

Attachment H

Aquatic Resources

in support of Texas Eastern's
Request for State Water Quality Certification

1. Watercourses HUC

No watercourses will be crossed by the Project at the Removal of Existing Receiver Site, Proposed Receiver Site, the Armagh Compressor Station Modifications, or any of the Contractor Yards. The Aquatic Resources Impact Table identifies the watercourses that will be crossed by the Project. Mapping showing the Project facilities in relation to affected and nearby watercourses are provided in Attachment D.

Line 28 Loop

On March 24, 2022, field surveys identified two perennial streams and one intermittent stream within the Line 28 Loop study area (Attachment I). The delineated watercourses are located within the HUC-12 Little Swatara Creek watershed (HUC 020503050703) in Lebanon County, Pennsylvania and are identified as follows:

- S-KMB-001 is a perennial waterway, listed as an unnamed tributary (UNT) to Deep Run (State Watercourse ID: PA-SCR-56396457);
- S-KMB-002 is an intermittent stream and flows north from Wetland-MJU-851 towards Deep Run, and
- S-KMB-003 is a perennial waterway, called Deep Run (State Watercourse ID: PA-SCR-56396235).

Two of the three delineated streams are within the Line 28 Loop workspace and will be temporarily impacted during Project construction. Impacts to stream S-KMB-002 will be avoided.

Deep Run and its UNTs have a 25 Pa. Code Chapter 93 designated protected aquatic life use of Warm Water Fishes (WWF) and Migratory Fishes (MF). Deep Run is not listed as any of the following Pennsylvania Fish and Boat Commission (PFBC) special designations: Stocked Trout Waters, Wild Trout Waters (Natural Reproduction), Class A Wild Trout Stream, or Wilderness Trout Stream.

Entriiken Compressor Station Modifications

The Entriiken Compressor Station is located within the Raystown Watershed and the Great Trough Creek Sub-Watershed (HUC 020503030702). Drainage from the Project boundary flows north into Great Trough Creek, a designated Trout Stocked (TSF) and Migratory Fishes (MF) stream under 25 Pa. Code Chapter 93 designations. Great Trough Creek is also classified by the PFBC as a stocked trout watercourse.

A delineation of waters of the U.S. (WOTUS) was conducted on December 13 and 14, 2021. Six minor (<10 foot wide), jurisdictional streams were identified within the study area, and no non-additional jurisdictional watercourses were identified. After delineations were completed, Texas Eastern reduced workspace to avoid impacts to five of the six delineated streams. One ephemeral stream, S005, will be temporarily impacted for an equipment crossing. A temporary equipment bridge crossing will be installed over S005 for temporary construction access. Water flow will not be impeded. The temporary equipment bridge will be removed at the completion of the Project, and the riparian area will be regraded and seeded with an approved seed mix.

2. Wetlands

As detailed within the Wetland Delineation Reports (Attachment I), three potentially jurisdictional wetlands were identified within the Line 28 Loop study area. This included two palustrine emergent (PEM) wetlands and one PEM/palustrine scrub-shrub (PSS) wetland.

The proposed Line 28 Loop route was chosen to minimize impacts to wetlands and streams. Temporary impacts to the three PEM wetlands will occur during construction. The wetlands will be restored in-kind following construction, so there will be no permanent loss of function or value. The PSS portion of Wetland W-MJU-850 will be avoided by construction activities, so that only PEM wetlands will be temporarily disturbed. Proposed impacts are summarized in the Aquatic Resources Impact Table.

No wetlands were identified within the Removal of the Existing Receiver Site nor Proposed Receiver Site either by desktop survey or field survey. There will be no wetland impacts in this location.

Although three wetlands were delineated within the study area, the proposed Armagh Compressor Station Modifications will result in no wetland impacts. The workspace was reduced to exclude all wetland areas to avoid wetland impacts. All delineated wetlands are outside the proposed workspace.

Similarly, five wetlands were delineated within the study area for the proposed Entriken Compressor Station Modifications. After wetland delineations were completed, Texas Eastern revised the workspace boundaries to avoid impacts to all delineated wetlands at this location. Although there are some wetlands are nested within the workspace, impacts will be avoided. High visibility safety fence and erosion control devices will be installed along wetland boundaries to demark the workspace limits.



