

Attachment G-3 Aquatic Resource Tables

Revised June 2025

Aquatic Resources on Site

Environmental field surveys, including aquatic resources delineation surveys, were conducted along the proposed Project's survey area in October and November 2023, and April and May 2024. The survey corridor was generally 300 feet wide for the Project pipelines, 50 feet wide for the access roads, and at least the size of the Project's aboveground facilities and support sites. Further detail on how resources were identified can be found in the Aquatic Resource Report in Attachment G-1. Table G-3-1 identifies all wetlands by the Project. Table G-3-2 identifies all waterbodies crossed by the Project.

Each wetland that will be crossed by the proposed Project was evaluated in accordance with 025 Pennsylvania Code § 105.17(1) (PA Code 2024b) to determine whether the wetland satisfied the requirements for classification as an Exceptional Value (EV) wetland resource. Under Pennsylvania Code § 105.17(1), EV wetlands are wetlands that exhibit one of more of the following characteristics:

- i. Wetlands which serve as habitat for fauna or flora listed as "threatened" or "endangered" under the Endangered Species Act of 1973 (7 U.S.C.A § 136;16 U.S.C.A. § § 4601-9, 460k-1, 668dd, 715i, 715a, 1362, 1371, 1372, 1402 and 1531 – 1543), the Wild Resource Conservation Act (32 P.S. § § 5301 – 5314), 30 Pa.C.S. (relating to the Fish and Boat Code) or 34 Pa.C.S (relating to the Game and Wildlife Code).
- ii. Wetlands that are hydrologically connected to or located within ½-mile of wetlands identified under subparagraph (i) and that maintain the habitat of the threatened or endangered species within the wetland identified under subparagraph (i).
- iii. Wetlands that are located in or along the floodplain of the reach of a wild trout stream or waters listed as exceptional value under Chapter 93 (relating to water quality standards) and the floodplain of streams tributary thereto, or wetlands within the corridor of a watercourse or body of water that has been designated as a National wild or scenic river in accordance with the Wild and Scenic Rivers Act of 1968 (16 U.S.C.A. § § 1271 – 1287) or designated as wild or scenic under the Pennsylvania Scenic Rivers Act (32 P.S. § § 820.21 – 820.29).
- iv. Wetlands located along an existing public or private drinking water supply, including both surface water and groundwater sources, that maintain the quality or quantity of the drinking water supply.
- v. Wetlands located in areas designated by the Department as "natural" or "wild" areas within State forest or park lands, wetlands located in areas designated as Federal wilderness areas under the Wilderness Act (16 U.S.C.A. § § 1131–1136) or the Federal Eastern Wilderness Act of 1975 (16 U.S.C.A. § 1132) or wetlands located in areas designated as National natural landmarks by the Secretary of the Interior under the Historic Sites Act of 1935 (16 U.S.C.A. § § 461–467).

Based on this evaluation, none of the wetlands crossed by the Project are considered EV wetlands. Specifically, none of the wetlands support threatened or endangered species, or overlap with a wild trout stream floodplain or national wild or scenic river. The wetlands are not located along drinking water supplies and are not within "natural" or "wild" areas in State Forest or State Park land.

Table G-3-1 Wetlands Crossed by the Tioga Pathway Project

Approximate Milepost	County	Wetland I.D.	Wetland Type	Latitude	Longitude	Municipality	Temporary Impacts (Acres) ^{ae}			Permanent Impacts (Acres) ^{be}			Subfacility Code ^c
							PEM	PSS	PFO	PEM	PSS	PFO	
Replacement Pipeline (Z20 Pipeline)													
0.00	Potter	W01z	PEM	41.966832	-77.718405	Harrison	0.027	-	-	0.000	-	-	TMPWI; WTDIM
0.10	Potter	W01	PSS	41.967236	-77.715901	Harrison	-	0.355	-	-	0.000	-	PIPE; TMPWI; WTDIM
0.70	Potter	W02	PEM/PSS	41.968985	-77.705062	Harrison	0.516	0.351	-	0.000	0.000	-	PIPE; TMPWI; WTDIM
1.35	Potter	W03	PEM/PFO	41.971927	-77.692612	Harrison	0.025	-	0.145	0.000	-	0.000	PIPE; TMPWI; WTDIM
1.84	Potter	W04	PEM/PFO	41.974176	-77.683657	Harrison	0.194	-	0.195	0.000	-	0.000	PIPE; TMPWI; WTDIM
1.95	Potter	W05	PEM	41.974656	-77.681935	Harrison	0.114	-	-	0.000	-	-	PIPE; TMPWI; WTDIM
2.16	Potter	W06	PEM/PSS	41.976286	-77.67759	Harrison	0.157	0.842	-	0.000	0.000	-	PIPE; TMPWI; WTDIM
2.72	Potter	W07	PEM/PFO	41.978328	-77.668284	Harrison	0.103	-	0.0002	0.000	-	0.000	PIPE; TMPWI; WTDIM
3.38	Potter	W08	PEM	41.980661	-77.655791	Harrison	0.057	-	-	0.000	-	-	PIPE; TMPWI; WTDIM
Mainline Pipeline (YM59 Pipeline)													
2.35	Potter	W10	PFO	41.964401	-77.616983	Harrison	-	-	0.044	-	-	0.030	PIPE; TMPWI; WTDIM
2.96	Tioga	W14	PEM/PSS	41.959947	-77.608239	Brookfield	0.029	0.003	-	0.001	0.000	-	TMPWI
3.00			PEM/PSS	41.959644	-77.607951				-			-	TMPWI
3.16			PEM/PSS	41.958172	-77.605524				-			-	PIPE; TMPWI; WTDIM
3.25	Tioga	W15	PEM	41.958363	-77.604067	Brookfield	0.013	-	-	0.000	-	-	TMPWI; WTDIM
3.68	Tioga	W60	PEM	41.961121	-77.590769	Brookfield	0.090	-	-	0.004	-	-	PIPE; TMPWI; WTDIM
4.02	Tioga	W16	PEM	41.962623	-77.581196	Brookfield	0.008	-	-	0.000	-	-	TMPWI; WTDIM
4.54	Tioga	W17	PEM/PSS/PFO	41.958363	-77.604067	Brookfield	0.275	0.200	0.119	0.038	0.029	0.091	PIPE; TMPWI; WTDIM
4.65	Tioga	W18	PSS	41.962702	-77.579489	Brookfield	-	0.094	-	-	0.011	-	PIPE; TMPWI; WTDIM
5.34	Tioga	W20	PEM	41.963814	-77.567067	Brookfield	0.017	-	-	0.003	-	-	PIPE; TMPWI; WTDIM
5.70	Tioga	W21	PEM	41.967169	-77.561953	Brookfield	0.445	-	-	0.066	-	-	PIPE; TMPWI; WTDIM
9.56	Tioga	W55	PFO	41.931374	-77.518473	Westfield	-	-	0.110	-	-	0.057	PIPE; TMPWI; WTDIM
9.70	Tioga	W57	PEM	41.929735	-77.517648	Westfield	0.016	-	-	0.000	-	-	TMPWI; WTDIM
9.80	Tioga	W58	PEM	41.928311	-77.516974	Westfield	0.170	-	-	0.014	-	-	PIPE; TMPWI; WTDIM
9.85	Tioga	W59	PEM	41.927243	-77.516526	Westfield	0.049	-	-	0.005	-	-	PIPE; TMPWI; WTDIM

