot wide corridor along proposed access roads.

Prior to the field surveys, available mapping and information were reviewed to identify potential wetland and water features within the Project area, including but not limited to United States Geologic Survey (USGS) 7.5-minute topographic maps, aerial photographs, National Wetlands Inventory (NWI) mapping, and United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) soil mapping. Wetlands were delineated in accordance with the 1987 USACE Wetland Delineation Manual (USACE, 1987), and the Midwest, and Northcentral and Northeast Regional Supplements to the Corps Wetland Delineation Manual (USACE, 2010 and 2012, respectively).

For regulatory purposes under the Federal Clean Water Act, the term wetlands means "those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas" (40 CFR 230.3(t)). Regulatory agencies in West Virginia, Pennsylvania, and Ohio also generally use this definition of

wetlands, which requires the presence of wetland hydrology, a dominance of hydrophytic vegetation, and the presence of hydric soils.

When a wetland area was identified, the boundary was geo-located using a handheld Trimble Geo-XH or Pro-XH Global Positioning System (GPS) with at least sub-meter accuracy. Wetlands were classified per Cowardin et al. (1979), as summarized in the tables in Appendix A. Data plot locations were established in representative wetland and upland areas, and USACE Routine Wetland Determination data forms were completed to document hydrology, vegetation, and soil characteristics at each wetland and upland data plot location (see Appendix B on the attached DVD).

Streams, waterbodies (ponds and lakes), and drainages within the proposed Project area were identified by the presence of an ordinary high water mark (OHWM) (see the tables in Appendix A). The term OHWM 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 (33 CFR 328.3(e)). The OHWM was also geo-located using GPS. For streams and drainages less than 10 feet wide, the centerline was geo-located using GPS and the OHWM width was recorded. Characteristics of delineated waters, such as flow type (e.g., perennial, intermittent, ephemeral), substrate type, and channel width and depth were recorded.

This report documents the wetlands and waters potentially under federal and/or state jurisdiction that were identified in the survey area; however, not all of these waters will necessarily be impacted by the Project. Summary tables of wetlands and waters that were identified are provided in Appendix A. Wetland and waters delineation maps are included as Appendix C on the attached DVD, and photos of delineated resources are included as Appendix D on the attached DVD.

## **1.2 Results**

The tables in Appendix A summarize characteristics of wetlands, streams, waterbodies, and drainages that were identified and delineated in the Project area within the USACE Buffalo District. The following sections describe the types of wetlands and waters delineated during field surveys.

### ***1.2.1 Wetlands***

#### **1.2.1.1 Wetland Vegetation Community Types**

The U.S. Fish and Wildlife Service wetland classification system described by Cowardin et al. (1979) was used to classify the wetlands that will be affected by the Project. The wetlands in the Project area were delineated as Palustrine Forested (PFO), Palustrine Scrub-Shrub (PSS), Palustrine Emergent (PEM), Palustrine Open Water, or a combination of these four cover types. Palustrine systems include all non-tidal wetlands that are dominated by trees, shrubs, persistent emergent, and emergent mosses or lichens, and all wetlands that occur in tidal areas where salinity due to ocean-derived salts is below 0.5 parts per thousand. The palustrine system was developed to group vegetated wetlands, commonly referred to as marshes,

swamps, bogs, and prairies. This system includes ponds and may be situated shoreward of lakes, river channels, estuaries, and river floodplains or in isolated catchments or on slopes. All of the wetland areas identified along the Project route are classified as palustrine systems.

#### 1.2.1.1.1 PEM Wetlands

The palustrine emergent wetland cover type is characterized by erect, rooted, herbaceous hydrophytes, excluding mosses and lichens (Cowardin et al. 1979). Emergent wetlands are known by many names, including marsh, meadow, fen, prairie pothole, and slough. PEM wetlands along the Project route are generally classified as marshes and wet meadows, which typically occur along lakes, ponds, shallow slow flowing rivers, and in isolated depressions. Marshes typically occur on mineral soils that are seasonally flooded or permanently or seasonally saturated, while wet meadows typically occur on seasonally saturated mineral or organic soils that may be associated with high water tables and/or surface water inputs. The hydrology of PEM wetlands ranges from saturated only to inundated with several feet of water. Shallow PEM wetlands are seasonal in that shallow inundation during the first part of the growing season may draw down to saturated soils by late in the growing season. Deep PEM wetlands are typically semi-permanent, drying out only during drought years. Vegetation typically consists of a variety of submergent, emergent and other rooted herbaceous species, including cattails, sedges, rushes, and grasses.

Dominant species and vegetative diversity varied within the delineated wetlands, depending on position in the landscape, duration and type of hydrology, and anthropogenic disturbances. Common dominant herbaceous species identified in delineated wetlands include reed canarygrass (*Phalaris arundinacea*), lamp rush (*Juncus effusus*), rice cutgrass (*Leersia oryzoides*), cattail species (*Typha* sp.), sensitive fern (*Onoclea sensibilis*), spotted touch-me-not (*Impatiens capensis*), late goldenrod (*Solidago gigantea*), spotted trumpetweed (*Eutrochium maculatum*), common boneset (*Eupatorium perfoliatum*), black bent (*Agrostis gigantea*), cottongrass bulrush or woolgrass (*Scirpus cyperinus*), dark-green bulrush (*Scirpus atrovirens*), large barnyard grass (*Echinochloa crus-galli*), skunk cabbage (*Symplocarpus foetidus*), arrow-leaf tearthumb (*Persicaria sagittata*), swamp smartweed (*Persicaria hydropiperoides*), and various sedges including hop sedge (*Carex lupulina*), lakebank sedge (*Carex lacustris*), uptight sedge (*Carex stricta*), shallow sedge (*Carex lurida*), and fox sedge (*Carex vulpinoidea*).

#### 1.2.1.1.2 PSS Wetlands

Scrub-shrub wetlands include areas dominated by woody vegetation less than six meters tall (Cowardin et al., 1979). Woody vegetation found in this type of wetland includes true shrubs, young trees, and trees or shrubs that are small or stunted because of environmental conditions. Scrub-shrub wetlands may represent a successional stage leading to a forested wetland or a relatively stable climax community. Vegetation composition is strongly influenced by the hydrologic regime and where located, such as within existing rights-of-way, and by local vegetation maintenance practices. Most scrub-shrub communities are seasonally flooded and the soil is often saturated to the surface. The ground layer can be composed of a diversity of ferns, sedges, rushes, and forbs, such as those in wet meadows. The ground layer in disturbed, deciduous shrub swamps may be composed of reed canarygrass or other invasive species.

Common dominant shrub species identified in delineated wetlands include willow species such as black willow (*Salix nigra*), sandbar willow (*Salix interior*), and Bebb's or gray willow (*Salix bebbiana*), dogwood species such as silky dogwood (*Cornus amomum*), gray dogwood (*Cornus racemosa*), stiff dogwood (*Cornus foemina*), alternate-leaf dogwood (*Cornus alternifolia*), and red-osier dogwood (*Cornus alba*), smooth arrowwood (*Viburnum recognitum*) and southern arrowwood (*Viburnum dentatum*), Morrow's honeysuckle (*Lonicera morrowii*) and twinsisters (*Lonicera tatarica*), common buttonbush (*Cephalanthus occidentalis*), and white meadowsweet (*Spiraea alba*), as well as young trees such as slippery elm (*Ulmus rubra*) and American elm (*Ulmus americana*), Eastern cottonwood (*Populus deltoides*), and green ash (*Fraxinus pennsylvanica*). Typical dominant herbaceous species identified in PSS wetlands include reed canarygrass, goldenrod species (*Solidago* sp.), aster species (*Symphyotrichum* sp.), spotted touch-me-not, beggarticks (*Bidens* sp.), rice cutgrass, sensitive fern, stinging nettle (*Urtica dioica*), arrow-leaf tearthumb, and various sedges (*Carex* sp.).

