

Aquatic Resources Impact Table

Wetland Resources

Carbon County

Identification			Location					Wetland Temporary Impacts			Wetland Permanent impacts			Crossing Information		
Wetland ID and Crossing Number ¹	State Wetland Classification ²	Cowardin Classification ³	Milepost ⁴	Latitude	Longitude	Municipality ⁵	Quadrangle	Temporary Crossing Length (feet) ⁶	Temporary Crossing Width (feet) ⁷	Temporary Impact Area (acres) ⁸	Permanent Crossing Length (feet) ⁹	Permanent Crossing Width (feet) ¹⁰	Permanent Impact Area (acres) ¹¹	Primary Pipeline Crossing Method ¹²	Secondary Pipeline Crossing Method ¹²	Temporary Equipment Crossing ¹²
PennEast Mainline Pipeline																
110614_JC_004_PSS - 1	Other	PSS1	24.2	41.11564302	-75.67872508	Kidder	Hickory Run	192	26	0.083	-	-	-	N/A - Workspace	-	Matted
110614_JC_004_PSS - 2	Other	PSS1	24.3	41.11447632	-75.67793628	Kidder	Hickory Run	44	24	0.015	-	-	-	N/A - Workspace	-	Matted
082219_MU_1006_PEM	Other	PEM1	24.3	41.113819	-75.677797	Kidder	Hickory Run	34	10	0.004	-	-	-	N/A - Workspace	-	Matted
110614_JC_002B_PFO	Other	PFO1	24.5	41.11139928	-75.67592007	Kidder	Hickory Run	26	18	0.008	-	-	-	N/A - Workspace	-	Matted
102114_JC_001B_PFO	Exceptional (i, iii)	PFO1	26.4	41.08611863	-75.66225785	Kidder	Hickory Run	37	38	0.014	26	30	0.018	CL - Open Cut	-	Matted
102114_JC_001_PEM - 1	Exceptional (i, iii)	PEM1	26.4	41.08600524	-75.66230418	Kidder	Hickory Run	89	14	0.017	-	-	-	N/A - Workspace	-	Matted
102114_JC_001_PEM - 2	Exceptional (i, iii)	PEM1	26.5	41.085284	-75.66190056	Kidder	Hickory Run	683	45	0.222	78	30	0.090	CL - Open Cut	-	Matted
102114_JC_001_PEM - 3	Exceptional (i, iii)	PEM1	26.7	41.08169924	-75.65966411	Kidder	Hickory Run	455	29	0.146	23	40	0.037	N/A - Workspace	-	Matted
102114_JC_001A_PSS - 1	Exceptional (i, iii)	PSS1	26.7	41.08186166	-75.65988363	Kidder	Hickory Run	186	9	0.013	-	-	-	CL - Open Cut	-	Matted
102114_JC_001_PEM - 5	Exceptional (i, iii)	PEM1	26.9R2	41.080958	-75.658755	Kidder	Hickory Run	-	-	-	26	3	0.002	CL - HDD	-	N/A
102114_JC_001A_PSS - 3	Exceptional (i, iii)	PSS1	26.9R2	41.08150868	-75.65963353	Kidder	Hickory Run	10	53	0.008	-	-	-	CL - Open Cut	-	Matted
102314_JC_004_PEM	Exceptional (ii, iii)	PEM1	27R2	41.08073214	-75.65859589	Kidder	Hickory Run	-	-	-	187	3	0.013	CL - HDD	-	N/A
102314_JC_002_PFO - 1	Exceptional (i, iii)	PFO1	27.1R2	41.07945552	-75.65771795	Kidder	Hickory Run	-	-	-	8	3	0.001	CL - HDD	-	N/A
102314_JC_002_PFO - 2	Exceptional (i, iii)	PFO1	27.1R2	41.07935865	-75.65765133	Kidder	Hickory Run	-	-	-	66	3	0.005	CL - HDD	-	N/A
102314_JC_002_PSS	Exceptional (i, iii)	PSS3	27.1R2	41.0789191	-75.65734905	Kidder	Hickory Run	-	-	-	1432	3	0.099	CL - HDD	-	N/A
042415_JC_1005_PEM	Other	PEM1	29.6R2	41.05166967	-75.62908989	Kidder	Hickory Run	1069	5	0.109	824	9	0.087	N/A	-	Matted
050115_JC_1001_PFO	Other	PFO4	29.6R2	41.05341201	-75.62939896	Kidder	Hickory Run	892	44	0.805	841	30	0.519	CL - Open Cut	-	Matted
042415_JC_1003_PSS	Other	PSS3	30.4R2	41.04239203	-75.62701283	Kidder	Hickory Run	112	7	0.013	93	30	0.053	CL - Open Cut	-	Matted
042415_JC_1002_PEM	Exceptional (iii)	PEM1	31.1R2	41.03110958	-75.62471198	Kidder	Hickory Run	1441	5	0.152	1178	10	0.151	CL - Open Cut	-	Matted
042415_JC_1001_PFO	Exceptional (iii)	PFO4	31R2	41.03340534	-75.62514067	Kidder	Hickory Run	1640	43	1.499	1679	30	0.995	CL - Open Cut	-	Matted
110316_GM_1001_PFO	Exceptional (iii)	PFO4	32.6R3	41.01196818	-75.61602006	Kidder	Blakeslee	86	15	0.025	7	18	0.012	CL - Open Cut	-	Matted

