

### TRANSMITTAL

5295	South Commerce Drive, Ste. 500		Murray, Utah 84107		P: 801.736.85	37 F:	801.261.3913				
TO:	Michael Luciani			NFG FM1	00 Project						
FRO	M: Theresa Albanese			PURCHAS	PURCHASE ORDER NO: N/A						
DAT	E: 20200312			TASK: Per	mit Application – Incompl	eteness	Submittal				
SUI	BJECT: NFG FM100 Project Resp Notification: DEP Application N										
	For Review Urgent	X	Please Comment As Requested		For Approval Approved as Noted		For Signature Please Reply				
MES	SSAGE:										
Dea	Mr. Luciani,										
inco FM1	osed you will find the revised respo mpleteness notification letter datec 00 Project. oreviously submitted a CD with digit	12/2	4/2019 and your emails date								
	ocumented, we have addressed all omove into technical review.	outsta	anding comments and reques	t that the Depa	rtment issue a Completeness	)etermin	nation so that we				
Plea	se let me know if you have any ques	stions	; you can contact me at the 4	13.315.2409.							
Rega	ards,										
Ther	esa Albanese										
CC:	PROJECT FILE WAYNE GRAHAM MELISSA HARRISON										

March 13, 2020 Page 1 of 1

This document outlines National Fuel Gas Supply Corporation's response to the Pennsylvania Department of Environmental Protection Incompleteness Notice letter issued for the FM100 Project on December 24, 2019. This response, dated March 12, 2020, addresses the list of items missing as identified in the Department's emails dated February 27, 2020 and March 5, 2020.

Each comment has been reproduced and a corresponding answer provided. Where applicable and as noted, National Fuel has updated information and mapping and provided these in separate Attachments. Revised versions of these documents are being provided in digital format as part of this response.

#### **Original Comment #2**

Please provide copies of the municipal and county return receipts. [25 Pa Code §105.13a(a)].

Specifically, in Elk County, municipal notifications were sent to Jones Township, the City of St. Marys, Jay Township and Benezette Township. However, according to the maps, it does not appear that there is any proposed work within those municipal limits. Please verify that the project will be proposing earth disturbance within these municipalities.)

#### **Response:**

The Department's email dated February 27, 2020 noted that the Act 14 municipal notification letter to Keating Township, McKean County, was missing. Within Keating Township, National Fuel proposes to impact approximately 11.70 acres of land for Rights-of-Way (ROW) and access roads associated with the proposed Staging Area No. 7. The Act 14 Notification letter was not submitted to the Township in the original Permit application submittal.

A letter was sent to Keating Township on February 28, 2020 and received on March 2, 2020. A copy the proof of delivery generated by the U.S. Postal Service online tracking system demonstrating delivery to the Township of Keating, McKean County is provided as Attachment A (Return Receipt for the Act 14 notification letter).

Within Elk County, the originally proposed project included work in Jones Township and the City of St. Mary's; however, that portion of the project was dropped from the scope of work so there is currently no work proposed for the project in these municipalities. Regarding Jay Township, the portion of Line FM100 that is proposed for abandonment passes through the township boundaries; however, there is no work proposed within Jay Township. Consequently, the Act 14 landuse notification letters were sent to these municipalities in error.

In Benezette Township we have proposed abandonment activities as seen on the Index Sheet of the E&S drawings for Elk County. Benezette is the only township in Elk County where NFG proposes project activities/land disturbance.

#### **Original Comment #3**

A review of Appendix A found that the table references those streams identified as naturally reproducing trout (wild trout) waters as listed by the PA Fish and Boat Commission. The table also lists whether in-stream work restrictions (based on wild trout spawn periods) are applicable in the specified water bodies. In the Clearfield County section of the table, several streams are identified as "Yes/NRT", but under the "In-Stream Work Restrictions" column those same streams have the word "None", indicating no in-stream work restrictions will be required in those streams that are designated as naturally reproducing wild trout. This is incorrect. A quick scan of the table found the same inconsistencies in other counties as well.

#### **Response:**

Please note that an updated/revised Waterbodies Table 2.2-1A was provided to the Department and the County Conservation Districts in the last submission as Attachment B-Comment PW-3 for the data incompleteness response dated February 25, 2020. In that submission, the table inconsistencies were resolved. Therefore, it is possible that the Conservation Districts were reviewing an older, outdated version.

However, for convenience, the updated Table has been provided again and can be found in Attachment B.

#### **New Comments:**

#### **Comment 1**

Pg. 7, NOI, Section b: The box for alternative BMP or design has been checked. In review of the proposed project, it has been noticed that there are erosion and sediment control BMP's from the New York E&S Manual. Should these proposed erosion and sediment control BMPs be proposed for use during construction activities within Pennsylvania, they will have to be reviewed by the Bureau of Waterways Engineering and Wetlands as an alternative erosion and sediment control BMP. If this was not the intent, please revise the Erosion and Sediment Control Plans and include the erosion and sediment control BMPs from the Pennsylvania Erosion and Sediment Pollution Control Program Manual, dated March 2012.

#### **Response:**

Page 7 of the NOI has been revised to uncheck box stating "E&S Plan is designed using an alternative BMP or design standard approved by DEP."

National Fuel's Erosion and Sediment Control and Agriculture Mitigation Plan (ESCAMP) has been updated to remove all references to New York standards and BMPs. The Erosion and Sediment Control Plans do not include BMP's, nor were the designs based on the New York E&S Manual.

The updated ESCAMP, revised March 9, 2020 and the NOI are provided in Attachment C.

