

**Appendix D1  
Pennsylvania Wetlands Crossed by the Project Workspace in the Delaware River Basin - Delineated Wetlands**

MP <sup>a</sup>	County	Latitude (ddnad83) <sup>1</sup>	Longitude (ddnad83) <sup>1</sup>	Wetland ID <sup>2</sup>	Wetland ID Method	Wetland Cover Type <sup>3</sup>	USGS HUC-8 Watershed	Anticipated Resource Value Classification <sup>4</sup>	Crossing Width (ft) <sup>5</sup>	Acres Affected <sup>6,7,8</sup>		Proposed Pipeline Crossing Method <sup>9</sup>	Proposed Equipment Crossing Method	Alignment Sheet, Plan Sheet, or Figure#
										Temp. ROW	Perm. ROW			
<b>PennEast Mainline - Upper Delaware River Basin</b>														
14.9	Luzerne	41.22972	-75.74945	043015_JC_1001_PFO	Field Delineation	PFO	Lehigh	Exceptional (iii)	154	0.06	0.16	OC	Matted	000-03-01-030
15.0	Luzerne	41.22967	-75.74950	043015_JC_1001_PEM	Field Delineation	PEM	Lehigh	Exceptional (iii)	152***	0.01	0.00	N/A	Matted	000-03-01-030
15.7, AR-31C	Luzerne	41.20288	-75.71023	112014_JC_001_PSS	Field Delineation	PSS	Lehigh	Other	389***	0.25	0.00	N/A	Matted	000-03-01-036
15.7, AR-31C	Luzerne	41.21819	-75.73386	112114_JC_003B_PSS	Field Delineation	PSS	Lehigh	Other	65***	0.03	0.00	N/A	Matted	000-03-01-033
15.7, AR-31C	Luzerne	41.21764	-75.73289	112114_JC_003A_PSS	Field Delineation	PSS	Lehigh	Other	143***	0.07	0.00	N/A	Matted	000-03-01-033
15.7, AR-31C	Luzerne	41.21554	-75.72935	112114_JC_002A_PSS	Field Delineation	PSS	Lehigh	Other	215***	0.12	0.00	N/A	Matted	000-03-01-033
15.7, AR-31C	Luzerne	41.21132	-75.72263	112014_JC_002_PSS	Field Delineation	PSS	Lehigh	Other	208***	0.14	0.00	N/A	Matted	000-03-01-034
16.0	Luzerne	41.21819	-75.73496	112114_JC_003B_PFO	Field Delineation	PFO	Lehigh	Other	639	0.34	0.73	OC	Matted	000-03-01-033
16.2	Luzerne	41.21740	-75.73354	112114_JC_003B_PSS	Field Delineation	PSS	Lehigh	Other	3	0.00	0.01	OC	Matted	000-03-01-033
16.2	Luzerne	41.21720	-75.73338	112114_JC_003A_PSS	Field Delineation	PSS	Lehigh	Other	165	0.09	0.19	OC	Matted	000-03-01-033
16.4	Luzerne	41.21537	-75.73048	112114_JC_002_PSS	Field Delineation	PSS	Lehigh	Other	87	0.06	0.10	OC	Matted	000-03-01-033
16.4	Luzerne	41.21538	-75.73033	112114_JC_002_PEM	Field Delineation	PEM	Lehigh	Other	38***	0.00	0.00	N/A	Matted	000-03-01-033
16.5	Luzerne	41.21441	-75.72922	112014_JC_004_PEM	Field Delineation	PEM	Lehigh	Other	50***	0.02	0.00	N/A	Matted	000-03-01-033
16.8	Luzerne	41.21098	-75.72335	112014_JC_002_PEM	Field Delineation	PEM	Lehigh	Other	306***	0.03	0.02	N/A	Matted	000-03-01-034