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110316_GM_1001_PEM - 1	Exceptional (iii)	PEM1	32.5R2	41.01195203	-75.61603283	Kidder	Blakeslee	54	45	0.046	57	30	0.037	CL - Open Cut	-	Matted
110316_GM_1001_PEM - 2	Exceptional (iii)	PEM1	32.7R3	41.00963509	-75.61541931	Kidder	Blakeslee	142	2	0.003	-	-	-	N/A - Workspace	-	Matted
110316_GM_1001_PEM - 3	Exceptional (iii)	PEM1	32.8R3	41.00884794	-75.61524368	Kidder	Blakeslee	116	21	0.032	9	25	0.033	CL - Open Cut	-	Matted
042115_JC_1003_PFO	Exceptional (iii)	PFO1	33.6R3	40.99655293	-75.6115178	Penn Forest	Pohopoco Mountain	335	40	0.259	159	7	0.014	N/A - Workspace	-	Matted
042315_JC_1002_PEM	Exceptional (i, iii)	PEM1	34.7R2	40.98345341	-75.61984166	Penn Forest	Pohopoco Mountain	712	15	0.107	100	12	0.014	N/A - Workspace	-	Matted
042315_JC_1001_PFO - 1	Exceptional (i, iii)	PFO4	34.7R2	40.9844547	-75.61915201	Penn Forest	Pohopoco Mountain	935	45	0.830	968	30	0.646	CL - Open Cut	-	Matted
042315_JC_1001_PFO - 2	Exceptional (i, iii)	PFO4	34.8R3	40.98106841	-75.62121012	Penn Forest	Pohopoco Mountain	126	30	0.067	25	26	0.018	CL - Open Cut	-	Matted
042315_JC_1004_PFO	Other	PFO4	35.4	40.97231279	-75.62633972	Penn Forest	Christmans	70	12	0.028	92	15	0.013	CL - Open Cut	-	Matted
010716_GM_1001_VP	Other	PEM2	35.5	40.97005798	-75.62740038	Penn Forest	Christmans	47	10	0.011	38	5	0.002	N/A - Workspace	-	Matted
060117_MB_1001_PFO - 1	Exceptional (ii, iii)	PFO1	35.9	40.96435217	-75.62911745	Penn Forest	Christmans	108	30	0.058	40	9	0.004	CL - Open Cut	-	Matted
060117_MB_1001_PFO - 2	Exceptional (ii, iii)	PFO1	36	40.96407467	-75.62927565	Penn Forest	Christmans	320	45	0.279	267	30	0.183	CL - Open Cut	-	Matted
060117_MB_1001_PEM	Exceptional (ii, iii)	PEM1	36	40.96343946	-75.62948394	Penn Forest	Christmans	180	7	0.014	-	-	-	N/A - Workspace	-	Matted
060217_MB_1001_PEM	Exceptional (ii, iii)	PEM1	36.1	40.96185481	-75.62975768	Penn Forest	Christmans	76	7	0.005	-	-	-	N/A - Workspace	-	Matted
060217_MB_1001_PFO	Exceptional (ii, iii)	PFO1	36.1	40.96241274	-75.62956	Penn Forest	Christmans	243	45	0.233	229	30	0.156	CL - Open Cut	-	Matted
050615_JC_1001_PFO - 1	Exceptional (i, ii, iii)	PFO1	36.5R3	40.95599108	-75.63070443	Penn Forest	Christmans	80	45	0.059	37	30	0.023	CL - Open Cut	-	Matted
050615_JC_1001_PFO - 2	Exceptional (i, ii, iii)	PFO1	36.6R3	40.95569979	-75.63075297	Penn Forest	Christmans	1080	45	1.080	1088	30	0.747	CL - Open Cut	-	Matted
061615_DB_1002_PFO	Exceptional (iii)	PFO1	37.1R3	40.947776	-75.63241086	Penn Forest	Christmans	342	45	0.347	341	30	0.235	CL - Open Cut	-	Matted
061615_DB_1001_PEM	Exceptional (iii)	PEM1	37.5	40.94334223	-75.63463974	Penn Forest	Christmans	53	11	0.011	-	-	-	N/A - Workspace	-	Matted
020117_GM_1006_PFO	Exceptional (iii)	PFO1	41.2	40.90303233	-75.59968116	Towamensing	Pohopoco Mountain	138	45	0.066	72	30	0.050	CL - Open Cut	-	Matted
020117_GM_1001_PUB	Other	PEM2	41.5	40.90198781	-75.59411971	Towamensing	Pohopoco Mountain	62	45	0.047	42	30	0.028	CL - Open Cut	-	Matted
041018_WA_002_PSS	Exceptional (iii)	PSS1	44.8R2	40.87432981	-75.54448581	Towamensing	Palmerton	28	15	0.008	8	24	0.006	CL - Open Cut	-	Matted