#### Comment 2

On the Erosion and Sediment Control Plans, please clearly identify which section of pipeline will be proposed as new construction, and which section of pipeline will be abandonment. It appears that the pipelines (abandonment and new) are the same color on the alignment sheets. Please revise accordingly.

#### **Response:**

For clarity, the modernization (proposed pipeline) section and abandonment section of the Project were provided as separate E&S and Site Restoration mapbooks. The legend item representing the abandonment pipeline for each abandonment mapbook was mistakenly labeled "Proposed Pipeline." Each of the abandonment mapbook index sheets has been revised to properly label this line type as "Existing Pipeline to be Abandoned."

The following updated index sheets are enclosed as Attachment D:

- Abandonment E&S Mapbook Index Sheet
- Abandonment E&S Mapbook Index Sheet Cameron County
- Abandonment E&S Mapbook Index Sheet Clearfield County
- Abandonment E&S Mapbook Index Sheet Elk County
- Abandonment E&S Mapbook Index Sheet Potter County
- Abandonment Site Restoration Mapbook Index Sheet
- Abandonment Site Restoration Mapbook Index Sheet Cameron County
- Abandonment Site Restoration Mapbook Index Sheet Clearfield County
- Abandonment Site Restoration Mapbook Index Sheet Elk County
- Abandonment Site Restoration Mapbook Index Sheet Potter County

#### **Comment 3**

Within Clearfield County, the appendices/tables are blank from Pages 44 to 67. These include the "Waterbodies Crossed by the Project", "Wetlands Located with Project Work Area", "Floodplains Crossed by the Project", and "Water Supply Wells and Springs within 150-feet of Project Work Area". Please provide these appendices/tables.

#### **Response:**

We understand that Clearfield County Conservation District did not receive hard copies of the referenced Appendices and Tables, in our previous submittal dated February 25, 2020. We apologize for this unintentional oversight and have provided hard copies of all missing appendices and tables (Pages 44 to 67) that were previously omitted.

We provided the following Appendices/Tables: Wetlands Located with Project Work Area", "Floodplains Crossed by the Project" and "Water Supply Wells and Springs within 150-feet of Project Work Area" in Attachment E.

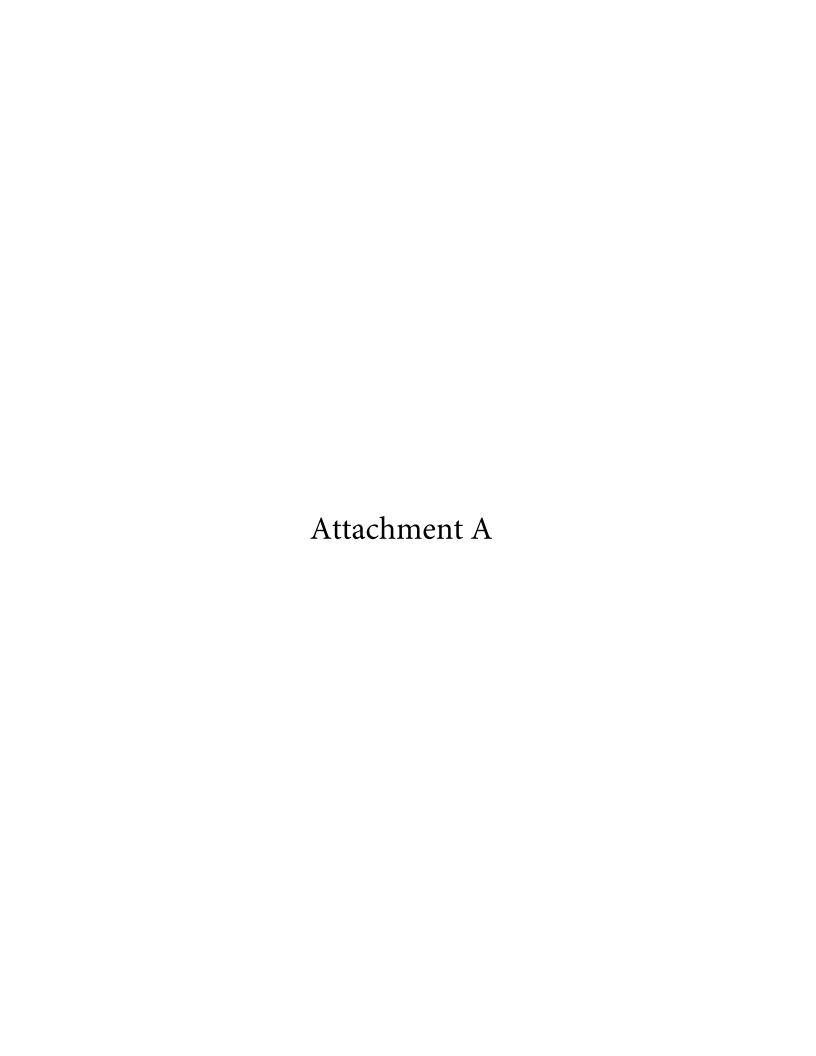
Table 2.2-1 - Waterbodies Crossed by the Project is provided in Attachment B as previously addressed above in original comment #3.

#### **Comment 4**

Legends on the Plan Drawings are missing, incomplete or inconsistent. Please revise accordingly.

#### **Response:**

Please refer to the response provided above for Comment 2.