16.8	Luzerne	41.21107	-75.72366	112014_JC_002_PFO	Field Delineation	PFO	Lehigh	Other	218	0.10	0.24	OC	Matted	000-03-01-034
17.7	Luzerne	41.20286	-75.71126	112014_JC_001_PEM	Field Delineation	PEM	Lehigh	Other	31***	0.00	0.00	N/A	Matted	000-03-01-036
17.7	Luzerne	41.20249	-75.71092	112014_JC_001_PFO	Field Delineation	PFO	Lehigh	Other	332	0.15	0.37	OC	Matted	000-03-01-036
19.6	Luzerne	41.17946	-75.69657	121614_JC_001_PFO	Field Delineation	PFO	Lehigh	Exceptional (iii)	206	0.10	0.24	OC	Matted	000-03-01-040
19.7	Luzerne	41.17812	-75.69674	121614_JC_001_PEM	Field Delineation	PEM	Lehigh	Exceptional (iii)	33***	0.00	0.00	N/A	Matted	000-03-01-040
22.5	Luzerne	41.13872	-75.69037	102115_WA_001_PEM	Field Delineation	PEM	Lehigh	Other	125***	0.01	0.00	N/A	Matted	000-03-01-045 / 046
22.7	Luzerne	41.13568	-75.68933	102115_WA_003_PFO	Field Delineation	PFO	Lehigh	Other	28***	0.01	0.01	N/A	Matted	000-03-01-046
24.2	Carbon	41.11610	-75.67899	110614_JC_004_PSS	Field Delineation	PSS	Lehigh	Other	2***	0.00	0.00	N/A	Matted	000-03-01-049
24.2	Carbon	41.11556	-75.67864	110614_JC_004_PFO	Field Delineation	PFO	Lehigh	Other	230***	0.08	0.00	N/A	Matted	000-03-01-049
24.5	Carbon	41.11140	-75.67590	110614_JC_002B_PFO	Field Delineation	PFO	Lehigh	Other	24***	0.01	0.00	N/A	Matted	000-03-01-050
26.4	Carbon	41.08608	-75.66225	102114_JC_001B_PFO	Field Delineation	PFO	Lehigh	Exceptional (iii)	28	0.01	0.03	OC	Matted	000-03-01-053
26.5	Carbon	41.08165	-75.65968	102114_JC_001_PEM	Field Delineation	PEM	Lehigh	Exceptional (iii)	145	0.16	0.42	OC	Matted	000-03-01-053 / 054
26.7	Carbon	41.08182	-75.65987	102114_JC_001A_PSS	Field Delineation	PSS	Lehigh	Exceptional (iii)	303***	0.13	0.08	OC	Matted	000-03-01-054
26.9R2	Carbon	41.08097	-75.65875	102114_JC_001_PEM	Field Delineation	PEM	Lehigh	Exceptional (iii)	25	0.00	0.00	HDD	N/A	000-03-01-054
27.0R2	Carbon	41.08067	-75.65855	102314_JC_004_PEM	Field Delineation	PEM	Lehigh	Exceptional (iii)	188	0.00	0.00	HDD	N/A	000-03-01-054
27.1R2	Carbon	41.07928	-75.65760	102314_JC_002_PFO	Field Delineation	PFO	Lehigh	Exceptional (iii)	74	0.00	0.00	HDD	NA	000-03-01-054
27.1R2	Carbon	41.07718	-75.65615	102314_JC_002_PSS	Field Delineation	PSS	Lehigh	Exceptional (iii)	1427	0.00	0.00	HDD	NA	000-03-01-054 / 055
27.7R2	Carbon	41.07133	-75.65262	102214_JC_001_PEM	Field Delineation	PEM	Lehigh	Other	89***	0.00	0.00	N/A	Matted	000-03-01-056
28.1R2	Carbon	41.06654	-75.64930	102314_JC_003_PSS	Field Delineation	PSS	Lehigh	Other	74***	0.01	0.00	N/A	Matted	000-03-01-056