Approximate Milepost	County	Wetland I.D.	Wetland Type	Latitude	Longitude	Municipality	Temporary Impacts (Acres) ^{ae}			Permanent Impacts (Acres) ^{be}			Subfacility Code ^c
							PEM	PSS	PFO	PEM	PSS	PFO	
10.00	Tioga	W23	PEM	41.925353	-77.516037	Westfield	0.104	-	-	0.002	-	-	PIPE; TMPWI; WTDIM
10.05	Tioga	W24	PEM	41.924788	-77.51574	Westfield	0.021	-	-	0.000	-	-	TMPWI; WTDIM
12.12	Tioga	W29	PEM	41.913929	-77.482821	Westfield	0.199	-	-	0.037	-	-	PIPE; TMPWI; WTDIM
14.78	Tioga	W32	PEM	41.914179	-77.438402	Deerfield	0.021	-	-	0.000	-	-	TMPWI; WTDIM
14.82	Tioga	W31	PSS	41.914442	-77.437616	Deerfield	-	0.018	-	-	0.004	-	PIPE; TMPWI; WTDIM
15.50	Tioga	W34	PEM	41.911875	-77.425407	Deerfield	0.508	-	-	0.079	-	-	PIPE; TMPWI; WTDIM
15.68	Tioga	W35	PEM	41.910894	-77.422991	Deerfield	0.090	-	-	0.014	-	-	PIPE; TMPWI; WTDIM
15.74	Tioga	W36	PEM	41.910879	-77.422235	Deerfield	0.160	-	-	0.026	-	-	PIPE; TMPWI; WTDIM
16.48	Tioga	W38	PEM	41.90693	-77.409351	Chatham	0.027	-	-	0.003	-	-	PIPE; TMPWI; WTDIM
16.93	Tioga	W39	PEM	41.903544	-77.404032	Chatham	0.022	-	-	0.000	-	-	TMPWI
17.16	Tioga	W40	PFO	41.903838	-77.399772	Chatham	-	-	0.081	-	-	0.079	PIPE; TMPWI; WTDIM
17.50	Tioga	W41	PEM	41.901814	-77.394413	Chatham	0.009	-	-	0.000	-	-	TMPWI
18.30	Tioga	W42	PFO	41.900397	-77.381429	Chatham	0.229	-	0.152	0.051	-	0.042	PIPE; TMPWI; WTDIM
18.82	Tioga	W43	PEM	41.90299	-77.37074	Chatham	0.670	-	-	0.109	-	-	PIPE; TMPWI; WTDIM
Cathodic Protection Ground Bed A (YM59 3.8)	Tioga	W54	PEM	41.957508	-77.593568	Brookfield	0.018	-	-	0.011	-	-	PIPE; TMPWI; WTDIM
Aboveground Facilities													
Ellisburg CS	Potter	W45	PEM	41.899303	-77.914484	Allegany	0.000	-	-	0.000	-	-	Resource will be avoided – no impacts.
Ellisburg CS	Potter	W46	PEM	41.89984	-77.913537	Allegany	0.000	-	-	0.000	-	-	Resource will be avoided – no impacts.
Ellisburg CS	Potter	W47	PEM	41.902289	-77.914483	Allegany	0.000	-	-	0.000	-	-	Resource will be avoided – no impacts.
Access Roads													
Z20 TAR-1	Potter	W02	PEM	41.968985	-77.705062	Harrison	0.013	-	-	0.000	-	-	TMPWI
YM59 TAR-10	Tioga	W23	PEM	41.925518	-77.51516	Westfield	0.025	-	-	0.000	-	-	TMPWI
YM59 TAR-3	Tioga	W54	PEM	41.957508	-77.593568	Brookfield	0.103	-	-	0.000	-	-	TMPWI
YM59 TAR-10A	Tioga	W56	PEM	41.924483	-77.521624	Westfield	0.013	-	-	0.000	-	-	TMPWI
YM59 PAR-9	Tioga	W61	PEM	41.915268	-77.482257	Westfield	0.000	-	-	0.002	-	-	WTDIM