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052915_JC_1001_PEM	Exceptional (iii)	PEM1	45R2	40.87216661	-75.54176174	Towamensing	Palmerton	42	45	0.039	30	30	0.021	CL - Open Cut	-	Matted
051115_JC_1001_PEM	Exceptional (iii)	PEM1	45.6	40.86567316	-75.53807601	Towamensing	Palmerton	65	45	0.034	53	30	0.037	CL - Open Cut	-	Matted
090914_WA_001_PSS	Exceptional (iii)	PSS1	48.1	40.83783396	-75.50900387	Lower Towamensing	Palmerton	64	18	0.024	55	30	0.036	CL - Open Cut	-	Matted
090914_WA_002_PSS	Exceptional (iii)	PSS1	48.1	40.83715117	-75.50876631	Lower Towamensing	Palmerton	18	41	0.011	23	30	0.013	CL - Open Cut	-	Matted
041117_GM_1001_PFO	Exceptional (i, iii)	PFO4	49.3R3	40.82443663	-75.49927312	Lower Towamensing	Kunkletown	-	-	-	142	3	0.010	CL - Bore	-	-
041117_GM_1001_PSS	Exceptional (i, iii)	PSS1	49.3R3	40.82427778	-75.49922155	Lower Towamensing	Kunkletown	-	-	-	116	3	0.008	CL - Bore	-	-
072618_WA_001_PEM	Exceptional (iii)	PEM1	50.6R3	40.82173812	-75.4792257	Lower Towamensing	Kunkletown	134	45	0.087	61	30	0.045	CL - Open Cut	-	Matted
072618_WA_002_PEM	Exceptional (iii)	PEM2	50.6R4	40.82162425	-75.47945838	Lower Towamensing	Kunkletown	16	7	0.001	-	-	-	N/A - Workspace	-	Matted
Kidder Compressor Station																
112414_JC_004_PEM	Other	PEM1	26.6	41.08221	-75.665297	Kidder	Hickory Run	-	-	-	49	25	0.022	N/A	-	N/A
112414_JC_004_MOSAIC ¹³	Other	PFO1	26.6	41.08174727	-75.66491037	Kidder	Hickory Run	-	-	-	68	44	0.024	N/A	-	N/A
082515_BT_004_PEM	Other	PEM1	26.6	41.08196393	-75.66592055	Kidder	Hickory Run	-	-	-	40	10	0.005	N/A	-	N/A
082515_BT_003_PEM	Other	PEM1	26.7	41.08189419	-75.66313061	Kidder	Hickory Run	-	-	-	41	22	0.009	N/A	-	N/A
112414_JC_004_PFO - 1	Other	PFO1	26.7	41.08101184	-75.66385556	Kidder	Hickory Run	-	-	-	95	41	0.083	N/A	-	N/A
112414_JC_004_PFO - 2	Other	PFO1	26.7	41.080536	-75.664033	Kidder	Hickory Run	-	-	-	69	6	0.005	N/A	-	N/A
102114_JC_001A_PSS - 2	Exceptional (i, iii)	PSS1	26.8R2	41.08163151	-75.65983074	Kidder	Hickory Run	53	9	0.068	54	61	0.001	CL - Open Cut	-	Matted
102114_JC_001_PEM - 4	Exceptional (i, iii)	PEM1	26.8R2	41.08166961	-75.65973893	Kidder	Hickory Run	-	-	-	7	60	0.006	CL - Open Cut	-	Matted
102114_JC_001_PFO	Exceptional (i, iii)	PFO1	26.8R2	41.08142402	-75.66062385	Kidder	Hickory Run	-	-	-	73	60	0.084	CL - Open Cut	-	Matted
TOTAL IMPACTS								12,635	1,200	6.987	11,016	1,120	4.700			