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										Temp. ROW	Perm. ROW			
29.6R2	Carbon	41.05216	-75.62920	042415_JC_1005_PEM	Field Delineation	PEM	Lehigh	Exceptional (iii)	1,182***	0.12	0.12	N/A	Matted	000-03-01-059 / 060
29.6R2	Carbon	41.05228	-75.62913	050115_JC_1001_PFO	Field Delineation	PFO	Lehigh	Exceptional (iii)	843	0.41	0.89	OC	Matted	000-03-01-059 / 060
30.1R2	Carbon	41.04572	-75.62783	042415_JC_1004_PEM	Field Delineation	PEM	Lehigh	Other	643***	0.08	0.08	N/A	Matted	000-03-01-060 / 061
30.4R2	Carbon	41.04226	-75.62699	042415_JC_1003_PSS	Field Delineation	PSS	Lehigh	Other	95	0.00	0.08	OC	Matted	000-03-01-061
31.0R2	Carbon	41.03118	-75.62474	042415_JC_1002_PEM	Field Delineation	PEM	Lehigh	Exceptional (iii)	1,549***	0.17	0.21	N/A	Matted	000-03-01-062 / 063
31.0R2	Carbon	41.03107	-75.62462	042415_JC_1001_PFO	Field Delineation	PFO	Lehigh	Exceptional (iii)	1705	0.78	1.74	OC	Matted	000-03-01-062 / 063
33.2R2	Carbon	41.00250	-75.61278	042115_JC_1001_PSS	Field Delineation	PSS	Lehigh	Exceptional (iii)	30***	0.01	0.00	N/A	Matted	000-03-01-067
33.6R2	Carbon	40.99656	-75.61155	042115_JC_1003_PFO	Field Delineation	PFO	Lehigh	Exceptional (iii)	1	0.14	0.11	OC	Matted	000-03-01-067 / 068
34.6R2	Carbon	40.98211	-75.62062	042315_JC_1001_PFO	Field Delineation	PFO	Lehigh	Exceptional (iii)	893	0.48	0.83	OC	Matted	000-03-01-069 / 070
34.6R2	Carbon	40.98232	-75.62049	042315_JC_1002_PEM	Field Delineation	PEM	Lehigh	Exceptional (iii)	76	0.10	0.25	OC	Matted	000-03-01-069 / 070
34.8R2	Carbon	40.98097	-75.62143	042315_JC_1003_PEM	Field Delineation	PEM	Lehigh	Exceptional (iii)	194***	0.02	0.01	N/A	Matted	000-03-01-070
35.4	Carbon	40.97233	-75.62636	042315_JC_1004_PFO	Field Delineation	PFO	Lehigh	Other	90***	0.01	0.03	OC	Matted	000-03-01-071
35.5	Carbon	40.97007	-75.62743	010716_GM_1001_VP	Field Delineation	Vernal Pool	Lehigh	Other	47***	0.01	0.01	N/A	Matted	000-03-01-072
36.5	Carbon	40.95439	-75.63095	050615_JC_1001_PFO	Field Delineation	PFO	Lehigh	Other	1008	0.51	0.88	OC	Matted	000-03-01-074
36.8	Carbon	40.95255	-75.63150	011116_GM_1001_PFO	Field Delineation	PFO	Lehigh	Other	9***	0.00	0.00	N/A	Matted	000-03-01-074
37.1	Carbon	40.94732	-75.63257	061615_DB_1002_PFO	Field Delineation	PFO	Lehigh	Exceptional (iii)	337	0.19	0.39	OC	Matted	000-03-01-075
37.5	Carbon	40.94335	-75.63459	061615_DB_1001_PEM	Field Delineation	PEM	Lehigh	Exceptional (iii)	59***	0.01	0.01	N/A	Matted	000-03-01-075
43.9	Carbon	40.88314	-75.55433	052215_JC_1002_PFO	Field Delineation	PFO	Lehigh	Exceptional (iii)	61***	0.00	0.00	HDD	NA	000-03-01-088
44.3R2	Carbon	40.88078	-75.54954	061715_DB_1001_PSS	Field Delineation	PSS	Lehigh	Exceptional (iii)	13	0.00	0.00	HDD	NA	000-03-01-089
45.0R2	Carbon	40.87213	-75.54175	052915_JC_1001_PEM	Field Delineation	PEM	Lehigh	Exceptional (iii)	31	0.02	0.04	OC	Matted	000-03-01-091
45.6	Carbon	40.86571	-75.53813	051115_JC_1001_PEM	Field Delineation	PEM	Lehigh	Exceptional (iii)	39	0.03	0.05	OC	Matted	000-03-01-092
48.1	Carbon	40.83776	-75.50898	090914_WA_001_PSS	Field Delineation	PSS	Lehigh	Exceptional (iii)	53	0.01	0.05	OC	Matted	000-03-01-097
48.2	Carbon	40.83712	-75.50876	090914_WA_002_PSS	Field Delineation	PSS	Lehigh	Exceptional (iii)	22	0.00	0.02	OC	Matted	000-03-01-097
52.2	Northampton	40.80083	-75.51375	031516_NJ_008_PEM	Field Delineation	PEM	Lehigh	Other	5	0.00	0.00	OC	Matted	000-03-01-105
52.2	Northampton	40.80077	-75.51346	031516_NJ_007_PEM	Field Delineation	PEM	Lehigh	Other	38***	0.00	0.00	N/A	Matted	000-03-01-105
52.3	Northampton	40.80087	-75.51169	031516_NJ_006_PFO	Field Delineation	PFO	Lehigh	Other	11	0.00	0.01	OC	Matted	000-03-01-105
52.4	Northampton	40.80089	-75.50991	072415_JC_1001_VP	Field Delineation	Vernal Pool	Lehigh	Other	25	0.00	0.03	OC	Matted	000-03-01-105
52.5	Northampton	40.80101	-75.50868	031516_NJ_004_PSS	Field Delineation	PSS	Lehigh	Other	42***	0.02	0.00	N/A	Matted	000-03-01-105 / 106
52.6	Northampton	40.80095	-75.50615	072415_JC_1003_VP	Field Delineation	Vernal Pool	Lehigh	Other	67	0.02	0.07	OC	Matted	000-03-01-106
52.7	Northampton	40.80097	-75.50567	031516_NJ_002_VP	Field Delineation	Vernal Pool	Lehigh	Other	12	0.00	0.01	OC	Matted	000-03-01-106
53.0	Northampton	40.80185	-75.50032	032916_BT_001_PSS	Field Delineation	PSS	Lehigh	Other	53***	0.02	0.01	N/A	Matted	000-03-01-106
53.5	Northampton	40.79867	-75.49084	051315_JC_1002_PFO	Field Delineation	PFO	Lehigh	Other	105	0.06	0.12	OC	Matted	000-03-01-108
55.9, AR-054	Northampton	40.78044	-75.45673	081815_MK_042_PEM	Field Delineation	PEM	Lehigh	Exceptional (iii)	105***	0.07	0.00	N/A	Matted	000-03-01-112
56.0	Northampton	40.78000	-75.45705	081815_MK_042_PEM	Field Delineation	PEM	Lehigh	Exceptional (iii)	56	0.04	0.06	Bore	Matted	000-03-01-012
59.2	Northampton	40.74740	-75.41355	090414_DB_008_PEM	Field Delineation	PEM	Lehigh	Exceptional (iii)	41	0.03	0.05	OC	Matted	000-03-01-119