Approximate Milepost	County	Wetland I.D.	Wetland Type	Latitude	Longitude	Municipality	Temporary Impacts (Acres) ^{ae}			Permanent Impacts (Acres) ^{be}			Subfacility Code ^c
							PEM	PSS	PFO	PEM	PSS	PFO	
Project Totals ^d							4.537	1.863	0.846	0.465	0.044	0.299	

Notes:

a Per DEP, "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)."
Accordingly, these values reflect the entire 75-foot-wide limit of disturbance through regulated wetlands minus the maintained areas described in the permanent impacts below. Note: all wetland impacts associated with the Z20 replacement pipeline are considered temporary as they will occur within an existing pipeline ROW.

b Per DEP, "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." Accordingly, these values represent the acreage of cover type conversion due to vegetation maintenance procedures within the 30-foot-wide portion of the permanent ROW. Specifically, in accordance with the FERC Procedures, National Fuel will not conduct routine vegetation mowing or clearing over the full width of the permanent ROW. However, to facilitate periodic corrosion/leak surveys, a corridor centered on the pipeline and up to 10 feet wide may be cleared through all wetlands (PEM, PSS, PFO) at a frequency necessary to maintain the 10-foot corridor in an herbaceous state. In addition, PFO trees within 15 feet of the pipeline with roots that could compromise the integrity of pipeline coating may be selectively cut and removed from the permanent ROW. National Fuel will not conduct any routine vegetation mowing or clearing in wetlands located between HDD entry and exit points (W58, W59, W23) but has included at permanent impact in these areas based on the width of the pipeline (2 feet) times the length of the wetland at centerline.

c Subfacility Code Definitions:

- **PIPE**: This subfacility code is used for any pipe or pipeline constructed for the transportation of a gaseous, liquid, liquefiable or slurry substance or, any cable, conduit, line or wire for the transmission of electrical energy, telephone, telegraph, radio or television signals including cathodic corrosion protection placed in, along, under, across or over regulated waters of the Commonwealth.
- **TMPWI**: This subfacility is used when direct or indirect impacts to wetlands occur on a temporary basis.
- **WTDIM**: This subfacility is used for all direct permanent wetland impacts regardless of their nature or size. Activities such as fills, excavation, inundation, draining, infiltration trenches, etc.

d Total Impacts were calculated using raw, unrounded GIS spatial calculations and rounded after totaling individual acreages. Therefore, total county impacts may not equal the total of rounded acreages presented for each individual resource.

e Acreages were determined using GIS software to calculate the acreage of the field delineated spatial data. Each polygon was broken down by cover class type, followed by permanent or temporary impact.

Table G-3-2 Waterbodies Crossed by the Tioga Pathway Project

Milepost	County	Feature ID ^a	Stream Name ^b	PA Chapter 93 Classification	PAFBC Stream Designation	Flow Regime	Bank to Bank Width (feet)	Municipality	Latitude	Longitude	Streams ⁱ		Floodways ⁱ		Subfacility Code ^e
											Temporary (Acres) ^c	Permanent (Acres) ^d	Temporary (Acres) ^c	Permanent (Acres) ^d	
Replacement Pipeline (Z20 Pipeline)															
0.05	Potter	D-03z	Drains to UNT of Marsh Creek	N/A	N/A	Ephemeral Ditch	Not Applicable								
0.05	Potter	D-04z	Drains to UNT of Marsh Creek	N/A	N/A	Ephemeral Ditch	Not Applicable								
0.05	Potter	D-08z	Drains to UNT of Marsh Creek	N/A	N/A	Ephemeral Ditch	Not Applicable								
0.10	Potter	S01	Marsh Creek	CWF	Drains to Stocked Trout Stream	Perennial	12	Harrison	41.967218	-77.716046	0.029	0.000	0.477	0.000	PIPE; BRDG: FLACT
0.10	Potter	S02	UNT to Marsh Creek	Drains to CWF	Drains to Stocked Trout Stream	Perennial	2 ^f	Harrison	41.967179	-77.716108	0.002	0.000			BRDG: FLACT
0.65	Potter	S03	UNT to Marsh Creek	Drains to CWF	Drains to Stocked Trout Stream	Perennial	8	Harrison	41.968702	-77.705193	0.023	0.000	0.290	0.000	PIPE; BRDG: FLACT
0.75	Potter	S04	UNT to Marsh Creek	Drains to CWF	Drains to Stocked Trout Stream	Perennial	6	Harrison	41.969286	-77.703812	0.020	0.000	0.333	0.000	PIPE; BRDG: FLACT
0.80	Potter	S05 ^g	UNT to Marsh Creek	Drains to CWF	Drains to Stocked Trout Stream	Ephemeral	10	Harrison	41.969407	-77.703308	0.022	0.000	0.235	0.000	PIPE; BRDG: FLACT
1.85	Potter	S06 ^g	UNT to North Branch Cowanesque River	Drains to CWF	Drains to Stocked Trout Stream	Intermittent	15 ^f	Harrison	41.974183	-77.683917	0.024	0.000	0.439	0.000	BRDG: FLACT
1.85	Potter	S07 ^g	UNT to North Branch Cowanesque River	Drains to CWF	Drains to Stocked Trout Stream	Intermittent	15 ^f	Harrison	41.974085	-77.684287	0.025	0.000			BRDG: FLACT
1.90	Potter	S08 ^g	UNT to North Branch Cowanesque River	Drains to CWF	Drains to Stocked Trout Stream	Ephemeral	8	Harrison	41.97441	-77.682827	0.015	0.000	0.202	0.000	PIPE; BRDG: FLACT
1.98	Potter	S09 ^g	UNT to North Branch Cowanesque River	Drains to CWF	Drains to Stocked Trout Stream	Ephemeral	20	Harrison	41.974737	-77.681639	0.069	0.000	0.427	0.000	PIPE; BRDG: FLACT
1.98	Potter	S10 ^g	UNT to North Branch Cowanesque River	Drains to CWF	Drains to Stocked Trout Stream	Ephemeral	5	Harrison	41.974835	-77.681285	0.010	0.000			PIPE; BRDG: FLACT
2.18	Potter	S11	UNT to North Branch Cowanesque River	Drains to CWF	Drains to Stocked Trout Stream	Perennial	2	Harrison	41.976008	-77.678276	0.003	0.000	0.223	0.000	PIPE; BRDG: FLACT