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Notes:

1. In instances where a wetland is crossed by the proposed pipeline or workspace multiple times, crossing numbers (e.g. "-1", "-2") have been added to the Wetland ID.

2. 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:

(i) Serves as habitat for fauna or flora listed as "threatened" or "endangered"

(ii) Is hydrologically connected to or located within a 1/2-mile from habitat for fauna or flora listed as "threatened" or "endangered" and wetland dependent;

(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 along an existing public or private drinking water supply.

3. Wetland Cover Type based on Cowardin, 1979

Key: PEM1 = palustrine emergent, persistent; PEM2 = palustrine emergent, non-persistent; PFO1 = palustrine forested, broad-leaved deciduous; PFO4 = palustrine forested, needle-leaved evergreen; PSS1 = palustrine scrub-shrub, broad-leaved deciduous; PSS3 = palustrine scrub-shrub, broad-leaved evergreen.

4. All route deviations implemented after the FERC Certificate Application are denoted with an "R" and indicate a MP equation. MPs with an "R1" indicate route deviations implemented and provided to FERC prior to the issuance of the DEIS. MPs with an "R2" indicate route deviations implemented as part of the September 2016 Route Update. MPs with an "R3" indicate route deviations implemented post-FERC Certificate issuance. All MPs without an "R" indicate that the route has not changed since the Certificate Application.

5. Sources: PennDOT Pennsylvania municipality boundaries, dated 1/2017 and PennDOT Pennsylvania county boundaries, dated 7/2018. Available at www.pasda.psu.edu.

6. Temporary crossing lengths are measured within the temporary workspace parallel to the pipeline or along the access road centerline. A "-" denotes there are no impacts to the wetland within the temporary workspace.

7. Temporary crossing widths are measured within the temporary workspace perpendicular to the pipeline or access road centerline. A "-" denotes there are no impacts to the wetland within the temporary workspace.

8. Temporary impact acres are measured within the temporary workspace and additional temporary workspace; the measurement does not include acreages impacted within the permanent ROW. A "-" denotes no impacts to the wetland.

9. Permanent crossing lengths are measured along the pipeline centerline, as applicable. In instance where the pipeline does not cross a wetland, the permanent crossing length was measured along the edge of the permanent ROW or permanent aboveground facility. A "-" denotes there are no impacts to the wetland within the permanent ROW.

10. Permanent crossing widths are the width of the permanent workspace, as applicable. In instances where the full permanent workspace does not cross a wetland the permanent crossing width was measured at the widest point of the wetland that intersected the permanent workspace.

11. Permanent impact acres are measured within the permanent ROW or within an aboveground facility footprint. For HDDs and bores, the permanent impact is calculated as the length of the crossing times the pipe diameter. A "-" denotes no impacts to the watercourse or floodway, as applicable.

12. Crossing Type Key for Wetlands:

- CL-Bore = Pipeline centerline crosses under wetland. Construction method is bore.

- CL-HDD = Pipeline centerline crosses under wetland. Construction method is HDD.

- CL-Open Cut = Pipeline centerline impacts wetland. Construction method is open cut.

- Matted = Wetland will be matted for temporary equipment crossing.

- N/A = Not affected by pipeline construction.

- N/A-Workspace = Pipeline trench does not impact wetland.

- "-" = No alternative construction method is proposed.

13. 112414_JC_004_MOSAIC was identified to be a mosaic of 50% PFO and 50% upland area. Therefore 50% of the total delineated acreage is included for impact calculations .