#### 1.2.1.1.3 PFO Wetlands

Forested wetlands are characterized by woody vegetation that grow six meters (20 feet) tall or taller (Cowardin et al., 1979). Forested wetlands normally include an overstory of trees, an understory of young trees or shrubs, and an herbaceous layer. Within the Project area, PFO wetlands are generally characterized as deciduous, which are common throughout much of the region in depressions, on floodplains, on flats on glacial lake plains, and along lake shores. Floodplain forests occupy lowlands adjacent to the larger rivers in the region.

Common dominant tree species identified in delineated wetlands include silver maple (*Acer saccharinum*) and red maple (*Acer rubrum*), American elm, green ash and black ash (*Fraxinus nigra*), shellbark hickory (*Carya laciniata*), black willow, pin oak (*Quercus palustris*) and swamp white oak (*Quercus bicolor*), and Eastern cottonwood. The understory within the delineated PFO wetlands were typically dominated by Northern spicebush (*Lindera benzoin*), American elm, common buttonbush, American hornbeam (*Carpinus caroliniana*), green ash, red maple, arrowwood (*Viburnum* sp.), and dogwood species (*Cornus* sp.). Dominant herbaceous vegetation within the PFO wetlands include Japanese stilt grass (*Microstegium vimineum*), Canadian clearweed (*Pilea pumila*), aster species, spotted touch-me-not, rice cutgrass, various sedge species, sensitive fern, and goldenrod species.

#### 1.2.1.2 Hydric Soils

According to the Corps of Engineers Wetland Delineation Manual (USACE, 1987), hydric soils are defined as a soil that formed under conditions of saturation, flooding or ponding long enough during the growing season to develop anaerobic conditions in the upper part. Hydric soils were identified and recorded on the data sheets in Appendix B on the attached DVD. Within the USACE Buffalo District, the Project traverses the following soil units mapped by the NRCS as hydric, described below (USDA NRCS, nd):

*Alvada loam* - The Alvada series consists of very deep, very poorly drained soils formed in loamy, sandy, and gravelly outwash or glaciolacustrine deposits 102 to 152 centimeters (cm) (40 to 60 inches) thick overlying till. They are on outwash plains, lake plains, and till plains. Slope ranges from 0 to 2 percent. The



depth to the top of an intermittent perched high water table ranges from 30 cm (1 foot) above the surface to 30 cm (1 foot) below between November and May in normal years. The potential for surface runoff is negligible to low. Saturated hydraulic conductivity is moderately high or high in the solum and moderately high or moderately low in the substratum. Permeability is moderate in the upper part of the solum, moderately rapid in the lower part of the solum, and moderately slow or slow in the substratum.

Aquents - Aquents are poorly to very poorly drained soils formed in human transported material or on excavated (cut) landscapes.

Bono silty clay and silty clay loam - The Bono series consists of very deep, very poorly drained soils formed mainly in lacustrine sediments on lake plains, in depressions on moraines and till plains, and in local areas between beach ridges. Slope ranges from 0 to 2 percent. The soils formed in calcareous, fine-textured lacustrine sediments with some stratification. The potential for surface runoff is negligible to medium depending on the shape of the slope. Saturated hydraulic conductivity is moderately low or low. Permeability is slow or very slow.

Cohoctah fine sandy loam - The Cohoctah series consists of very deep, poorly drained or very poorly drained soils formed in loamy alluvial deposits in abandoned drainageways and depressions on flood plains. Slope ranges from 0 to 2 percent. The depth to the top of an apparent seasonal high water table ranges from near the surface to 30 cm (1 foot) below the surface from September to May in normal years. The potential for surface runoff is very low or negligible. Saturated hydraulic conductivity is high. Permeability is moderately rapid. The soil is commonly flooded for brief to long periods of time from November to May.

Colwood loam and silt loam - The Colwood series consists of very deep, poorly drained or very poorly drained soils formed in stratified silty and loamy glaciolacustrine deposits or outwash. These soils are on lake plains, outwash plains, moraines, and deltas. Slope ranges from 0 to 3 percent. Depth to the top of an apparent seasonal high water table ranges from 30 cm (1 foot) above the surface to 30 cm (1 foot) below the surface between October and May in normal years. Potential for surface runoff is negligible or very low. Saturated hydraulic conductivity is moderately high. Permeability is moderate or moderately slow.

Condit-Bennington silt loams - The Condit series consists of very deep, very poorly drained soils formed in loamy till on ground moraines. Slope ranges from 0 to 2 percent. Depth to the top of a perched seasonal high water table ranges from 30 cm (1 foot) above the surface to 30 cm (1 foot) below the surface between November and May in normal years. Potential for surface runoff is negligible to low. Saturated hydraulic conductivity is moderately low. Permeability is slow.

The Bennington series consists of very deep, somewhat poorly drained soils formed in loamy till of medium lime content. These soils are on ground moraines and end moraines. Slope ranges from 0 to 6 percent. The depth to the top of an intermittent perched water table ranges from 15 to 30 cm (0.5 to 1 foot) between November and May in normal years. The potential for surface runoff is negligible to medium. Saturated hydraulic conductivity is moderately low. Permeability is slow.





Gilford fine sandy loam - The Gilford series consists of very deep, poorly drained or very poorly drained soils formed in loamy over sandy sediments on outwash plains, near-shore zones (relict), and flood-plain steps. Slope ranges from 0 to 2 percent. In drained areas, the depth to the top of an apparent seasonal high water table ranges from 15 cm (0.5 feet) above the surface to 30 cm (1 foot) below the surface between December and May in normal years. Potential for surface runoff is negligible. Saturated hydraulic conductivity is high in the upper part and very rapid in the lower part. Permeability is moderately rapid in the upper part and rapid in the lower part.

Hoytville clay, clay loam, and silty clay loam - The Hoytville series consists of very deep, very poorly drained soils that are deep or very deep to dense till. They formed in till that has been leveled by wave action and are on lake plains. Slope ranges from 0 to 1 percent. A perched water table ranges from 30 cm (1 foot) above the surface to 30 cm (1 foot) below the surface from January to April in normal years. Saturated hydraulic conductivity is moderately high in the upper part of the solum, moderately low in the lower part of the solum, and low in the substratum. The potential for surface runoff is negligible or very low. Permeability is moderately slow in the upper part of the solum, slow in the lower part of the solum, and slow or very slow in the substratum.

Lamson fine sandy loam - The Lamson series consists of very deep, poorly drained and very poorly drained soils formed in glacio-fluvial, glacio-lacustrine and deltaic deposits. They are level and nearly level soils in low areas on glacial lake plains. Slope ranges from 0 to 3 percent but is mostly less than 2 percent. The potential for surface runoff is very high to negligible. Saturated hydraulic conductivity is moderately high through high in the mineral soil.

Latty clay and silty clay - The Latty series consists of very deep, very poorly drained soils formed in clayey glaciolacustrine sediments. These soils are on lake plains. Slope ranges from 0 to 2 percent. The depth to the top of an intermittent apparent high water table ranges from 30 cm (1 foot) above the surface to 30 cm (1 foot) below the surface between January and April in normal years. The potential for surface runoff is negligible. Saturated hydraulic conductivity is moderately low in the solum and low in the underlying material. Permeability is slow in the solum and very slow in the underlying material.

Lenawee silty clay loam - The Lenawee series consists of very deep, poorly drained and very poorly drained soils formed in lacustrine deposits. These soils are on lake plains and in depressional areas on moraines, outwash plains, and glacial drainageways. Slope ranges from 0 to 2 percent. Potential for surface runoff is negligible. Saturated hydraulic conductivity is moderately high or moderately low. Permeability is moderately slow or slow.

Luray silty clay loam - The Luray series consists of very deep, very poorly drained soils formed in silty lacustrine material or slack water sediments. These soils are on lake plains, terraces, outwash plains, and some local areas on till plains. Slope ranges from 0 to 2 percent. The depth to the top of an intermittent perched high water table ranges from 30 cm (1 foot) above the surface to 30 cm (1 foot) below the surface during periods of high rainfall in normal years. The potential for surface runoff is negligible to medium. Saturated hydraulic conductivity is moderately high. Permeability is moderately slow.