David S. McClain. Chairman **Keating Township** 7160 Route 46 P.O. Box 103 East Smethport, PA 16730

via USPS

#### **National Fuel Gas Supply Corporation**

FM 100 Project

Land Use Notification Letter: Request for Land Use Response Keating Township, Pennsylvania

5295 South Commerce Drive Suite 500 Murray, UT 84107 United States of America

February 27, 2020

T+1 (801) 571 6522

Dear Mr. McClain,

F+1 (801) 261 3913 www.mottmac.com/americas

On behalf of National Fuel Gas Supply Corporation (National Fuel), Mott MacDonald is sending this notice to inform you of National Fuel's intent to submit an application for coverage under the Pennsylvania Department of Environmental Protection (PADEP) Chapter 102 Erosion and Sediment Control General Permit (ESCGP-3) for Earth Disturbance Associated with Oil & Gas Exploration, Production, Processing or Treatment Operations Facilities, and a USACE Joint Permit - Chapter 105 Water Obstructions and Encroachment Permit. National Fuel has a PAG 10 for discharges from hydrostatic testing.

This notification satisfies the requirements of Acts 14, 67, 68, 127 of the Pennsylvania Municipalities Planning Code for the following project:

Project Name: FM100 Project (Project)

Project Description: The primary purpose of the Project, as designed and filed with FERC (Docket No. CP-19-491-000), is to modernize a portion of National Fuel's existing pipeline system. The Project will allow for the removal from service and abandonment of approximately 44.9 miles of vintage steel pipe. National Fuel's risk analysis has prioritized the replacement of these aging facilities. In order to continue to provide the existing transportation and storage services provided by the facilities proposed to be abandoned, approximately 29.5 miles of new 20-inch diameter coated steel pipeline, 0.4 miles of new 12-inch diameter coated steel pipeline to be used as a suction/discharge header, and 4,055 hp of compression and related facilities at the proposed Marvindale Compressor Station will be installed. The Project will enhance the reliability and safety of the National Fuel system for transportation services, local distribution market needs, storage management purposes and local production collection and transportation. Line FM100 is National Fuel's only connecting pipeline between its western and eastern operating systems.



In addition to modernizing its existing system, National Fuel also proposes to construct additional facilities designed to create 330,000 Dth/day of incremental transportation capacity ("Transportation Capacity") from the Sergeant Township area to Transco at Leidy, PA. These additional facilities include 11,110 hp at the proposed Marvindale Compressor Station, 22,220 hp at the proposed Tamarack Compressor Station, an increase in the YM58 pipe diameter to 20-inch, and measurement upgrades at National Fuel's interconnection with Transco at Leidy.

The Transportation Capacity, which is fully subscribed to Transco under a proposed capacity lease, will provide upstream gas supply from shale producing areas in central PA to Transco's "Leidy South Project" (Docket No. CP-19-494-000) on behalf of Transco's foundation shipper. The companion projects will allow abundant, reliable, and economic gas supply to access the interstate pipeline system grid where it can reach key consuming market centers in the northeastern United States via the Transco pipeline system.

Within Keating Township, National Fuel proposes to impact approximately 11.70 acres of land for Rights-of-Way (ROW) and Access Roads to construct their Line YM58 pipelines.

#### **Applicant Contact:**

National Fuel Gas Supply Corporation c/o: Wayne Graham, Environmental Compliance Manager 1100 State Street Erie, PA 16512

Section 1905-A of the Commonwealth Administrative Code, as amended by Act 14, requires that each applicant for a PADEP permit must give written notice to the municipality and the county in which the permitted activity is located. Acts 67, 68 and 127, which amended the Municipalities Planning Code, direct state agencies to consider comprehensive plans and zoning ordinances when reviewing applications for permitting of facilities and infrastructure and specify that state agencies may rely upon comprehensive plans and zoning ordinances under certain conditions as described in Sections 619.2 and 1105 of the Municipalities Planning Code.

Enclosed is a Project Location Map (Attachment 1) and a copy of the PADEP General Information Form (GIF) (Attachment 2) that has been completed by Mott MacDonald on behalf of the Applicant. PADEP invites you to review and comment on the land use aspects of this Project. If you wish to submit comments to DEP to consider in a land use review of this Project, you must respond within 30 days of receipt of this letter to the DEP Central Office listed below:

Pennsylvania Department of Environmental Protection Regional Permit Coordination Office Rachel Carson State Office Building 400 Market St. Harrisburg, PA 17101

If no land use comments are received by the end of the comment period, PADEP will assume that there are no substantive land use conflicts and proceed with the normal application review process. For more information about this land use review process, please visit <a href="https://www.dep.pa.gov">www.dep.pa.gov</a> (Keyword: Land Use Reviews).



If you have any questions, please do not hesitate to contact me at the number/email listed below.

Sincerely,

Mott MacDonald

Douglas Gibbons, CEP Principal Project Manager T +1 (801) 704 0301

C +1 (801) 633 6293

Douglas.gibbons@mottmac.com

Enclosures: (1) Location Map

(2) PADEP General Information Form

cc: Wayne Graham- National Fuel

Project file

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SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIV	'ERY
<ul> <li>Complete items 1, 2, and 3.</li> <li>Print your name and address on the reverse so that we can return the card to you.</li> <li>Attach this card to the back of the mailpiece, or on the front if space permits.</li> </ul>	A. Signature  B. Received by (Printed Name)	☐ Agent ☐ Addressee C. Date of Delivery
1. Article Addressed to:  David S. McClain	D. Is delivery address different from item If YES, enter delivery address below:	
7160 Route 46 Po Box 103 East Smethpolt, PA 16730		
9590 9402 4886 9032 1397 31	□ Adult Signature □ Repair □ Repair □ Adult Signature Restricted Delivery □ Repair □ Certified Mail Restricted Delivery □ Repair □ Certified Mail Restricted Delivery □ Repair □ Collect on Delivery	ority Mall Express® gistered Mall <sup>TM</sup> gistered Mail Restricted livery with the restricted livery rehandise
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Permit No. G-10