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										Temp. ROW	Perm. ROW			
60.6	Northampton	40.73582	-75.39256	090314_DB_004_PEM	Field Delineation	PEM	Lehigh	Exceptional (iii)	60	0.03	0.07	OC	Matted	000-03-01-122
61.5R2	Northampton	40.73441	-75.37735	111214_JC_003_PEM	Field Delineation	PEM	Lehigh	Exceptional (iii)	2***	0.00	0.00	N/A	Matted	000-03-01-123
64.3R2	Northampton	40.71663	-75.33414	042815_JC_1003_PEM	Field Delineation	PEM	Lehigh	Other	38***	0.02	0.00	Bore	Matted	000-03-01-129
70.1	Northampton	40.65336	-75.28570	031716_NJ_001_PEM	Field Delineation	PEM	Lehigh	Other	17***	0.00	0.00	HDD	NA	000-03-01-141
72.1	Northampton	40.62831	-75.27202	092614_GO_002_PFO	Field Delineation	PFO	Lehigh	Exceptional (iii)	78	0.10	0.11	OC	Matted	000-03-01-145
72.5	Northampton	40.62480	-75.26546	051415_JC_1002_PFO	Field Delineation	PFO	Lehigh	Exceptional (iii)	9***	0.00	0.00	N/A	Matted	000-03-01-146
72.6	Northampton	40.62458	-75.26534	051415_JC_1001_PEM	Field Delineation	PEM	Lehigh	Exceptional (iii)	6	0.00	0.01	OC	Matted	000-03-01-146
72.6	Northampton	40.62423	-75.26484	012116_GM_1002_PFO	Field Delineation	PFO	Lehigh	Exceptional (iii)	1***	0.00	0.00	N/A	Matted	000-03-01-146
72.6	Northampton	40.62378	-75.26406	012116_GM_1001_PFO	Field Delineation	PFO	Lehigh	Exceptional (iii)	13	0.03	0.03	OC	Matted	000-03-01-146
72.8	Northampton	40.62226	-75.26215	042815_JC_1001_PFO	Field Delineation	PFO	Lehigh	Exceptional (iii)	879	0.35	0.95	OC	Matted	000-03-01-146
73.1	Northampton	40.61916	-75.25705	031716_NJ_002_PSS	Field Delineation	PSS	Middle Delaware-Musconetcong	Exceptional (iii)	99	0.05	0.13	OC	Matted	000-03-01-147
74.9	Northampton	40.60690	-75.22911	062415_BT_1002_PEM	Field Delineation	PEM	Middle Delaware-Musconetcong	Exceptional (ii,iii)	104	0.04	0.11	OC	Matted	000-03-01-151
75.7	Northampton	40.60154	-75.21881	111314_JC_003_PFO	Field Delineation	PFO	Middle Delaware-Musconetcong	Exceptional (ii,iii)	57***	0.01	0.01	N/A	Matted	000-03-01-152
77.5	Bucks	40.58429	-75.19671	110714_JC_001_PFO	Field Delineation	PFO	Middle Delaware-Musconetcong	Other	65	0.00	0.00	HDD	NA	000-03-01-155
<b>Kidder Compressor Station - Upper Delaware River Basin</b>														
26.7	Carbon	41.08196	-75.66594	082515_BT_004_PEM	Field Delineation	PEM	Lehigh	Exceptional (iii)	29***	0.00	0.00*	N/A	N/A	023A-03-00-001
26.7	Carbon	41.08191	-75.66313	082515_BT_003_PEM	Field Delineation	PEM	Lehigh	Exceptional (iii)	22***	0.00	0.01*	N/A	N/A	023A-03-00-001
26.7	Carbon	41.08156	-75.66076	102114_JC_001_PFO	Field Delineation	PFO	Lehigh	Exceptional (iii)	96***	0.10	0.08	OC	Matted	000-03-01-054
26.7	Carbon	41.08127	-75.66382	112414_JC_004_PFO	Field Delineation	PFO	Lehigh	Other	223***	0.00	0.04**	N/A	N/A	023A-03-00-001
<b>Total Field Delineated Wetlands Affected:</b>									17,534	6.09	10.33			