Marengo silty clay loam - The Marengo series consists of very deep, very poorly drained soils formed loamy till on till plains. Slope ranges from 0 to 2 percent. The depth to the top of an intermittent apparent high water table ranges from the surface to 30 cm (1 foot) above the surface between November and June in normal years. The potential for surface runoff is negligible. Saturated hydraulic conductivity is moderately high. Permeability is moderate or moderately slow.

Mermill loam, clay loam, and sandy clay loam - The Mermill series consists of very deep, very poorly drained soils on lake plains and till plains. They formed in loamy glaciolacustrine or water-sorted material 51 to 102 cm (20 to 40 inches) thick and in the underlying till. Slope ranges from 0 to 2 percent. The depth to the top of an intermittent perched high water table ranges from 30 cm (1 foot) above the surface to 30 cm (1 foot) below the surface between December and May in normal years. The potential for surface runoff is negligible or very low. Saturated hydraulic conductivity is moderately high in the loamy material and moderately low or low in the underlying till. Permeability is moderate in the loamy material and slow or very slow in the underlying till.

Millgrove loam - The Millgrove series consists of very deep, very poorly drained soils on outwash plains and terraces. They formed in loamy and gravelly outwash overlying sandy, gravelly, and loamy outwash deposits. Slope ranges from 0 to 2 percent. The depth to the top of an intermittent apparent high water table ranges from 30 cm (1 foot) above the surface to 30 cm (1 foot) below the surface between November and May in normal years. The potential for surface runoff is negligible to low. Saturated hydraulic conductivity is moderately high in the solum and high in the underlying material. Permeability is moderate in the solum and moderately rapid in the underlying material. The rarely flooded phase is subject to flooding from late fall to spring.

Millsdale silty clay loam - The Millsdale series consists of moderately deep, very poorly drained soils formed in till overlying limestone or dolostone. They are on till plains, lake plains, and terraces. Slope ranges from 0 to 2 percent. The depth to the top of an intermittent apparent high water table ranges from 30 cm (1 foot) above the surface to 30 cm (1 foot) below the surface between November and May in normal years. The potential for surface runoff is negligible to high. Saturated hydraulic conductivity is moderately high. Permeability is moderately slow.

Olentangy mucky silt loam - The Olentangy series consists of very deep, very poorly drained soils formed in coprogenous earth and underlain by lake sediments or till at a depth of 61 to 127 cm (24 to 50 inches). These soils are in depressions on lakebeds and till plains. Slope ranges from 0 to 2 percent. Potential for surface runoff is negligible. Saturated hydraulic conductivity is moderately high throughout the coprogenous material and moderately low in the mineral substratum. Permeability is moderate throughout the coprogenous material and slow in the mineral substratum.

Paulding clay - The Paulding series consists of very deep, very poorly drained soils that are moderately deep or deep to dense clayey lacustrine material. These soils formed in clayey glaciolacustrine deposits. They are on lake plains and till-floored lake plains. Slope ranges from 0 to 2 percent. The depth to the top

of an intermittent perched high water table ranges from 30 cm (1 foot) above the surface to 15 cm (6 inches) below the surface from January to April or during periods of high rainfall. The potential for surface runoff is negligible. Saturated hydraulic conductivity is low in the subsoil and very low in the substratum.

Pewamo silty clay loam - The Pewamo series consists of very deep, very poorly drained soils formed in till on moraines, near-shore zones (relict), and lake plains. Slope ranges from 0 to 2 percent. Depth to an apparent seasonal high water table ranges from 30 cm (1 foot) above the surface to 30 cm (1 foot) below the surface from December to May in normal years. The potential for surface runoff is negligible to low. Saturated hydraulic conductivity is moderately high. Permeability is moderately slow.

Sebring silt loam - The Sebring series consists of very deep, poorly drained soils formed in stratified Wisconsinan age glaciolacustrine sediments on lake plains and slackwater terraces. Permeability is moderately slow in the subsoil and moderate or moderately slow in the substratum. Slope ranges from 0 to 2 percent. The potential for surface runoff is negligible to low. Frequent brief ponding occurs during periods of heavy rainfall and during spring snowmelt. Permeability is moderately slow in the subsoil and moderate or moderately slow in the substratum. Depth to the top of an intermittent apparent seasonal high water table ranges from +0.5 to 0.5 foot from November to June in normal years.

Sloan silt loam and silty clay loam - The Sloan series consists of very deep, very poorly drained soils formed in loamy alluvium on flood plains. Slope ranges from 0 to 2 percent. Depth to the top of an intermittent apparent high water table ranges from 30 cm (1 foot) above the surface to 30 cm (1 foot) below the surface between November and June in normal years. Potential for surface runoff is negligible to medium. These soils are subject to flooding from late fall to spring. Saturated hydraulic conductivity is moderately high; in the sandy substratum phase, it is very high. Permeability is moderate or moderately slow. In the sandy substratum phase, permeability is rapid in the lower part of the series control section.

Toledo silty clay and silty clay loam - The Toledo series consists of very deep, very poorly drained soils formed in clayey glaciolacustrine sediments. These soils are on lake plains. Slope ranges from 0 to 2 percent. The depth to the top of an intermittent apparent high water table ranges from 30 cm (1 foot) above the surface to 30 cm (1 foot) below between November and May in normal years. The ponded phase has an apparent high water table ranging from 91 cm (3 feet) above the surface to 30 cm (1 foot) below between September and May in normal years. The potential for surface runoff is negligible to medium. Saturated hydraulic conductivity is moderately low. Permeability is slow.

Wabasha silty clay - The Wabasha series consists of very deep, very poorly drained or poorly drained soils formed in clayey alluvium on flood plains. Slope ranges from 0 to 2 percent. The depth to the top of an intermittent apparent high water table ranges from 30 cm (1 foot) above the surface to 30 cm (1 foot) below the surface between December and June in normal years. The potential for surface runoff is negligible to low. Saturated hydraulic conductivity is moderately low. Permeability is slow. These soils are subject to frequent flooding from January to May.

Wallkill silt loam - The Wallkill series consists of very deep, very poorly drained soils formed in alluvium overlying organic soil material. They are nearly level soils that occur on flood plains or around margins of organic soils adjacent to uplands. Saturated hydraulic conductivity of the mineral portion is moderately high to high, and the organic portion is high to very high. Slope ranges from 0 to 3 percent. The potential for surface runoff is low to negligible. Saturated hydraulic conductivity of the mineral portion is moderately high to high, and the organic portion is high to very high.

Wauseon fine sandy loam - The Wauseon series consists of very deep, poorly drained or very poorly drained soils that are moderately deep or deep to dense till. These soils formed in loamy and sandy glaciolacustrine sediments and in the underlying till. They are on lake plains and deltas. Slope ranges from 0 to 2 percent. The depth to the top of an intermittent perched high water ranges from 30 cm (1 foot) above the surface to 30 cm (1 foot) below the surface between January and April in normal years. The potential for surface runoff is negligible. Saturated hydraulic conductivity is high in the loamy and sandy material, moderately low in the lower part of the subsoil formed in till, and low in the substratum. Permeability is moderately rapid in the loamy and sandy material, slow in the lower part of the subsoil formed in till, and slow or very slow in the substratum.

### **1.2.2 Streams, Drainages, and Waterbodies**

Streams and drainages delineated within the Project area were classified according to flow regime (e.g., perennial, intermittent, or ephemeral). Perennial streams have continuous year-round flow and typically a well-defined OHWM. Intermittent streams have seasonal flow (continuous flow for a period of at least three months) and also typically have a defined OHWM. Ephemeral streams have flow of short duration after a rainfall event and typically have an ill-defined OHWM. Waterbodies delineated within the Project area are classified as either Palustrine Aquatic Bed (PAB) or Palustrine Unconsolidated Bottom (PUB). PAB waterbodies have a greater than 30 percent cover of vegetation growing on or below the surface for most of the growing season in almost all years. PUB waterbodies have 30 percent or less cover by vegetation growing on or below the surface (Cowardin et. al. 1979).