**United States Postal Service** 

• Sender: Please print your name, address, and ZIP+4® in this box• Doug Gibbons Mott Mac Donald Sags South Commerce Drive Suite 500 MUCCay, UT 84107

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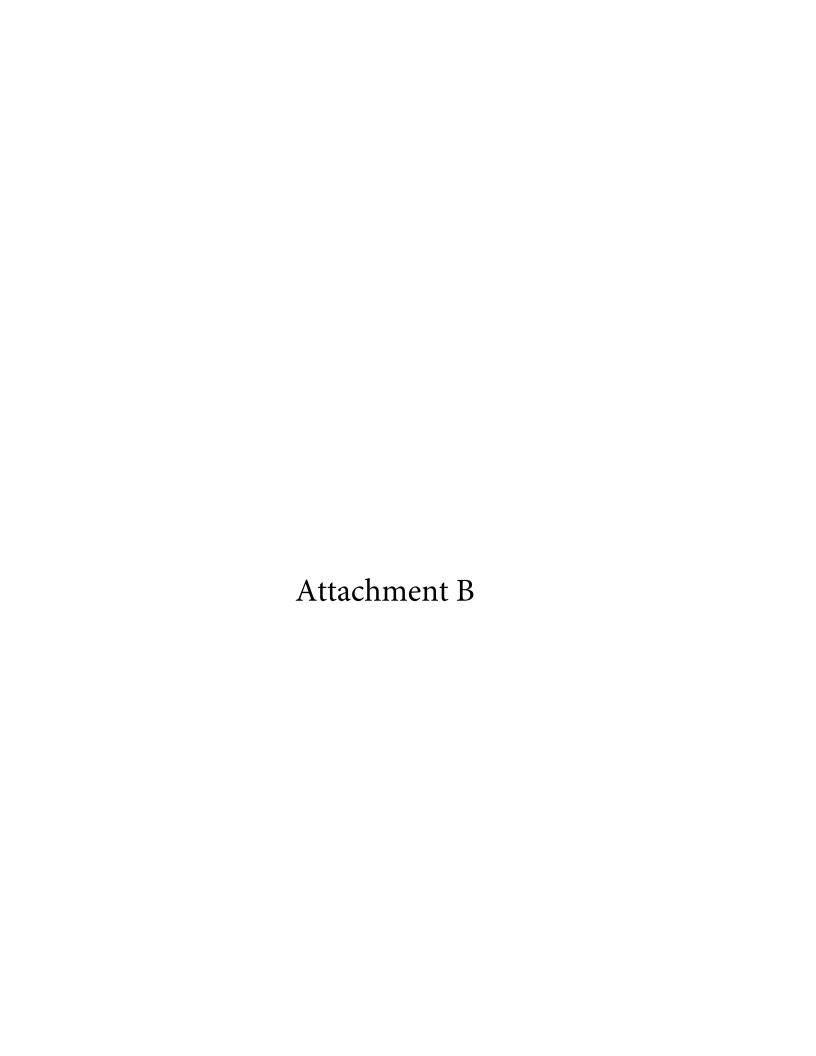


Table 2.2-1A (Rev1): Waterbodies Crossed by the Project

County	Waterbody Project ID	MP	Crossing Length <sup>1</sup> (ft.)	FERC Waterbody Classification	Waterbody Name	Flow Regime <sup>2</sup>	Designated Use and Water Quality Criteria <sup>3</sup>	Wild Trout <sup>4,5</sup>	Crossing Method <sup>6</sup>	In-Stream Work Restrictions <sup>7</sup>
Line YM58										
McKean	Stream 006	0.9	3.0	Minor	UNT to Wernwag Hollow	IT	HQ-CWF	Yes <sup>5</sup> /NRT	Dam and Pump/Flume	10/01 – 12/31 10/1 – 5/31
McKean	Stream 007	1.2	4.0	Minor	UNT to Wernwag Hollow	Р	HQ-CWF	Yes <sup>5</sup> /NRT	Dam and Pump/Flume	10/01 – 12/31 10/1 – 5/31
McKean	Stream 008	1.4	6.5	Minor	Wernwag Hollow	Р	HQ-CWF	Yes <sup>5</sup> /NRT	Dam and Pump/Flume	10/01 – 12/31 10/1 – 5/31
McKean	Stream 011	1.5	3.0	Minor	UNT to Wernwag Hollow	IT	HQ-CWF	Yes <sup>5</sup> /NRT	Dam and Pump/Flume	10/01 – 12/31 10/1 – 5/31
McKean	Stream 012	1.6	6.5	Minor	UNT to Wernwag Hollow	IT	HQ-CWF	Yes <sup>5</sup> /NRT	Dam and Pump/Flume	10/01 – 12/31 10/1 – 5/31
McKean	Stream 014	1.6	1.0	Minor	UNT to Wernwag Hollow	IT	HQ-CWF	Yes <sup>5</sup> /NRT	Dam and Pump/Flume	10/01 – 12/31 10/1 – 5/31
McKean	Stream 017	1.8	3.0	Minor	UNT to Wernwag Hollow	IT	HQ-CWF	Yes <sup>5</sup> /NRT	Dam and Pump/Flume	10/01 – 12/31 10/1 – 5/31
McKean	Stream 019	2.2	2.5	Minor	UNT to Browns Mill Hollow Run	IT	HQ-CWF	Yes <sup>5</sup> /NRT	Dam and Pump/Flume	10/01 – 12/31 10/1 – 5/31
McKean	Stream 020	2.2	2.5	Minor	UNT to Browns Mill Hollow Run	IT	HQ-CWF	Yes <sup>5</sup> /NRT	Dam and Pump/Flume	10/01 – 12/31 10/1 – 5/31
McKean	Stream 026	3.0	3.0	Minor	UNT to Robbins Brook	IT	HQ-CWF	Yes <sup>5</sup> /NRT	Dam and Pump/Flume	10/01 – 12/31 10/1 – 5/31
McKean	Stream 027	3.3	3.0	Minor	UNT to Robbins Brook	Р	HQ-CWF	Yes <sup>5</sup> /NRT	Dam and Pump/Flume	10/01 – 12/31 10/1 – 5/31
McKean	Robbins Brook	3.4	27.0	Intermediate	Robbins Brook	Р	HQ-CWF	Yes <sup>5</sup> /NRT	Dam and Pump/Flume	10/01 – 12/31 10/1 – 5/31
McKean	Donley Fork	3.6	7.0	Minor	Donley Fork	Р	HQ-CWF	No	Dam and Pump/Flume	10/1 – 5/31
McKean	Stream 160	4.2	3.0	Minor	UNT to Robbins Brook	IT	HQ-CWF	Yes <sup>5</sup> /NRT	Dam and Pump/Flume	10/01 – 12/31 10/1 – 5/31
McKean	Stream 030 - 1	4.9	3.0	Minor	UNT to Robbins Brook	E	HQ-CWF	Yes <sup>5</sup> /NRT	Dam and Pump/Flume	10/01 – 12/31 10/1 – 5/31
McKean	Ditch 02	6.5	3.0	Minor		D			Open Cut	None