Milepost	County	Feature ID ^a	Stream Name ^b	PA Chapter 93 Classification	PAFBC Stream Designation	Flow Regime	Bank to Bank Width (feet)	Municipality	Latitude	Longitude	Streams ⁱ		Floodways ⁱ		Subfacility Code ^e
											Temporary (Acres) ^c	Permanent (Acres) ^d	Temporary (Acres) ^c	Permanent (Acres) ^d	
2.20	Potter	S12	North Branch Cowanesque River	CWF	Drains to Stocked Trout Stream	Perennial	10	Harrison	41.976395	-77.677322	0.038	0.000	0.493	0.000	PIPE; BRDG: FLACT
2.25	Potter	S13	North Branch Cowanesque River	Drains to CWF	Drains to Stocked Trout Stream	Perennial	8	Harrison	41.976543	-77.676957	0.015	0.000			PIPE; BRDG: FLACT
2.30	Potter	D01	Drains to UNT to North Branch Cowanesque River	N/A	N/A	Ephemeral Ditch	Not Applicable								
2.70	Potter	S14	UNT to North Branch Cowanesque River	CWF	Drains to Stocked Trout Stream	Perennial	6	Harrison	41.978337	-77.668231	0.012	0.000	0.202	0.000	PIPE; BRDG: FLACT
2.80	Potter	D02	Drains to UNT to North Branch Cowanesque River	N/A	N/A	Ephemeral Ditch	Not Applicable								
2.80	Potter	D03	Drains to UNT to North Branch Cowanesque River	N/A	N/A	Ephemeral Ditch	Not Applicable								
3.30	Potter	S15 ^g	UNT to North Branch Cowanesque River	Drains to CWF	Drains to Stocked Trout Stream	Ephemeral	5	Harrison	41.98024	-77.657616	0.010	0.000	0.214	0.000	PIPE; BRDG: FLACT
3.40	Potter	S16	UNT to North Branch Cowanesque River	Drains to CWF	Drains to Stocked Trout Stream	Perennial	20	Harrison	41.980684	-77.655608	0.039	0.000	0.282	0.000	PIPE; BRDG: FLACT
Mainline Pipeline (YM59 Pipeline)															
2.10	Potter	S17	North Fork Cowanesque River	Drains to CWF	Drains to Stocked Trout Stream	Perennial	15	Harrison	41.967015	-77.61861	0.024	0.003	0.181	0.027	PIPE; BRDG: FLACT
2.10	Potter	D05	N/A	N/A	N/A	Ephemeral Ditch	Not Applicable								
2.27	Potter	S18a	UNT to North Fork of Cowanesque River	Drains to CWF	Drains to Stocked Trout Stream	Perennial	20	Harrison	41.96481	-77.6179	0.034	0.005	0.201	0.030	PIPE; BRDG: FLACT
2.87	Potter	D07	N/A	N/A	N/A	Ephemeral Ditch	Not Applicable								
2.88	Tioga	S18	UNT to North Fork of Cowanesque River	Drains to CWF	Drains to Stocked Trout Stream	Perennial	25'	Brookfield	41.960858	-77.608491	0.000	0.000	0.052	0.000	FLACT
3.00	Tioga	S19	UNT to North Fork of Cowanesque River	Drains to CWF	Drains to Stocked Trout Stream	Perennial	10	Brookfield	41.958876	-77.606803	0.030	0.005	0.172	0.026	PIPE; BRDG: FLACT
3.25	Tioga	S20	North Fork Cowanesque River	CWF	Drains to Stocked Trout Stream	Perennial	25	Brookfield	41.958269	-77.604058	0.045	0.006	1.399	0.171	PIPE; BRDG: FLACT
3.42	Tioga	Sw02	N/A	N/A	N/A	Man-made Swale	Not Applicable								