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# **APPENDIX A**

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**TABLE 1**  
**Rover Pipeline Project - Mainline and Market Segment**  
**USACE, Buffalo District**  
**Waters of the U.S. Delineation Report - Wetlands in Ohio**

Wetland ID	Approx. MP	Latitude	Longitude	Type	USGS Quad	County, State	Township	Delimited Acres
<b>Mainline A</b>								
W4H-CR-159	115.59	40° 53' 42.607" N	82° 45' 53.456" W	PEM	New Washington	Crawford, OH	Vernon	3.68
W7H-CR-160	121.51	40° 55' 53.248" N	82° 51' 52.466" W	PEM	New Washington	Crawford, OH	Cranberry	0.42
W8H-SE-158	131.67	40° 59' 59.084" N	83° 1' 57.983" W	PEM	Lykens	Seneca, OH	Bloom	0.08
W3H-SE-108	133.34	41° 0' 41.795" N	83° 3' 35.873" W	PSS	Bloomville	Seneca, OH	Bloom	0.83
W7H-SE-216	134.20	41° 1' 0.039" N	83° 4' 30.441" W	PFO	Bloomville	Seneca, OH	Eden	1.48
W7H-SE-219	135.16	41° 1' 22.870" N	83° 5' 26.814" W	PEM	Bloomville	Seneca, OH	Eden	0.46
W7H-SE-220	135.40	41° 1' 26.364" N	83° 5' 43.405" W	PFO	Bloomville	Seneca, OH	Eden	0.08
W3H-SE-113	140.18	41° 3' 14.971" N	83° 10' 27.227" W	PEM	Tiffin South	Seneca, OH	Eden	0.01
W3H-SE-115	140.43	41° 3' 21.542" N	83° 10' 41.604" W	PFO	Tiffin South	Seneca, OH	Eden	0.17
W8H-SE-172	151.02	41° 6' 55.595" N	83° 21' 41.846" W	PFO	New Riegel	Seneca, OH	Loudon	0.77
W3H-HA-118	158.86	41° 9' 13.276" N	83° 29' 11.956" W	PEM	Fostoria	Hancock, OH	Washington	0.06
W3H-HA-117	158.98	41° 9' 19.492" N	83° 29' 12.488" W	PEM	Fostoria	Hancock, OH	Washington	0.04
W8H-HE-143	191.22	41° 17' 16.973" N	84° 2' 44.753" W	PFO	Malinta	Henry, OH	Monroe	1.58
W8H-HE-117	200.50	41° 18' 44.393" N	84° 13' 4.424" W	PFO	Florida	Henry, OH	Flat Rock	0.70
W4H-DE-112	206.34	41° 20' 0.772" N	84° 19' 23.200" W	PEM	Defiance East	Defiance, OH	Richland	0.01
W8H-DE-101	207.74	41° 20' 48.558" N	84° 20' 25.422" W	PFO	Defiance East	Defiance, OH	Adams	5.29
<b>Mainline B</b>								
W4H-CR-245	118.62	40° 54' 36.135" N	82° 49' 7.607" W	PFO	New Washington	Crawford, OH	Cranberry	0.98
W6H-CR-114	122.00	40° 56' 4.131" N	82° 52' 22.518" W	PEM	New Washington	Crawford, OH	Cranberry	0.04
W4H-CR-243	123.77	40° 56' 42.452" N	82° 54' 17.184" W	PEM	Chatfield	Crawford, OH	Chatfield	0.52
W4H-CR-165	125.52	40° 57' 27.231" N	82° 55' 49.709" W	PEM	Chatfield	Crawford, OH	Chatfield	0.07
W4H-CR-244	127.19	40° 58' 15.682" N	82° 57' 21.930" W	PFO	Chatfield	Crawford, OH	Chatfield	0.23
W3H-CR-107	127.62	40° 58' 24.408" N	82° 57' 49.605" W	PEM	Chatfield	Crawford, OH	Chatfield	0.07

**TABLE 1**  
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**USACE, Buffalo District**  
**Waters of the U.S. Delineation Report - Wetlands in Ohio**

Wetland ID	Approx. MP	Latitude	Longitude	Type	USGS Quad	County, State	Township	Delineated Acres
<b>Mainline B, cont'd</b>								
W8H-SE-156	131.66	40° 59' 59.580" N	83° 1' 55.466" W	PFO	Lykens	Seneca, OH	Bloom	1.06
W8H-SE-156	131.67	41° 0' 0.669" N	83° 1' 57.269" W	PFO	Bloomville	Seneca, OH	Bloom	1.03
W7H-SE-217	134.70	41° 1' 16.315" N	83° 4' 57.274" W	PEM	Bloomville	Seneca, OH	Eden	0.37
W7H-SE-220	135.40	41° 1' 28.270" N	83° 5' 41.338" W	PFO	Bloomville	Seneca, OH	Eden	1.40
W7H-SE-224	138.43	41° 2' 46.246" N	83° 8' 34.589" W	PEM	Tiffin South	Seneca, OH	Eden	0.21
W7H-SE-225	139.35	41° 3' 7.940" N	83° 9' 33.246" W	PFO	Tiffin South	Seneca, OH	Eden	0.97
W3H-SE-112	140.20	41° 3' 17.040" N	83° 10' 27.777" W	PEM	Tiffin South	Seneca, OH	Eden	0.02
W3H-SE-111	140.24	41° 3' 18.792" N	83° 10' 29.131" W	PEM	Tiffin South	Seneca, OH	Eden	0.20
W3H-SE-116	140.46	41° 3' 23.847" N	83° 10' 43.356" W	PFO	Tiffin South	Seneca, OH	Eden	0.39
W7H-SE-229	141.56	41° 3' 52.946" N	83° 11' 47.555" W	PEM	Tiffin South	Seneca, OH	Seneca	0.13
W1M-SE-113	142.23	41° 4' 9.136" N	83° 12' 28.023" W	PFO	Tiffin South	Seneca, OH	Seneca	0.04
W1M-SE-108	142.77	41° 4' 18.695" N	83° 13' 3.101" W	PFO	Tiffin South	Seneca, OH	Seneca	0.19
W1M-SE-106	142.84	41° 4' 20.972" N	83° 13' 7.988" W	PFO	Tiffin South	Seneca, OH	Seneca	0.18
W1M-SE-104	143.92	41° 4' 37.651" N	83° 14' 17.315" W	PFO	Tiffin South	Seneca, OH	Seneca	0.57
W1M-SE-127	146.60	41° 5' 41.008" N	83° 16' 57.973" W	PFO	New Riegel	Seneca, OH	Hopewell	0.21
W1M-SE-119	146.86	41° 5' 44.292" N	83° 17' 15.834" W	PFO	New Riegel	Seneca, OH	Hopewell	5.92
W1M-SE-115	148.12	41° 6' 7.495" N	83° 18' 32.681" W	PFO	New Riegel	Seneca, OH	Loudon	0.81
W8H-HE-123	200.33	41° 18' 40.577" N	84° 12' 52.982" W	PFO	Florida	Henry, OH	Flat Rock	0.48
W8H-HE-116	200.57	41° 18' 47.164" N	84° 13' 7.572" W	PEM	Florida	Henry, OH	Flat Rock	0.53
W8H-DE-110	201.36	41° 18' 57.665" N	84° 14' 0.231" W	PFO	Florida	Defiance, OH	Richland	3.61