County	Waterbody Project ID	MP	Crossing Length <sup>1</sup> (ft.)	FERC Waterbody Classification	Waterbody Name	Flow Regime <sup>2</sup>	Use and Water Quality Criteria <sup>3</sup>	Wild Trout <sup>4,5</sup>	Crossing Method <sup>6</sup>	In-Stream Work Restrictions <sup>7</sup>
McKean	Stream 037	6.6	26.2	Intermediate	UNT to Potato Creek	Р	TSF	No/TSW	Dam and Pump/Flume	3/01 – 6/15
McKean	Potato Creek	6.8	205.16	Major	Potato Creek	Р	TSF	No/TSW	HDD	10/1 – 5/31
McKean	Ditch 03	6.9	3.0	Minor		D			Open Cut	None
McKean	Ditch 05	6.9	5.0	Minor		D			Open Cut	None
McKean	Stream 038	7.1	5.0	Minor	UNT to Potato Creek	Р	CWF	No	Dam and Pump/Flume	10/1 – 5/31
McKean	Stream 039	7.1	4.0	Minor	UNT to Potato Creek	IT	CWF	No	Dam and Pump/Flume	10/1 – 5/31
McKean	Stream 159	7.2	30	Intermediate	UNT to Potato Creek	E	CWF	No	Dam and Pump/Flume	10/1 – 5/31
McKean	Stream 040	7.9	3.00	Minor	UNT to Walcott Brook	E	CWF	Yes <sup>5</sup> /NRT	Dam and Pump/Flume	10/01 – 12/31 10/1 – 5/31
McKean	Stream 041	7.9	9.44	Minor	UNT to Walcott Brook	Р	CWF	Yes <sup>5</sup> /NRT	Dam and Pump/Flume	10/01 – 12/31 10/1 – 5/31
McKean	Stream 043	8.0	16.71	Intermediate	UNT to Walcott Brook	Р	CWF	Yes <sup>5</sup> /NRT	Dam and Pump/Flume	10/01 – 12/31 10/1 – 5/31
McKean	Stream 054	10.4	8.50	Minor	Coalbed Hollow	Р	HQ-CWF	Yes <sup>5</sup> /NRT	Dam and Pump/Flume	10/01 – 12/31 10/1 – 5/31
McKean	Stream 122	11.2	5.0	Minor	UNT to Bemis Hollow	Е	HQ-CWF	Yes <sup>5</sup> /NRT	Dam and Pump/Flume	10/01 – 12/31 10/1 – 5/31
McKean	Stream 055	11.2	20.18	Intermediate	Bemis Hollow	Р	HQ-CWF	Yes <sup>5</sup> /NRT	Dam and Pump/Flume	10/01 – 12/31 10/1 – 5/31
McKean	Stream 056	11.3	3.0	Minor	UNT to Bemis Hollow	Р	HQ-CWF	Yes <sup>5</sup> /NRT	Dam and Pump/Flume	10/01 – 12/31 10/1 – 5/31
McKean	Stream 066	13.6	3.00	Minor	UNT to Allegheny Portage Creek	' E	CWF	Yes <sup>5</sup> /NRT	Dam and Pump/Flume	10/01 – 12/31 10/1 – 5/31
McKean	Ditch 08	13.8	3.0	Minor		D			Open Cut	None
McKean	Ditch 09	13.8	6.5	Minor		D			Open Cut	None
McKean	Ditch 10	13.9	6.0	Minor		D			Open Cut	None
McKean	Allegheny Portage Creek	14.1	129.25	Major	Allegheny Portage Creek	P P	TSF	Yes <sup>5</sup> /TSW	HDD	10/01 – 12/31 10/1 – 5/31
McKean	Stream 067	14.1	3.0	Minor	UNT to Allegheny Portage Creek	' IT	CWF	Yes <sup>5</sup> /NRT	Dam and Pump/Flume	10/01 – 12/31 10/1 – 5/31