Milepost	County	Feature ID ^a	Stream Name ^b	PA Chapter 93 Classification	PAFBC Stream Designation	Flow Regime	Bank to Bank Width (feet)	Municipality	Latitude	Longitude	Streams ⁱ		Floodways ⁱ		Subfacility Code ^e
											Temporary (Acres) ^c	Permanent (Acres) ^d	Temporary (Acres) ^c	Permanent (Acres) ^d	
3.68	Tioga	S21	UNT to North Fork of Cowanesque River	Drains to CWF	Drains to Stocked Trout Stream	Perennial	8	Brookfield	41.960571	-77.596576	0.013	0.002	0.168	0.026	PIPE; BRDG: FLACT
4.02	Tioga	S22	UNT to North Fork of Cowanesque River	Drains to CWF	Drains to Stocked Trout Stream	Perennial	3	Brookfield	41.961059	-77.590698	0.005	0.001	0.160	0.025	PIPE; BRDG: FLACT
4.30	Tioga	S23	UNT to North Fork of Cowanesque River	CWF	Drains to Stocked Trout Stream	Perennial	12	Brookfield	41.962633	-77.585936	0.019	0.003	0.183	0.027	PIPE; BRDG: FLACT
4.57	Tioga	S24	UNT to North Fork of Cowanesque River	Drains to CWF	Drains to Stocked Trout Stream	Perennial	8	Brookfield	41.962671	-77.583404	0.041	0.007	0.565	0.086	PIPE; BRDG: FLACT
4.64	Tioga	S25	UNT to North Fork of Cowanesque River	Drains to CWF	Drains to Stocked Trout Stream	Perennial	3 ^f	Brookfield	41.962796	-77.57982	0.000	0.000	0.094	0.000	FLACT
5.33	Tioga	Sw05	N/A	N/A	N/A	Man-made Swale	Not Applicable								
5.34	Tioga	S28	UNT to California Brook	Drains to WWF	Drains to Stocked Trout Stream	Perennial	6	Brookfield	41.963797	-77.566758	0.009	0.001	0.159	0.024	PIPE; BRDG: FLACT
5.59	Tioga	Sw04	N/A	N/A	N/A	Man-made Swale	Not Applicable								
5.74	Tioga	S26	California Brook	WWF	Drains to Stocked Trout Stream	Perennial	15	Brookfield	41.967168	-77.561839	0.027	0.004	0.327	0.047	PIPE; BRDG: FLACT
5.78	Tioga	D10	N/A	N/A	N/A	Ephemeral Ditch	Not Applicable								
6.40	Tioga	S29 ^g	UNT to California Brook	Dry	Drains to WWF	Ephemeral	4	Brookfield	41.965114	-77.549977	0.008	0.001	0.270	0.035	PIPE; BRDG: FLACT
6.45	Tioga	S30 ^g	UNT to California Brook	Dry	Drains to WWF	Ephemeral	6	Brookfield	41.964569	-77.549209	0.009	0.001	0.162	0.025	PIPE; BRDG: FLACT
9.56	Tioga	S62	UNT to Cowanesque River	6	Drains to WWF	Perennial	10	Westfield	41.931261	-77.518355	0.018	0.003	0.251	0.030	PIPE; BRDG: FLACT
9.70	Tioga	S65	UNT to Cowanesque River	1	Drains to WWF	Ephemeral	1 ^f	Westfield	41.927439	-77.516767	0.003	0.000	0.602	0.005	BRDG: FLACT
9.91	Tioga	D32	N/A	N/A	N/A	Ephemeral Ditch	Not Applicable								
9.98	Tioga	S31	UNT to Cowanesque River	Drains to WWF	Drains to Stocked Trout Stream	Perennial	5	Westfield	41.925356	-77.515612	0.012	0.000	1.666	0.036	PIPE; BRDG: FLACT
10.04	Tioga	S32	Cowanesque River	WWF	Stocked Trout Stream	Perennial	59	Westfield	41.924832	-77.515902	0.132	0.003			PIPE; BRDG: FLACT
10.10	Tioga	S33	UNT to Cowanesque River	Drains to WWF	Drains to Stocked Trout Stream	Ephemeral	12 ^f	Westfield	41.923983	-77.515853	0.025	0.001			BRDG: FLACT