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Wetland ID	Approx. MP	Latitude	Longitude	Type	USGS Quad	County, State	Township	Delimited Acres
<b>Market Segment</b>								
W3H-DF-102	1.31	41° 22' 26.165" N	84° 21' 18.624" W	PFO	Defiance East	Defiance, OH	Tiffin	3.04
W1H-DF-119	1.68	41° 22' 42.171" N	84° 21' 4.144" W	PEM	Ridgeville Corners	Defiance, OH	Tiffin	0.01
W1H-DF-118	1.72	41° 22' 45.309" N	84° 21' 6.142" W	PFO	Ridgeville Corners	Defiance, OH	Tiffin	3.85
W1H-DF-117	2.29	41° 23' 11.306" N	84° 20' 48.380" W	PEM	Ridgeville Corners	Defiance, OH	Tiffin	0.12
W4H-DF-231	2.65	41° 23' 29.171" N	84° 20' 38.219" W	PFO	Ridgeville Corners	Defiance, OH	Tiffin	0.44
W4H-DF-229	2.93	41° 23' 39.586" N	84° 20' 27.885" W	PFO	Ridgeville Corners	Defiance, OH	Adams	2.10
W3H-DF-103	3.52	41° 24' 8.185" N	84° 20' 13.234" W	PEM	Ridgeville Corners	Defiance, OH	Adams	0.11
W3H-DF-104	3.83	41° 24' 23.829" N	84° 20' 5.666" W	PFO	Ridgeville Corners	Defiance, OH	Adams	1.82
W1H-DF-122	3.87	41° 24' 24.481" N	84° 20' 3.065" W	PEM	Ridgeville Corners	Defiance, OH	Adams	0.85
W1H-DF-121	3.89	41° 24' 25.924" N	84° 20' 2.588" W	PFO	Ridgeville Corners	Defiance, OH	Adams	0.00
W1H-DF-122	3.89	41° 24' 25.924" N	84° 20' 2.588" W	PEM	Ridgeville Corners	Defiance, OH	Adams	0.00
W1H-DF-121	3.90	41° 24' 25.167" N	84° 20' 0.791" W	PFO	Ridgeville Corners	Defiance, OH	Adams	2.62
W1H-DF-120	4.14	41° 24' 36.277" N	84° 19' 51.901" W	PEM	Ridgeville Corners	Defiance, OH	Adams	0.07
W3H-HN-130	6.06	41° 26' 0.225" N	84° 18' 50.807" W	PFO	Ridgeville Corners	Henry, OH	Ridgeville	5.81
W4H-HN-228	7.38	41° 26' 42.877" N	84° 17' 49.795" W	PFO	Ridgeville Corners	Henry, OH	Ridgeville	5.33
W2H-HN-110	8.11	41° 27' 10.593" N	84° 17' 39.707" W	PEM	Ridgeville Corners	Henry, OH	Ridgeville	0.06
W8H-HN-174	8.46	41° 27' 27.747" N	84° 17' 32.080" W	PFO	Ridgeville Corners	Henry, OH	Ridgeville	6.31
W1H-HE-123	10.23	41° 28' 55.535" N	84° 17' 42.930" W	PEM	Ridgeville Corners	Henry, OH	Ridgeville	0.05
W1H-FU-125	11.10	41° 29' 35.561" N	84° 17' 16.387" W	PFO	Ridgeville Corners	Fulton, OH	German	0.52
W1H-FU-126	11.16	41° 29' 39.014" N	84° 17' 17.862" W	PFO	Ridgeville Corners	Fulton, OH	German	0.11
W1H-FU-127	11.17	41° 29' 38.867" N	84° 17' 14.784" W	PFO	Ridgeville Corners	Fulton, OH	German	0.76
W1H-FU-128	11.29	41° 29' 42.133" N	84° 17' 11.894" W	PEM	Ridgeville Corners	Fulton, OH	German	0.02
W4H-FU-221	17.02	41° 34' 17.141" N	84° 15' 15.090" W	PEM	Archbold	Fulton, OH	German	0.29

**TABLE 1**  
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Wetland ID	Approx. MP	Latitude	Longitude	Type	USGS Quad	County, State	Township	Delineated Acres
<b>Market Segment, cont'd</b>								
W2H-FU-112	18.15	41° 35' 13.763" N	84° 15' 5.944" W	PEM	Archbold	Fulton, OH	Franklin	0.12
W4H-FU-216	20.67	41° 37' 17.405" N	84° 14' 20.731" W	PEM	Wauseon	Fulton, OH	Franklin	0.07

**TABLE 2**  
**Rover Pipeline Project - Mainline and Market Segment**  
**USACE, Buffalo District**  
**Waters of the U.S. Delineation Report – Surface Waters in Ohio**

Stream ID	Approx. MP	Latitude	Longitude	Stream Name	Type	USGS Quad	County, State	Township
<b>Mainline A</b>								
S4H-CR-160	115.46	40° 53' 39.069" N	82° 45' 47.745" W	UT to Broken Sword Creek	Intermittent	New Washington	Crawford, OH	Vernon
S7H-CR-158	116.14	40° 53' 58.008" N	82° 46' 27.062" W	Broken Sword Creek	Intermittent	New Washington	Crawford, OH	Vernon
S7H-CR-159	119.34	40° 54' 56.369" N	82° 49' 46.366" W	Honey Creek	Intermittent	New Washington	Crawford, OH	Cranberry
S7H-SE-221	135.39	41° 1' 26.146" N	83° 5' 42.935" W	Unnamed	Intermittent	Bloomville	Seneca, OH	Eden
S7H-SE-222	135.42	41° 1' 28.438" N	83° 5' 42.968" W	Honey Creek	Perennial	Bloomville	Seneca, OH	Eden
S3H-SE-110	135.85	41° 1' 43.336" N	83° 6' 3.623" W	UT to Honey Creek	Ephemeral	Bloomville	Seneca, OH	Eden
S3H-SE-114	140.40	41° 3' 21.584" N	83° 10' 39.702" W	UT to Wolf Creek	Perennial	Tiffin South	Seneca, OH	Eden
S8H-SE-167	147.79	41° 6' 0.285" N	83° 18' 12.336" W	UT to East Branch Wolf Creek	Perennial	New Riegel	Seneca, OH	Hopewell
S1M-SE-129	151.47	41° 6' 55.755" N	83° 22' 10.917" W	Wolf Creek	Perennial	New Riegel	Seneca, OH	Loudon
S3H-SE-137	152.38	41° 6' 52.212" N	83° 23' 13.297" W	UT to Wolf Creek	Intermittent	Alvada	Seneca, OH	Loudon
S1M-HA-131	154.44	41° 7' 11.287" N	83° 25' 29.395" W	UT to Wolf Creek	Ephemeral	Alvada	Hancock, OH	Washington
S3H-HA-140	155.14	41° 7' 28.718" N	83° 26' 11.389" W	East Branch Portage River	Perennial	Alvada	Hancock, OH	Washington
S3H-HA-119	158.86	41° 9' 13.291" N	83° 29' 11.955" W	UT to South Branch Portage River	Perennial	Fostoria	Hancock, OH	Washington
S1M-HE-170	190.40	41° 17' 16.910" N	84° 1' 47.126" W	South Turkeyfoot Creek	Perennial	Malinta	Henry, OH	Monroe
S8H-HE-146	190.77	41° 17' 16.380" N	84° 2' 13.751" W	UT to South Turkeyfoot Creek	Ephemeral	Malinta	Henry, OH	Monroe
S8H-HE-145	190.80	41° 17' 16.509" N	84° 2' 15.202" W	UT to South Turkeyfoot Creek	Intermittent	Malinta	Henry, OH	Monroe
S8H-HE-141	191.27	41° 17' 17.550" N	84° 2' 48.298" W	UT to South Turkeyfoot Creek	Ephemeral	Malinta	Henry, OH	Monroe
S8H-HE-137	191.80	41° 17' 24.225" N	84° 3' 23.453" W	UT to Lost Creek	Perennial	Malinta	Henry, OH	Monroe
S8H-HE-135	192.41	41° 17' 32.902" N	84° 4' 3.993" W	Lost Creek	Perennial	Malinta	Henry, OH	Monroe
S8H-HE-139	193.36	41° 17' 46.510" N	84° 5' 7.320" W	UT to Lost Creek	Ephemeral	Malinta	Henry, OH	Monroe