County	Waterbody Project ID	MP	Crossing Length <sup>1</sup> (ft.)	FERC Waterbody Classification	Waterbody Name	Flow Regime <sup>2</sup>	Use and Water Quality Criteria <sup>3</sup>	Wild Trout <sup>4,5</sup>	Crossing Method <sup>6</sup>	In-Stream Work Restrictions <sup>7</sup>
McKean	Ditch 11	14.2	6.5	Minor		D			Open Cut	None
McKean	Ditch 12	14.2	3.0	Minor		D			Open Cut	None
McKean	Ditch 13	14.2	3.0	Minor		D			Open Cut	None
McKean	Stream 068	14.2	6.5	Minor	UNT to Allegheny Portage Creek		CWF	Yes <sup>5</sup> /NRT	Dam and Pump/Flume	10/01 – 12/31 10/1 – 5/31
McKean	Stream 070	14.3	6.5	Minor	UNT to Allegheny Portage Creek	İT	CWF	Yes <sup>5</sup> /NRT	Dam and Pump/Flume	10/01 – 12/31 10/1 – 5/31
McKean	Stream 071	14.5	3.0	Minor	UNT to Allegheny River	E	CWF	No	Dam and Pump/Flume	10/1 – 5/31
McKean	Stream 073	14.6	3.0	Minor	UNT to Allegheny River	E	CWF	No	Dam and Pump/Flume	10/1 – 5/31
McKean	Stream 074	14.7	3.0	Minor	UNT to Allegheny River	E	CWF	No	Dam and Pump/Flume	10/1 – 5/31
McKean	Stream 075	14.7	2.0	Minor	UNT to Allegheny River	İT	CWF	No	Dam and Pump/Flume	10/1 – 5/31
McKean	Allegheny River	14.8	169.61	Major	Allegheny River	Р	CWF	No	HDD	10/1 – 5/31
McKean	Stream 077	15.0	17.80	Intermediate	UNT to Benson Hollow	Р	CWF	Yes <sup>5</sup> /NRT	Dam and Pump/Flume	10/01 – 12/31 10/1 – 5/31
McKean	Ditch 16	15.3	10.0	Minor		D			Open Cut	None
McKean	Ditch 17	15.3	6.5	Minor		D			Open Cut	None
McKean	Stream 078	15.4	3.50	Minor	UNT to Allegheny River	İT	CWF	No	Dam and Pump/Flume	10/1 – 5/31
McKean	Coleman Creek - 1	15.7	16.15	Intermediate	Coleman Creek	IT	CWF	Yes <sup>5</sup> /NRT	Dam and Pump/Flume	10/01 – 12/31 10/1 – 5/31
McKean	Ditch 18-1	18.0	3.0	Minor		D			Open Cut	None
McKean	Stream 089	18.1	3.0	Minor	UNT to Jordan Hollow	IT	CWF	Yes <sup>5</sup> /NRT	Dam and Pump/Flume	10/01 – 12/31 10/1 – 5/31
Potter	Stream 091	18.1	3.0	Minor	UNT to Jordan Hollow	IT	CWF	Yes <sup>5</sup> /NRT	Dam and Pump/Flume	10/01 – 12/31 10/1 – 5/31
Potter	Stream 092	18.1	1.0	Minor	UNT to Jordan Hollow	IT	CWF	Yes <sup>5</sup> /NRT	Dam and Pump/Flume	10/01 – 12/31 10/1 – 5/31
Potter	Stream 090	18.1	18.14	Intermediate	Jordan Hollow	Р	CWF	Yes <sup>5</sup> /NRT	Dam and Pump/Flume	10/01 – 12/31 10/1 – 5/31
Potter	Stream 093	18.9	37.74	Intermediate	Ernst Hollow	Р	CWF	Yes <sup>5</sup> /NRT	Dam and Pump/Flume	10/01 – 12/31 10/1 – 5/31