Milepost	County	Feature ID ^a	Stream Name ^b	PA Chapter 93 Classification	PAFBC Stream Designation	Flow Regime	Bank to Bank Width (feet)	Municipality	Latitude	Longitude	Streams ⁱ		Floodways ⁱ		Subfacility Code ^e
											Temporary (Acres) ^c	Permanent (Acres) ^d	Temporary (Acres) ^c	Permanent (Acres) ^d	
12.05	Tioga	S39 ^g	UNT to Jemison Creek	Drains to WWF	Drains to Stocked Trout Stream	Ephemeral	5	Westfield	41.914324	-77.483963	0.012	0.002	0.250	0.032	PIPE; BRDG: FLACT
12.14	Tioga	S37	UNT to Jemison Creek	Drains to WWF	Drains to Stocked Trout Stream	Intermittent	4 ^f	Westfield	41.913881	-77.482558	0.000	0.000	0.113	0.010	BRDG: FLACT
12.14	Tioga	S38	UNT to Jemison Creek	Drains to WWF	Drains to Stocked Trout Stream	Intermittent	2 ^f	Westfield	41.913881	-77.482558	0.000	0.000			BRDG: FLACT
12.24	Tioga	S36	Jemison Creek	WWF	Drains to Stocked Trout Stream	Perennial	20	Westfield	41.913886	-77.481102	0.034	0.006	0.471	0.053	PIPE; BRDG: FLACT
13.90	Tioga	Sw07	N/A	N/A	N/A	Man-made Swale	Not Applicable								
13.98	Tioga	Sw08	N/A	N/A	N/A	Man-made Swale	Not Applicable								
14.05	Tioga	Sw09	N/A	N/A	N/A	Man-made Swale	Not Applicable								
14.16	Tioga	S39a	UNT to Boatman Brook			Perennial	5	Deerfield	41.910238	-77.447776	0.008	0.001	0.159	0.025	PIPE; BRDG: FLACT
14.80	Tioga	D15	N/A	N/A	N/A	Ephemeral Ditch	Not Applicable								
14.80	Tioga	D16	N/A	N/A	N/A	Ephemeral Ditch	Not Applicable								
14.81	Tioga	S40	Boatman Brook	Drains to WWF	Drains to Stocked Trout Stream	Perennial	12	Deerfield	41.914391	-77.43785	0.020	0.003	0.186	0.026	PIPE; BRDG: FLACT
14.96	Tioga	D18	N/A	N/A	N/A	Ephemeral Ditch	Not Applicable								
(Along YM59 PAR-10 near MP 14.97)	Tioga	D17	N/A	N/A	N/A	Ephemeral Ditch	Not Applicable								
15.02	Tioga	D19	N/A	N/A	N/A	Ephemeral Ditch	Not Applicable								
15.24	Tioga	S41 ^g	UNT to Crooked Creek	Drains to WWF	Drains to Stocked Trout Stream	Ephemeral	4 ^f	Deerfield	41.913661	-77.430417	0.006	0.000	0.174	0.026	BRDG: FLACT
15.62	Tioga	S42	UNT to Crooked Creek	Drains to WWF	Drains to Stocked Trout Stream	Intermittent	2 ^f	Deerfield	41.911082	-77.424149	0.000	0.000	0.019	0.000	FLACT
15.66	Tioga	D21	N/A	N/A	N/A	Ephemeral Ditch	Not Applicable								

Milepost	County	Feature ID ^a	Stream Name ^b	PA Chapter 93 Classification	PAFBC Stream Designation	Flow Regime	Bank to Bank Width (feet)	Municipality	Latitude	Longitude	Streams ⁱ		Floodways ⁱ		Subfacility Code ^e
											Temporary (Acres) ^c	Permanent (Acres) ^d	Temporary (Acres) ^c	Permanent (Acres) ^d	
15.68	Tioga	S43 ^g	UNT to Crooked Creek	Drains to WWF	Drains to Stocked Trout Stream	Intermittent	2	Deerfield	41.910894	-77.422985	0.003	0.001	0.179	0.028	PIPE; BRDG: FLACT
16.20	Tioga	S44 ^g	UNT to Crooked Creek	Drains to WWF	Drains to Stocked Trout Stream	Intermittent	8	Chatham	41.907833	-77.414802	0.012	0.002	0.162	0.025	PIPE; BRDG: FLACT
16.50	Tioga	S45 ^g	UNT to Crooked Creek	Drains to WWF	Drains to Stocked Trout Stream	Intermittent	9	Chatham	41.906929	-77.40934	0.013	0.002	0.164	0.025	PIPE; BRDG: FLACT
16.54	Tioga	D22	N/A	N/A	N/A	Ephemeral Ditch	Not Applicable								
16.54	Tioga	S46	UNT to Crooked Creek	Drains to WWF	Drains to Stocked Trout Stream	Intermittent	6 ^f	Chatham	41.906927	-77.408497	0.000	0.000	0.065	0.000	FLACT
17.04	Tioga	S47	UNT to Crooked Creek	Drains to WWF	Drains to Stocked Trout Stream	Perennial	15	Chatham	41.903123	-77.402116	0.023	0.003	0.192	0.027	PIPE; BRDG: FLACT
17.18	Tioga	S48	UNT to Crooked Creek	Drains to WWF	Drains to Stocked Trout Stream	Perennial	6	Chatham	41.903839	-77.399686	0.011	0.001	0.353	0.050	PIPE; BRDG: FLACT
17.2	Tioga	S49 ^g	UNT to Crooked Creek	Drains to WWF	Drains to Stocked Trout Stream	Ephemeral	4	Chatham	41.903844	-77.399343	0.008	0.001			PIPE; BRDG: FLACT
17.42	Tioga	D24	N/A	N/A	N/A	Ephemeral Ditch	Not Applicable								
17.50	Tioga	S50 ^g	UNT to Crooked Creek	Drains to WWF	Drains to Stocked Trout Stream	Intermittent	11	Chatham	41.901756	-77.394562	0.018	0.003	0.236	0.028	PIPE; BRDG: FLACT
17.50	Tioga	S51 ^g	UNT to Crooked Creek	Drains to WWF	Drains to Stocked Trout Stream	Intermittent	1 ^f	Chatham	41.90182	-77.394441	0.001	0.000			BRDG: FLACT
18.32	Tioga	S52	UNT to Crooked Creek	Drains to WWF	Drains to Stocked Trout Stream	Perennial	12	Chatham	41.90069	-77.380339	0.042	0.005	0.247	0.030	PIPE; BRDG: FLACT
18.67	Tioga	Sw11	N/A	N/A	N/A	Man-made Swale	Not Applicable								
18.85	Tioga	S53	UNT to Losey Creek	WWF	Drains to Stocked Trout Stream	Perennial	8	Chatham	41.902996	-77.370667	0.012	0.002	0.135	0.025	PIPE; BRDG: FLACT
19.15	Tioga	D26	N/A	N/A	N/A	Ephemeral Ditch	Not Applicable								
19.17	Tioga	S54 ^g	UNT to Losey Creek	WWF	Drains to Stocked Trout Stream	Ephemeral	1	Chatham	41.904183	-77.364778	0.002	0.000	0.175	0.028	PIPE; BRDG: FLACT