**TABLE 2**  
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**USACE, Buffalo District**  
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Stream ID	Approx. MP	Latitude	Longitude	Stream Name	Type	USGS Quad	County, State	Township
<b>Mainline A, cont'd</b>								
S8H-HE-140	193.93	41° 17' 55.629" N	84° 5' 42.416" W	UT to Lost Creek	Intermittent	Malinta	Henry, OH	Monroe
S8H-HE-134	194.53	41° 18' 1.201" N	84° 6' 22.765" W	UT to School Creek	Intermittent	Malinta	Henry, OH	Monroe
S8H-HE-132	195.59	41° 18' 12.716" N	84° 7' 34.058" W	UT to School Creek	Perennial	Florida	Henry, OH	Flat Rock
S8H-HE-131	197.05	41° 18' 25.457" N	84° 9' 11.971" W	Wade Creek	Perennial	Florida	Henry, OH	Flat Rock
S8H-HE-129	200.28	41° 18' 38.144" N	84° 12' 50.462" W	UT to Maumee River	Ephemeral	Florida	Henry, OH	Flat Rock
S8H-HE-122	200.29	41° 18' 38.645" N	84° 12' 52.687" W	UT to Maumee River	Perennial	Florida	Henry, OH	Flat Rock
S8H-HE-128	200.31	41° 18' 39.483" N	84° 12' 51.972" W	UT to Maumee River	Ephemeral	Florida	Henry, OH	Flat Rock
S2H-DE-115	203.74	41° 19' 38.232" N	84° 16' 31.593" W	Brubaker Creek	Ephemeral	Defiance East	Defiance, OH	Richland
S4H-DE-110	205.52	41° 19' 50.391" N	84° 18' 27.773" W	Brubaker Creek	Intermittent	Defiance East	Defiance, OH	Richland
S4H-DE-405	206.35	41° 19' 56.741" N	84° 19' 24.122" W	UT to Tanby Ditch	Intermittent	Defiance East	Defiance, OH	Richland
S8H-DE-105	206.88	41° 20' 13.547" N	84° 19' 52.918" W	UT to Webb Run	Intermittent	Defiance East	Defiance, OH	Richland
S8H-DE-103	207.35	41° 20' 33.223" N	84° 20' 8.403" W	UT to Webb Run	Intermittent	Defiance East	Defiance, OH	Adams
S4H-DE-113	208.13	41° 21' 1.065" N	84° 20' 45.997" W	UT to Webb Run	Intermittent	Defiance East	Defiance, OH	Tiffin
S4H-DE-113	208.17	41° 20' 59.534" N	84° 20' 51.372" W	UT to Webb Run	Intermittent	Defiance East	Defiance, OH	Tiffin
S8H-DE-100	209.02	41° 21' 12.174" N	84° 21' 42.054" W	UT	Intermittent	Defiance East	Defiance, OH	Tiffin
<b>Mainline B</b>								
S4H-CR-247	122.69	40° 56' 22.826" N	82° 53' 2.291" W	UT to Sycamore Creek	Intermittent	Chatfield	Crawford, OH	Chatfield
S7H-SE-214	130.80	40° 59' 39.891" N	83° 1' 3.994" W	UT to Silver Creek	Intermittent	Lykens	Seneca, OH	Bloom
S3H-SE-109	135.83	41° 1' 43.922" N	83° 6' 3.678" W	UT to Honey Creek	Ephemeral	Bloomville	Seneca, OH	Eden
S7H-SE-228	141.54	41° 3' 53.173" N	83° 11' 45.311" W	Unnamed	Ephemeral	Tiffin South	Seneca, OH	Seneca
S7H-SE-231	141.55	41° 3' 53.859" N	83° 11' 46.148" W	Unnamed	Ephemeral	Tiffin South	Seneca, OH	Seneca
S7H-SE-232	142.19	41° 4' 6.140" N	83° 12' 27.306" W	Sandusky River	Perennial	Tiffin South	Seneca, OH	Seneca

**TABLE 2**  
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Stream ID	Approx. MP	Latitude	Longitude	Stream Name	Type	USGS Quad	County, State	Township
<b>Mainline B, cont'd</b>								
S1M-SE-112	142.23	41° 4' 6.333" N	83° 12' 29.746" W	Unnamed	Ephemeral	Tiffin South	Seneca, OH	Seneca
S1M-SE-110	142.57	41° 4' 13.776" N	83° 12' 51.210" W	Bells Run	Perennial	Tiffin South	Seneca, OH	Seneca
S1M-SE-105	143.36	41° 4' 30.499" N	83° 13' 41.211" W	East Branch Wolf Creek	Intermittent	Tiffin South	Seneca, OH	Seneca
S8H-SE-162	144.65	41° 4' 56.418" N	83° 14' 58.678" W	UT to Middle Branch Wolf Creek	Intermittent	Tiffin South	Seneca, OH	Hopewell
S8H-SE-163	144.76	41° 4' 58.365" N	83° 15' 5.231" W	Middle Branch Wolf Creek	Perennial	New Riegel	Seneca, OH	Hopewell
S1M-SE-125	146.41	41° 5' 34.809" N	83° 16' 47.939" W	UT to East Branch Wolf Creek	Intermittent	New Riegel	Seneca, OH	Hopewell
S1M-SE-118	147.24	41° 5' 49.100" N	83° 17' 38.958" W	UT to East Branch Wolf Creek	Intermittent	New Riegel	Seneca, OH	Hopewell
S1M-SE-114	148.25	41° 6' 11.128" N	83° 18' 42.617" W	East Branch Wolf	Perennial	New Riegel	Seneca, OH	Loudon
S8H-SE-169	149.16	41° 6' 29.072" N	83° 19' 39.588" W	UT to Plum Creek	Intermittent	New Riegel	Seneca, OH	Loudon
S8H-SE-170	149.69	41° 6' 40.567" N	83° 20' 12.736" W	UT to Harrison Creek	Intermittent	New Riegel	Seneca, OH	Loudon
S8H-SE-171	150.37	41° 6' 52.925" N	83° 20' 56.408" W	UT to Harrison Creek	Perennial	New Riegel	Seneca, OH	Loudon
S3H-SE-138	152.69	41° 6' 55.052" N	83° 23' 35.825" W	UT to Wolf Creek	Perennial	Alvada	Seneca, OH	Loudon
S3H-HA-140	155.12	41° 7' 30.259" N	83° 26' 9.050" W	East Branch Portage River	Perennial	Fostoria	Hancock, OH	Washington
S8H-HE-155	183.17	41° 16' 6.293" N	83° 53' 46.506" W	Hammer Creek	Perennial	McClure	Henry, OH	Richfield
S1M-HE-102	183.88	41° 16' 16.081" N	83° 54' 33.408" W	Beaver Creek	Perennial	McClure	Henry, OH	Richfield
S8H-HE-153	185.03	41° 16' 25.445" N	83° 55' 51.422" W	UT to Big Creek	Intermittent	McClure	Henry, OH	Richfield
S8H-HE-152	186.58	41° 16' 36.240" N	83° 57' 36.313" W	UT to Beaver Creek	Intermittent	McClure	Henry, OH	Richfield
S8H-HE-150	187.66	41° 16' 48.906" N	83° 58' 46.427" W	UT to Beaver Creek	Intermittent	McClure	Henry, OH	Richfield
S8H-HE-149	188.74	41° 17' 7.209" N	83° 59' 55.170" W	UT to Little Turkeyfoot Creek	Perennial	McClure	Henry, OH	Monroe
S8H-HE-148	189.24	41° 17' 11.490" N	84° 0' 29.286" W	UT to Little Turkeyfoot Creek	Perennial	Malinta	Henry, OH	Monroe