County	Waterbody Project ID	MP	Crossing Length <sup>1</sup> (ft.)	FERC Waterbody Classification	Waterbody Name	Flow Regime <sup>2</sup>	Use and Water Quality Criteria <sup>3</sup>	Wild Trout <sup>4,5</sup>	Crossing Method <sup>6</sup>	In-Stream Work Restrictions <sup>7</sup>
Potter	Stream 094	19.1	27.98	Intermediate	UNT to Sartwell Creek	IT	CWF	Yes <sup>5</sup> /NRT	Dam and Pump/Flume	10/01 – 12/31 10/1 – 5/31
Potter	Sartwell Creek	19.2	28.49	Intermediate	Sartwell Creek	Р	CWF	Yes <sup>5</sup> /NRT	Dam and Pump/Flume	10/01 – 12/31 10/1 – 5/31
Potter	Stream 096	19.6	33.00	Intermediate	UNT to Sartwell Creek	Р	CWF	Yes <sup>5</sup> /NRT	Dam and Pump/Flume	10/01 – 12/31 10/1 – 5/31
Potter	Stream 098	19.7	6.0	Minor	UNT to Sartwell Creek	E	CWF	Yes <sup>5</sup> /NRT	Dam and Pump/Flume	10/01 – 12/31 10/1 – 5/31
Potter	Stream 099	21.8	21.50	Intermediate	Baker Hollow	Р	CWF	Yes <sup>5</sup> /NRT	Dam and Pump/Flume	10/01 – 12/31 10/1 – 5/31
Potter	Stream 156	23.0	37.38	Intermediate	Fishing Creek	Р	CWF	Yes <sup>5</sup> /NRT	Dam and Pump/Flume	10/01 – 12/31 10/1 – 5/31
Potter	Stream 151	25.0	3.0	Minor	UNT to East Branch Fishing Creek	IT	HQ-CWF	Yes <sup>5</sup> /NRT	Dam and Pump/Flume	10/01 – 12/31 10/1 – 5/31
Potter	Stream 116	26.7	3.0	Minor	East Branch Fishing Creek	Р	HQ-CWF	Yes <sup>5</sup> /NRT	Dam and Pump/Flume	10/01 – 12/31 10/1 – 5/31
Potter	Whitney Creek	27.4	3.0	Minor	Whitney Creek	E	EV	Yes <sup>5</sup> /NRT	Dam and Pump/Flume	10/01 – 12/31 10/1 – 5/31
Potter	Stream 102	27.8	3.0	Minor	UNT to Whitney Creek	E	EV	Yes <sup>5</sup> /NRT	Dam and Pump/Flume	10/01 – 12/31 10/1 – 5/31
Potter	Stream 103	28.7	4.0	Minor	UNT to Whitney Creek	E	EV	Yes <sup>5</sup> /NRT	Dam and Pump/Flume	10/01 – 12/31 10/1 – 5/31
Line YM58 Ac	cess Roads									
McKean	Stream 021	PAR-3	3.0	Minor	UNT to Red Mill Brook	IT	CWF	Yes <sup>5</sup> /NRT	Existing Road, No Improvements Proposed	10/01 – 12/31 d 10/1 – 5/31
McKean	Stream 022	PAR-3	3.0	Minor	UNT to Red Mill Brook	IT	CWF	Yes <sup>5</sup> /NRT	Existing Road, No Improvements Proposed	10/01 – 12/31 1 10/1 – 5/31
McKean	Stream 023	PAR-3	3.0	Minor	UNT to Red Mill Brook	IT	CWF	Yes <sup>5</sup> /NRT	Existing Road, No Improvements Proposed	10/01 – 12/31 1 10/1 – 5/31
McKean	Stream 025	PAR-3	3.0	Minor	UNT to Red Mill Brook	IT	CWF	Yes <sup>5</sup> /NRT	Existing Road, No Improvements Proposed	10/01 – 12/31 d 10/1 – 5/31
McKean	Stream 024	TAR-4	3.0	Minor	UNT to Red Mill Brook	E	CWF	Yes <sup>5</sup> /NRT	Existing Road, No Improvements Proposed	10/01 – 12/31
McKean	Stream 109	PAR-5	3.0	Minor	UNT to Irons Hollow	Е	CWF	Yes <sup>5</sup> /NRT	Existing Road, No Improvements Proposed	10/01 – 12/31 d 10/1 – 5/31

County	Waterbody Project ID	MP	Crossing Length <sup>1</sup> (ft.)	FERC Waterbody Classification	Waterbody Name	Flow Regime <sup>2</sup>	Use and Water Quality Criteria <sup>3</sup>	Wild Trout <sup>4,5</sup>	Crossing Method <sup>6</sup>	In-Stream Work Restrictions <sup>7</sup>
McKean	Stream 110	PAR-5	3.0	Minor	UNT to Irons Hollow	IT	CWF	Yes <sup>5</sup> /NRT	Existing Road, No Improvements Proposed	10/01 – 12/31 10/1 – 5/31
McKean	Stream 111	PAR-5	3.0	Minor	UNT to Irons Hollow	IT	CWF	Yes <sup>5</sup> /NRT	Existing Road, No Improvements Proposed	10/01 – 12/31 10/1 – 5/31
McKean	Stream 112	PAR-5	1.0	Minor	UNT to Irons Hollow	IT	CWF	Yes <sup>5</sup> /NRT	Existing Road, No Improvements Proposed	10/01 – 12/31 10/1 – 5/31
McKean	Stream 113	PAR-5	3.5	Minor	UNT to Irons Hollow	IT	CWF	Yes <sup>5</sup> /NRT	Existing Road, No Improvements Proposed	10/01 – 12/31 10/1 – 5/31
McKean	Stream 114	PAR-5	3.5	Minor	UNT to Irons Hollow	IT	CWF	Yes <sup>5</sup> /NRT	Existing Road, No Improvements Proposed	10/01 – 12/31 10/1 – 5/31
McKean	Stream 030 - 2	TAR-6	3.0	Minor	UNT to Robbins Brook	E	HQ-CWF	Yes <sup>5</sup> /NRT	Existing Road, No Improvements Proposed	10/01 – 12/31 10/1 – 5/31
McKean	Stream 032	TAR-6	3.0	Minor	UNT to Robbins Brook	IT	HQ-CWF	Yes <sup>5</sup> /NRT	Existing Road, No Improvements Proposed	10/01 – 12/31 10/1 – 5/31
McKean	Stream 033	TAR-6	3.0	Minor	UNT to Robbins Brook	IT	HQ-CWF	Yes <sup>5</sup> /NRT	Existing Road, No Improvements Proposed	10/01 – 12/31 10/1 – 5/31
McKean	Stream 034	TAR-6	3.0	Minor	UNT to Robbins Brook	IT	HQ-CWF	Yes <sup>5</sup> /NRT	Existing Road, No Improvements Proposed	10/01 – 12/31 10/1 – 5/31
McKean	Stream 035	TAR-6	3.0	Minor	UNT to Robbins Brook	IT	HQ-CWF	Yes <sup>5</sup> /NRT	Existing Road, No Improvements Proposed	10/01 – 12/31 10/1 – 5/31
McKean	Stream 036	TAR-6	3.0	Minor	UNT to Robbins Brook	IT	HQ-CWF	Yes <sup>5</sup> /NRT	Existing Road, No Improvements Proposed	10/01 – 12/31 10/1 – 5/31
McKean	Ditch 01	TAR-6	3.0	Minor		D			Existing Road, No Improvements Proposed	None
McKean	Stream 044	TAR-10	3.0	Minor	UNT to Walcott Brook	IT	CWF	Yes <sup>5</sup> /NRT	Existing Road, No Improvements Proposed	10/01 – 12/31 10/1 – 5/31
McKean	Stream 045	PAR-12	3.0	Minor	UNT to Walcott Brook	IT	CWF	Yes <sup>5</sup> /NRT	Existing Road, No Improvements Proposed	10/01 – 12/31 10/1 – 5/31
McKean	Stream 198	TAR-10	3.0	Minor	UNT to Walcott Brook	E	CWF	Yes <sup>5</sup> /NRT	Existing Road, No Improvements Proposed	10/01 – 12/31 10/1 – 5/31
McKean	Stream 046	PAR-12	3.0	Minor	UNT to Walcott Brook	E	CWF	Yes <sup>5</sup> /NRT	Existing Road, No Improvements Proposed	10/01 – 12/31 10/1 – 5/31
McKean	Stream 047	PAR-12	9.00	Minor	UNT to Walcott Brook	IT	CWF	Yes <sup>5</sup> /NRT	Existing Road, No Improvements Proposed	10/01 – 12/31
McKean	Stream 048	PAR-12	1.00	Minor	UNT to Walcott Brook	IT	CWF	Yes <sup>5</sup> /NRT	Existing Road, No Improvements Proposed	10/01 – 12/31