Milepost	County	Feature ID ^a	Stream Name ^b	PA Chapter 93 Classification	PAFBC Stream Designation	Flow Regime	Bank to Bank Width (feet)	Municipality	Latitude	Longitude	Streams ⁱ		Floodways ⁱ		Subfacility Code ^e
											Temporary (Acres) ^c	Permanent (Acres) ^d	Temporary (Acres) ^c	Permanent (Acres) ^d	
Catholic Protection Ground Bed A (YM59 3.8)	Tioga	S66	UNT to North Fork of Cowanesque River	CWF	Drains to Stocked Trout Stream	Ephemeral	1	Brookfield	41.957978	-77.593752	0.000	0.000	0.188	0.000	FLACT
Access Roads															
TAR-1	Potter	S03	UNT to Marsh Creek	Drains to CWF	Drains to Stocked Trout Stream	Perennial	8	Harrison	41.968623	-77.704686	0.007	0.000	0.220	0.000	Existing culvert; FLACT
YM59 TAR-2	Tioga	S19	UNT to North Fork of Cowanesque River	CWF	Drains to Stocked Trout Stream	Perennial	10 ^f	Brookfield	41.959119	-77.604038	0.000	0.000	0.353	0.000	FLACT
YM59 TAR-2	Tioga	S20	North Fork Cowanesque River	CWF	Drains to Stocked Trout Stream	Perennial	25 ^f	Brookfield	41.958269	-77.604058	0.000	0.000			FLACT
YM59 TAR-4	Tioga	S23	UNT to North Fork of Cowanesque River	CWF	Drains to Stocked Trout Stream	Perennial	12	Brookfield	41.962633	-77.585936	0.010	0.000	0.115	0.000	Existing culvert; FLACT
YM59 TAR-4	Tioga	S24	UNT to North Fork of Cowanesque River	Drains to CWF	Drains to Stocked Trout Stream	Perennial	8	Brookfield	41.962671	-77.583404	0.006	0.000			Existing culvert; FLACT
YM59 TAR-4	Tioga	D09	N/A	N/A	N/A	Intermittent Ditch	Not Applicable								
YM59 TAR-3	Tioga	S66	UNT to North Fork of Cowanesque River	Drains to CWF	Drains to Stocked Trout Stream	Ephemeral	1	Brookfield	41.957978	-77.593752	0.000	0.000	0.248	0.000	FLACT
YM59 TAR-6	Tioga	S56 ^g	UNT to California Brook	Drains to WWF	Drains to Stocked Trout Stream	Intermittent	7	Brookfield	41.964514	-77.561691	0.006	0.000	0.095	0.000	Existing culvert; FLACT
YM59 TAR-6	Tioga	Sw04	N/A	N/A	N/A	Man-made swale	Not Applicable								
YM59 TAR-7	Tioga	S56a ^g	UNT to California Brook	Drains to WWF	Drains to Stocked Trout Stream	Ephemeral	1	Brookfield	41.97045	-77.561435	0.001	0.000	0.072	0.000	Existing culvert; FLACT
YM59 TAR-7	Tioga	S57	UNT to California Brook	Drains to WWF	Drains to Stocked Trout Stream	Intermittent	3	Brookfield	41.970564	-77.559798	0.002	0.000	0.075	0.000	Existing culvert; FLACT
YM59 TAR-7	Tioga	S58 ^g	UNT to California Brook	Drains to WWF	Drains to Stocked Trout Stream	Ephemeral	3	Brookfield	41.970287	-77.559319	0.002	0.000	0.336	0.000	CULV/BRDG; FLACT
YM59 TAR-7	Tioga	S59 ^g	UNT to California Brook	Drains to WWF	Drains to Stocked Trout Stream	Ephemeral	2	Brookfield	41.970209	-77.559236	0.012	0.000			CULV/BRDG; FLACT