**TABLE 2**  
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Stream ID	Approx. MP	Latitude	Longitude	Stream Name	Type	USGS Quad	County, State	Township
<b>Mainline B, cont'd</b>								
S8H-HE-147	189.75	41° 17' 16.071" N	84° 1' 3.873" W	UT to Little Turkeyfoot Creek	Perennial	Malinta	Henry, OH	Monroe
S4H-HE-406	190.75	41° 17' 18.597" N	84° 2' 12.365" W	UT to South Turkeyfoot Creek	Perennial	Malinta	Henry, OH	Monroe
S8H-HE-136	192.84	41° 17' 39.248" N	84° 4' 33.112" W	UT to Lost Creek	Intermittent	Malinta	Henry, OH	Monroe
S8H-HE-138	193.47	41° 17' 50.682" N	84° 5' 13.144" W	UT to Lost Creek	Ephemeral	Malinta	Henry, OH	Monroe
S8H-HE-133	194.93	41° 18' 5.205" N	84° 6' 49.902" W	UT to School Creek	Perennial	Malinta	Henry, OH	Monroe
S1M-HE-123	198.81	41° 18' 28.478" N	84° 11' 12.022" W	UT to Maumee River	Intermittent	Florida	Henry, OH	Flat Rock
S8H-HE-126	200.30	41° 18' 40.980" N	84° 12' 50.965" W	UT to Maumee River	Ephemeral	Florida	Henry, OH	Flat Rock
S8H-HE-127	200.30	41° 18' 40.516" N	84° 12' 52.257" W	UT to Maumee River	Ephemeral	Florida	Henry, OH	Flat Rock
S8H-HE-124	200.38	41° 18' 42.209" N	84° 12' 55.763" W	Maumee River	Perennial	Florida	Henry, OH	Flat Rock
S8H-HE-119	200.52	41° 18' 45.536" N	84° 13' 4.991" W	UT to Maumee River	Intermittent	Florida	Henry, OH	Flat Rock
S8H-HE-118	200.54	41° 18' 45.655" N	84° 13' 6.398" W	UT to Maumee River	Perennial	Florida	Henry, OH	Flat Rock
S8H-DE-114	201.19	41° 18' 54.928" N	84° 13' 48.914" W	UT to Maumee River	Intermittent	Florida	Defiance, OH	Richland
S8H-DE-106	201.66	41° 19' 2.017" N	84° 14' 19.965" W	UT to Brubaker Creek	Perennial	Florida	Defiance, OH	Richland
<b>Market Segment</b>								
S3H-DF-100	0.25	41° 21' 39.967" N	84° 21' 49.307" W	Mattock Ditch	Perennial	Defiance East	Defiance, OH	Tiffin
S3H-DF-101	0.57	41° 21' 56.477" N	84° 21' 46.328" W	Mattock Ditch	Perennial	Defiance East	Defiance, OH	Tiffin
S4H-DF-232	2.54	41° 23' 23.756" N	84° 20' 41.022" W	Doty Run	Perennial	Ridgeville Corners	Defiance, OH	Tiffin
S4H-HN-100	6.45	41° 26' 14.669" N	84° 18' 31.771" W	Coon Creek	Intermittent	Ridgeville Corners	Henry, OH	Ridgeville
S4H-HN-226	7.99	41° 27' 4.157" N	84° 17' 26.563" W	UT to Owl Creek	Intermittent	Ridgeville Corners	Henry, OH	Ridgeville
S2H-HN-111	8.88	41° 27' 45.340" N	84° 17' 45.448" W	UT to Owl Creek	Perennial	Ridgeville Corners	Henry, OH	Ridgeville
S4H-HN-101	9.26	41° 28' 5.281" N	84° 17' 45.561" W	UT to Owl Creek	Intermittent	Ridgeville Corners	Henry, OH	Ridgeville
S3H-HN-135	9.59	41° 28' 22.552" N	84° 17' 44.411" W	Owl Creek	Perennial	Ridgeville Corners	Henry, OH	Ridgeville

**TABLE 2**  
**Rover Pipeline Project - Mainline and Market Segment**  
**USACE, Buffalo District**  
**Waters of the U.S. Delineation Report – Surface Waters in Ohio**

Stream ID	Approx. MP	Latitude	Longitude	Stream Name	Type	USGS Quad	County, State	Township
<b>Market Segment, cont'd</b>								
S1H-FU-124	11.17	41° 29' 39.769" N	84° 17' 15.708" W	UT to Brush Creek	Ephemeral	Ridgeville Corners	Fulton, OH	German
S4H-FU-103	12.26	41° 30' 27.368" N	84° 16' 43.345" W	UT to Brush Creek	Intermittent	Archbold	Fulton, OH	German
S4H-FU-213	12.59	41° 30' 44.191" N	84° 16' 43.634" W	UT to Brush Creek	Intermittent	Archbold	Fulton, OH	German
S4H-FU-224	13.29	41° 31' 19.115" N	84° 16' 31.432" W	Brush Creek	Perennial	Archbold	Fulton, OH	German
S4H-FU-105	13.80	41° 31' 47.010" N	84° 16' 23.057" W	Brush Creek	Perennial	Archbold	Fulton, OH	German
S4H-FU-107	14.25	41° 32' 4.452" N	84° 16' 15.868" W	Brush Creek	Perennial	Archbold	Fulton, OH	German
S4H-FU-108	14.61	41° 32' 18.138" N	84° 15' 59.216" W	Brush Creek	Perennial	Archbold	Fulton, OH	German
S4H-FU-220	18.11	41° 35' 11.904" N	84° 15' 8.984" W	UT to Tiffin River	Intermittent	Archbold	Fulton, OH	German
S4H-FU-215	20.30	41° 36' 58.254" N	84° 14' 26.279" W	UT to Old Bean Creek	Perennial	Wauseon	Fulton, OH	Franklin
S4H-FU-217	21.36	41° 37' 50.369" N	84° 14' 4.051" W	UT to Old Bean Creek	Perennial	Morenci	Fulton, OH	Franklin
S4H-FU-218	21.77	41° 38' 8.637" N	84° 13' 48.790" W	Old Bean Creek	Perennial	Morenci	Fulton, OH	Franklin
S4H-FU-219	22.71	41° 38' 51.081" N	84° 13' 23.747" W	UT to Old Bean Creek	Intermittent	Morenci	Fulton, OH	Chesterfield

**TABLE 3**  
**Rover Pipeline Project - Mainline and Market Segment**  
**USACE, Buffalo District**  
**Waters of the U.S. Delineation Report - Ponds in Ohio**

Waterbody ID	Approx. MP	Latitude	Longitude	Type	USGS Quad	County, State	Township
<b>Mainline A</b>							
WB2H-DE-114	203.21	41° 19' 24.016" N	84° 16' 2.215" W	Pond-Manmade	Defiance East	Defiance, OH	Richland
<b>Market Segment</b>							
WB4H-FU-106	13.84	41° 31' 45.933" N	84° 16' 26.991" W	Pond-Manmade	Archbold	Fulton, OH	German



**TABLE 4**  
**Rover Pipeline Project - Mainline and Market Segment**  
**USACE, Buffalo District**  
**Waters of the U.S. Delineation Report - Drainages in Ohio**