Notes:

a. All route deviations implemented after the September 2015 FERC Filing are denoted with an "R" and indicate a milepost equation. Mileposts with an "R1" indicate route deviations implemented and provided to FERC prior to the issuance of the Draft Environmental Impact Statement. Mileposts with an "R2" indicate route deviations implemented as part of this September 2016 Supplemental Filing. All mileposts without an "R" indicate that the route has not changed since the September 2015 Application.

1. Latitude and Longitude are in Decimal Degrees (dd) North American Datum 1983 (nad83).

2. Wetland IDs assigned during field delineation or based on GIS data features (NWI) to the closest northern milepost.

3. Wetland Cover Type based on Cowardin, 1979 data

Key:

- PEM = Palustrine Emergent
- PSS = Palustrine Scrub-Shrub
- PFO = Palustrine Forested

4. Resource Value Definitions: Pennsylvania Exceptional Value Wetland as defined by PA Code §105.17 (relating to special criteria for projects affecting important wetlands). Criteria are:

Other: a wetland which does not meet the criteria of a PA Exceptional Value Wetland

- (i) Serves as habitat for fauna or flora listed as "threatened" or "endangered" (Pennsylvania Natural Heritage Program [PNHP]. 2012. County Natural Heritage Inventories Core Habitat of Biological Diversity Areas.);
- (ii) Is located within a 1/2-mile from habitat for fauna or flora listed as "threatened" or "endangered" and wetland dependant;
- (iii) Located in or along the floodplain of the reach or tributaries of a wild trout stream or waters listed as exceptional value;
- (iv) Located at or near existing public or private drinking water supply.

5. Approximate wetland crossing distance measured within the proposed workspace.

6. For Cons. ROW: Square feet affected based on ATWS and temporary workspace.

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										Temp. ROW	Perm. ROW			

For Perm. ROW: Square feet affected based on permanent workspace as presented on GIS shapefile, subject to change based on construction methodologies.

7. Impacts reported as 0.00 not associated with an HDD, as indicated by Proposed Equipment Crossing Method, are values less than 0.005 acres.

8. Acreages that are presented in this table may differ from those presented in federal and state permit applications due to agency-specific calculation methods.

9. Pipeline trench width will vary based upon site-specific conditions to account for worker safety and substrate stability. Construction procedures to preserve the integrity and function of the wetland will be implemented, and the sites will be restored in accordance with FERC's Wetland and Waterbody Construction and Mitigation Procedures and in compliance with applicable permit conditions.

\* Permanent Impact associated with placement of fill.

\*\* Wetland impact area will be located along chain-link security fence located at the station's perimeter. A 20-foot wide buffer will be maintained as PEM wetlands.

\*\*\* Wetland does not cross centerline. Crossing width measured along construction ROW.

Key:

OC = Open Cut

HDD = Horizontal Directional Drilling

N/A =Not Applicable

ROW = Right-of-way