Milepost	County	Feature ID ^a	Stream Name ^b	PA Chapter 93 Classification	PAFBC Stream Designation	Flow Regime	Bank to Bank Width (feet)	Municipality	Latitude	Longitude	Streams ⁱ		Floodways ⁱ		Subfacility Code ^e
											Temporary (Acres) ^c	Permanent (Acres) ^d	Temporary (Acres) ^c	Permanent (Acres) ^d	
YM59 TAR-10	Tioga	S31	UNT to Cowanesque River	Drains to WWF	Drains to Stocked Trout Stream	Perennial	5	Westfield	41.925356	-77.515612	0.003	0.000	0.272	0.000	Existing culvert; FLACT
YM59 TAR-10	Tioga	S32	Cowanesque River	WWF	Stocked Trout Stream	Perennial	59 ^f	Westfield	41.925362	-77.515292	0.000	0.000			FLACT
YM59 TAR-10A	Tioga	S68	UNT to Cowanesque River	Drains to WWF	Drains to Stocked Trout Stream	Perennial	6	Westfield	41.924484	-77.52163	0.004	0.000	1.078	0.000	CULV/BRDG; FLACT
YM59 TAR-10A	Tioga	S63	UNT to Cowanesque River	Drains to WWF	Drains to Stocked Trout Stream	Perennial	50	Westfield	41.924073	-77.521176	0.041	0.000			CULV/BRDG; FLACT
YM59 TAR-10A	Tioga	S64	UNT to Cowanesque River	Drains to WWF	Drains to Stocked Trout Stream	Perennial	20	Westfield	41.922196	-77.517457	0.014	0.000	0.086	0.000	BRDG; FLACT
YM59 TAR-10A	Tioga	S67	UNT to Cowanesque River	Drains to WWF	Drains to Stocked Trout Stream	Perennial	6	Westfield	41.921871	-77.515732	0.006	0.000	0.087	0.000	Existing culvert; FLACT
YM59 PAR-7	Tioga	S39	UNT to Jemison Creek	Drains to WWF	Drains to Stocked Trout Stream	Perennial	5	Westfield	41.910238	-77.447776	0.000	0.000	0.035	0.000	Existing culvert; FLACT
YM59 TAR-15	Tioga	S47	UNT to Crooked Creek	Drains to WWF	Drains to Stocked Trout Stream	Perennial	15 ^f	Chatham	41.903658	-77.402068	0.014	0.000	0.207	0.000	FLACT
YM59 TAR-11	Tioga	D33	N/A	N/A	N/A	Ephemeral Ditch	Not Applicable								
YM59 PAR-10	Tioga	D17	N/A	N/A	N/A	Ephemeral Ditch	Not Applicable								
YM59 PAR-10	Tioga	D18	N/A	N/A	N/A	Ephemeral Ditch	Not Applicable								
YM59 PAR-13	Tioga	D25	N/A	N/A	N/A	Ephemeral Ditch	Not Applicable								
YM59 PAR-13	Tioga	Sw10	N/A	N/A	N/A	Man-made Swale	Not Applicable								
YM59 PAR-14	Tioga	Sw12	N/A	N/A	N/A	Man-made Swale	Not Applicable								
YM59 PAR-14	Tioga	Sw13	N/A	N/A	N/A	Man-made Swale	Not Applicable								

Milepost	County	Feature ID ^a	Stream Name ^b	PA Chapter 93 Classification	PAFBC Stream Designation	Flow Regime	Bank to Bank Width (feet)	Municipality	Latitude	Longitude	Streams ⁱ		Floodways ⁱ		Subfacility Code ^e
											Temporary (Acres) ^c	Permanent (Acres) ^d	Temporary (Acres) ^c	Permanent (Acres) ^d	
Aboveground Facilities															
Ellisburg CS	Potter	S55	Rose Lake Run	HQ-CWF	Class A Trout Stream	Perennial	9 ^f	Allegheny	41.899581	-77.913991	0.000	0.000	0.000	0.000	Existing culvert and road
Z20 Pipeline Valve Setting	Potter	S73z ^g	UNT to Marsh Creek	Drains to CWF	Drains to Stocked Trout Stream	Intermittent	12 ^f	Harrison	41.966834	-77.718357	0.025	0.000	0.215	0.022	BRDG; FLACT
Impact Totals ^h											1.185	0.078	17.391	1.080	
Notes:															
a Prefix to resource identification numbers include S = stream and D = ditch.															
b UNT = unnamed tributary															
c Per DEP, "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)." Accordingly, these values reflect the entire 75-foot-wide limit of disturbance through regulated stream and floodway resources minus the maintained areas described in the permanent impacts below. Note: all stream/floodway impacts associated with the Z20 replacement pipeline are considered temporary as they will occur within an existing pipeline ROW.															
d Per DEP, "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." All streams and floodways will be restored to pre-existing conditions and there will be no long-term impact to the substrate, banks, flow, aquatic/terrestrial life, or floodway. However, National Fuel will maintain a 10 feet wide corridor centered over the pipeline in an herbaceous state and has conservatively identified stream and floodway impacts within this corridor as permanent. National Fuel will not conduct any routine vegetation mowing or clearing along the ROW located between HDD entry and exit points (S65, S31, S32, S33) but has included a permanent impact in these areas based on the width of the pipeline (2 feet) times the length of the stream/floodway crossing at centerline.															
e Subfacility Code Definitions:															
• PIPE: This subfacility is used for any pipe or pipeline constructed for the transportation of a gaseous, liquid, liquefiable or slurry substance or, any cable, conduit, line or wire for the transmission of electrical energy, telephone, telegraph, radio or television signals including cathodic corrosion protection placed in, along, under, across or over regulated waters of the Commonwealth. • CULV: This subfacility is used when a structure with appurtenant works that carries a stream under or through an embankment or fill is constructed. Culverts are 100 feet and less in length upstream to downstream. • FLACT: This subfacility is used for activities or structures encroaching upon or obstructing the floodway. • BRDG: This subfacility is used when a structure and its appurtenant works is erected over regulated waters of the Commonwealth.															
f Stream is not crossed by the pipeline but is located within the workspace. These features will not be excavated/trenched but will be temporarily matted.															
g The area of the basin which feeds the stream is less than 100 acres and is considered waived from fee calculations per Chapter 105.12 (a) (2).															
h Total Impacts were calculated using raw, unrounded GIS spatial calculations and rounded after totaling individual acreages. Therefore, total county impacts may not equal the total of each rounded acreages presented.															
i Acreages were determined using GIS software to calculate the acreage of the field delineated spatial data (or floodway area calculated buffer either side of stream spatial data). Each polygon was broken down by stream or floodway, followed by permanent or temporary impact.															