Drainage ID	Approx. MP	Latitude	Longitude	Drainage Type	Type	USGS Quad	County, State	Township
<b>Mainline A</b>								
D4H-CR-161	120.13	40° 55' 21.014" N	82° 50' 26.797" W	Ditch (Non-Roadside)	Intermittent	New Washington	Crawford, OH	Cranberry
D4H-CR-162	120.83	40° 55' 37.611" N	82° 51' 9.507" W	Ditch (Non-Roadside)	Intermittent	New Washington	Crawford, OH	Cranberry
D4H-CR-163	124.62	40° 57' 1.985" N	82° 55' 2.454" W	Ditch (Roadside)	Ephemeral	Chatfield	Crawford, OH	Chatfield
D3H-SE-136	152.16	41° 6' 53.322" N	83° 22' 58.336" W	Ditch (Non-Roadside)	Ephemeral	Alvada	Seneca, OH	Loudon
D1M-HE-103	183.53	41° 16' 10.061" N	83° 54' 10.841" W	Ditch (Roadside)	Ephemeral	McClure	Henry, OH	Richfield
D1M-HE-101	185.55	41° 16' 30.261" N	83° 56' 26.610" W	Ditch (Roadside)	Intermittent	McClure	Henry, OH	Richfield
D2H-DE-113	203.16	41° 19' 24.772" N	84° 15' 57.827" W	Ditch (Roadside)	Ephemeral	Defiance East	Defiance, OH	Richland
D2H-DE-116	203.96	41° 19' 41.752" N	84° 16' 44.499" W	Ditch (Non-Roadside)	Ephemeral	Defiance East	Defiance, OH	Richland
D4H-DE-111	206.35	41° 19' 58.533" N	84° 19' 24.090" W	Ditch (Roadside)	Intermittent	Defiance East	Defiance, OH	Richland
D8H-DE-104	207.01	41° 20' 18.365" N	84° 19' 59.223" W	Ditch (Non-Roadside)	Ephemeral	Defiance East	Defiance, OH	Richland
D5H-DE-100	207.19	41° 20' 25.831" N	84° 19' 58.771" W	Ditch (Roadside)	Ephemeral	Defiance East	Defiance, OH	Richland
<b>Mainline B</b>								
D4H-CR-164	124.67	40° 57' 4.751" N	82° 55' 3.385" W	Ditch (Non-Roadside)	Intermittent	Chatfield	Crawford, OH	Chatfield
D7H-SE-218	134.87	41° 1' 21.391" N	83° 5' 7.706" W	Ditch (Non-Roadside)	Ephemeral	Bloomville	Seneca, OH	Eden
D8H-SE-159	136.03	41° 1' 48.991" N	83° 6' 13.948" W	Ditch (Roadside)	Ephemeral	Bloomville	Seneca, OH	Eden
D8H-SE-160	137.00	41° 2' 10.486" N	83° 7' 12.321" W	Ditch (Roadside)	Ephemeral	Bloomville	Seneca, OH	Eden
D7H-SE-227	139.96	41° 3' 15.498" N	83° 10' 12.032" W	Ditch (Roadside)	Ephemeral	Tiffin South	Seneca, OH	Eden
D8H-SE-164	144.75	41° 4' 59.008" N	83° 15' 4.653" W	Other	Ephemeral	New Riegel	Seneca, OH	Hopewell
D8H-SE-166	145.45	41° 5' 13.226" N	83° 15' 49.200" W	Ditch (Roadside)	Ephemeral	New Riegel	Seneca, OH	Hopewell
D8H-SE-168	147.86	41° 6' 1.861" N	83° 18' 17.154" W	Ditch (Roadside)	Ephemeral	New Riegel	Seneca, OH	Hopewell
D1M-SE-117	148.99	41° 6' 26.336" N	83° 19' 28.147" W	Ditch (Roadside)	Ephemeral	New Riegel	Seneca, OH	Loudon

**TABLE 4**  
**Rover Pipeline Project - Mainline and Market Segment**  
**USACE, Buffalo District**  
**Waters of the U.S. Delineation Report - Drainages in Ohio**

Drainage ID	Approx. MP	Latitude	Longitude	Drainage Type	Type	USGS Quad	County, State	Township
<b>Mainline B, cont'd</b>								
D3H-SE-139	153.13	41° 6' 54.351" N	83° 24' 5.051" W	Ditch (Roadside)	Ephemeral	Alvada	Seneca, OH	Loudon
D3H-WO-120	163.25	41° 12' 3.638" N	83° 32' 5.786" W	Ditch (Roadside)	Ephemeral	Bloomdale	Wood, OH	Perry
D3H-WO-123	180.35	41° 15' 39.903" N	83° 50' 37.028" W	Ditch (Roadside)	Ephemeral	Weston	Wood, OH	Milton
D3H-WO-124	180.86	41° 15' 43.730" N	83° 51' 11.828" W	Ditch (Non-Roadside)	Ephemeral	Weston	Wood, OH	Milton
D3H-WO-121	181.92	41° 15' 54.850" N	83° 52' 21.891" W	Ditch (Non-Roadside)	Ephemeral	Weston	Wood, OH	Milton
D3H-HE-122	182.44	41° 15' 59.568" N	83° 52' 57.084" W	Ditch (Roadside)	Ephemeral	McClure	Henry, OH	Richfield
D3H-HE-125	182.95	41° 16' 4.467" N	83° 53' 31.746" W	Ditch (Non-Roadside)	Ephemeral	McClure	Henry, OH	Richfield
D4H-HE-118	184.26	41° 16' 18.581" N	83° 54' 58.976" W	Ditch (Non-Roadside)	Ephemeral Ag Drainage	McClure	Henry, OH	Richfield
D1M-HE-100	186.32	41° 16' 34.775" N	83° 57' 18.641" W	Ditch (Roadside)	Ephemeral	McClure	Henry, OH	Richfield
D4H-HE-117	186.58	41° 16' 49.954" N	83° 57' 36.608" W	Ditch (Non-Roadside)	Intermittent	McClure	Henry, OH	Richfield
D4H-HE-116	187.89	41° 17' 13.655" N	83° 58' 46.684" W	Ditch (Non-Roadside)	Intermittent	McClure	Henry, OH	Richfield
D8H-HE-151	188.09	41° 16' 59.919" N	83° 59' 11.953" W	Ditch (Roadside)	Ephemeral	McClure	Henry, OH	Richfield
<b>Market Segment</b>								
D1M-DE-169	0.07	41° 21' 31.066" N	84° 21' 38.970" W	Ditch (Roadside)	Intermittent	Defiance East	Defiance, OH	Tiffin
D4H-DF-230	2.86	41° 23' 39.689" N	84° 20' 32.223" W	Ditch (Non-Roadside)	Intermittent	Ridgeville Corners	Defiance, OH	Tiffin
D4H-DF-230	2.89	41° 23' 39.686" N	84° 20' 30.110" W	Ditch (Non-Roadside)	Intermittent	Ridgeville Corners	Defiance, OH	Adams
D3H-DF-126	4.40	41° 24' 47.874" N	84° 19' 43.170" W	Ditch (Roadside)	Ephemeral	Ridgeville Corners	Defiance, OH	Adams
D3H-DF-127	5.03	41° 25' 17.052" N	84° 19' 27.895" W	Ditch (Roadside)	Ephemeral	Ridgeville Corners	Defiance, OH	Adams
D3H-DF-128	5.31	41° 25' 29.350" N	84° 19' 19.095" W	Ditch (Non-Roadside)	Ephemeral	Ridgeville Corners	Defiance, OH	Adams
D3H-DF-129	5.51	41° 25' 39.168" N	84° 19' 13.832" W	Ditch (Roadside)	Ephemeral	Ridgeville Corners	Defiance, OH	Adams
D3H-HN-131	5.78	41° 25' 50.200" N	84° 19' 4.381" W	Ditch (Non-Roadside)	Ephemeral	Ridgeville Corners	Henry, OH	Ridgeville
D3H-HN-132	6.91	41° 26' 31.329" N	84° 18' 14.030" W	Ditch (Roadside)	Ephemeral	Ridgeville Corners	Henry, OH	Ridgeville

**TABLE 4**  
**Rover Pipeline Project - Mainline and Market Segment**  
**USACE, Buffalo District**  
**Waters of the U.S. Delineation Report - Drainages in Ohio**

Drainage ID	Approx. MP	Latitude	Longitude	Drainage Type	Type	USGS Quad	County, State	Township
<b>Market Segment, cont'd</b>								
D3H-HN-133	7.55	41° 26' 45.697" N	84° 17' 38.736" W	Ditch (Non-Roadside)	Ephemeral	Ridgeville Corners	Henry, OH	Ridgeville
D4H-HN-225	8.34	41° 27' 22.529" N	84° 17' 28.596" W	Ditch (Non-Roadside)	Intermittent	Ridgeville Corners	Henry, OH	Ridgeville
D3H-HN-134	8.37	41° 27' 24.330" N	84° 17' 27.058" W	Ditch (Non-Roadside)	Ephemeral	Ridgeville Corners	Henry, OH	Ridgeville
D4H-FU-211	10.86	41° 29' 24.210" N	84° 17' 26.139" W	Ditch (Non-Roadside)	Intermittent	Ridgeville Corners	Fulton, OH	German
D4H-FU-115	11.88	41° 30' 11.406" N	84° 16' 57.597" W	Ditch (Non-Roadside)	Intermittent	Archbold	Fulton, OH	German
D4H-FU-109	14.96	41° 32' 36.410" N	84° 15' 56.538" W	Ditch (Roadside)	Intermittent	Archbold	Fulton, OH	German
D4H-FU-214	19.41	41° 36' 17.167" N	84° 14' 51.896" W	Ditch (Non-Roadside)	Intermittent	Wauseon	Fulton, OH	Franklin