AQUATIC RESOURCE IMPACT TABLE
FOR PENNSYLVANIA CHAPTER 105 WATER OBSTRUCTION AND ENCROACHMENT APPLICATION / REGISTRATION

Project / Site Name: Appalachia to Market II and Armagh and Entriken Replacement Projects – Line 28 Loop
Date: August 2022

DEP USE ONLY	Project Information						PA DEP / 105						Enter Only If Different from DEP Impacts Army Corps Impacts:	
	PADEP Permit Number	Structure / Activity unique identifier	Aquatic Resource Type	Latitude dd nad83	Longitude dd nad83	Waters Name	PA Code Chapter 93 Designation	Work Proposed	DEP Impact Type temp / perm	ACOE Impact Type temp / perm	Watercourse Impact Top of Bank to Top of Bank Length and Width in feet	Floodway Impact Top of Bank Landward Length and Width in feet	Wetland Impact Dimensions Length and Width in feet	Watercourse Impact Length and Width in feet
	W-MJU-851	Riverine floodplain complex (R2c)	40.393540	-76.364520		Other	Access / Temp. Workspace	Temp	Temp	NA	NA	66 – 73.5 (3,935 ft ²)*	NA	66 – 73.5 (3,935 ft ²)*
	W-MJU-851	Riverine floodplain complex (R2c)	40.393679	-76.364472		Other	Directional Bore / Permanent ROW Maint.	Perm	NA	NA	NA	63 – 26.5 (1,662 ft ²)*	NA	0
	S-KMB-002	Perennial	40.393854	-76.364754	UNT to Deep Run	WWF	Extra workspace	Temp	Temp	NA	10 – 26 (181 ft ²)*	NA	10 – 26 (181 ft ²)*	NA
	W-MJU-850	Riverine floodplain complex (R2c)	40.396382	-76.357374		Other	Access / Temp. Workspace	Temp	Temp	NA	NA	267 – 48.5 (12,605 ft ²)*	NA	267 – 48.5 (12,605 ft ²)*
	W-MJU-850	Riverine floodplain complex (R2c)	40.396448	-76.357497		Other	Excavation / Permanent ROW Maint.	Perm	Temp	NA	NA	267 – 26.5 (7,112 ft ²)*	NA	267 – 26.5 (7,112 ft ²)*
	S-KMB-001	Intermittent	40.396217	-76.357770	UNT to Deep Run	WWF	Access / Temp. Workspace	Temp	Temp	20 – 5705 (916 ft ²)*	36 – 48.5 (1,935 ft ²)*	NA	20 – 5705 (916 ft ²)*	NA
	S-KMB-001	Intermittent	40.396286	-76.357896	UNT to Deep Run	WWF	Excavation / Permanent ROW Maint.	Perm	Temp	15 – 31.5 (422 ft ²)*	28 – 26.5 (847 ft ²)*	NA	15 – 31.5 (422 ft ²)*	NA
	W-MJU-852	Riverine floodplain complex (R2c)	40.404537	-76.336834		Other	Access / Temp. Workspace	Temp	Temp	NA	NA	130 – 36 (4,372 ft ²)*	NA	130 – 36 (4,372 ft ²)*
	W-MJU-852	Riverine floodplain complex (R2c)	40.404535	-76.337146		Other	Excavation / Permanent ROW Maint.	Perm	Temp	NA	NA	68 – 13 (843 ft ²)*	NA	68 – 13 (843 ft ²)*
	S-KMB-003	Perennial	40.404550	-76.336796	Deep Run	WWF	Access / Temp. Workspace	Temp	Temp	6 – 94 (561 ft ²)*	137 – 29 (3,597 ft ²)*	NA	6 – 94 (561 ft ²)*	NA
	S-KMB-003	Perennial	40.404589	-76.337003	Deep Run	WWF	Excavation / Permanent ROW Maint.	Perm	Temp	6 – 32 (192 ft ²)*	157 – 32 (3,081 ft ²)*	NA	6 – 32 (192 ft ²)*	NA

* The area of impact (sf) provided in the table and on the Site Plan were calculated in a CAD program and do not equal the product of the length and the width of the proposed impact.

PADEP Impact Type: temporary or permanent.

Permanent Impacts are those areas affected by a water obstruction or encroachment that consist of both direct and indirect impacts that result from the placement or construction of a water obstruction or encroachment and include areas necessary for the operation and maintenance of the water obstruction or encroachment located in, along or across, or projecting into a watercourse, floodway or body of water.

Temporary Impacts are those areas affected during the construction of a water obstruction or encroachment that consists of both direct and indirect impacts located in, along or across, or projecting into a watercourse, floodway or body of water that are restored upon completion of construction. This does not include areas that will be maintained as a result of the operation and maintenance of the water obstruction or encroachment located in, along or across, or projecting into a watercourse, floodway or body of water (these are considered permanent impacts).