County	Waterbody Project ID	MP	Crossing Length <sup>1</sup> (ft.)	FERC Waterbody Classification	Waterbody Name	Flow Regime <sup>2</sup>	Use and Water Quality Criteria <sup>3</sup>	Wild Trout <sup>4,5</sup>	Crossing Method <sup>6</sup>	In-Stream Work Restrictions <sup>7</sup>
McKean	Stream 049	PAR-12	3.0	Minor	UNT to Walcott Brook	ΙΤ	CWF	Yes <sup>5</sup> /NRT	Existing Road, No Improvements Proposed	10/01 – 12/31 10/1 – 5/31
McKean	Stream 050	PAR-12	3.0	Minor	UNT to Walcott Brook	E	CWF	Yes <sup>5</sup> /NRT	Existing Road, No Improvements Proposed	10/01 – 12/31 10/1 – 5/31
McKean	Ditch 06 – JUR <sup>8</sup>	PAR-12	2.5	Minor		D			Existing Road, No Improvements Proposed	None
McKean	Stream 051	TAR-13	3.0	Minor	UNT to Walcott Brook	IT	CWF	Yes <sup>5</sup> /NRT	Existing Road, No Improvements Proposed	10/01 – 12/31 10/1 – 5/31
McKean	Stream 052	TAR-13	6.5	Minor	UNT to Walcott Brook	IT	CWF	Yes <sup>5</sup> /NRT	Existing Road, No Improvements Proposed	10/01 – 12/31 10/1 – 5/31
McKean	Stream 053	TAR-13	2.5	Minor	UNT to Walcott Brook	Е	CWF	Yes <sup>5</sup> /NRT	Existing Road, No Improvements Proposed	10/01 – 12/31 10/1 – 5/31
McKean	Stream 057	PAR-14	3.0	Minor	UNT to Bemis Hollow	Е	HQ-CWF	Yes <sup>5</sup> /NRT	Existing Road, No Improvements Proposed	10/01 – 12/31 10/1 – 5/31
McKean	Stream 058	PAR-14	3.0	Minor	UNT to Bemis Hollow	Е	HQ-CWF	Yes <sup>5</sup> /NRT	Existing Road, No Improvements Proposed	10/01 – 12/31
McKean	Stream 118	PAR-14	6.5	Minor	UNT to Bemis Hollow	Р	HQ-CWF	Yes <sup>5</sup> /NRT	Existing Road, No Improvements Proposed	10/01 – 12/31 10/1 – 5/31
McKean	Stream 059	PAR-14	3.0	Minor	UNT to Bemis Hollow	Е	HQ-CWF	Yes <sup>5</sup> /NRT	Existing Road, No Improvements Proposed	10/01 – 12/31 10/1 – 5/31
McKean	Stream 060	PAR-14	3.0	Minor	UNT to Bemis Hollow	Р	HQ-CWF	Yes <sup>5</sup> /NRT	Existing Road, No Improvements Proposed	10/01 – 12/31 10/1 – 5/31
McKean	Stream 061	PAR-14	3.0	Minor	UNT to Bemis Hollow	IT	HQ-CWF	Yes <sup>5</sup> /NRT	Existing Road, No Improvements Proposed	10/01 – 12/31 10/1 – 5/31
McKean	Stream 062	PAR-14	6.5	Minor	Bemis Hollow	Р	HQ-CWF	Yes <sup>5</sup> /NRT	Existing Road, No Improvements Proposed	10/01 – 12/31 10/1 – 5/31
McKean	Stream 063	PAR-14	3.0	Minor	UNT to Bemis Hollow	IT	HQ-CWF	Yes <sup>5</sup> /NRT	Existing Road, No Improvements Proposed	10/01 – 12/31 10/1 – 5/31
McKean	Stream 064	PAR-14	3.0	Minor	UNT to Bemis Hollow	IT	HQ-CWF	Yes <sup>5</sup> /NRT	Existing Road, No Improvements Proposed	10/01 – 12/31 10/1 – 5/31
McKean	Stream 080	PAR-25	3.0	Minor	UNT to Benson Hollow	IT	CWF	Yes <sup>5</sup> /NRT	Existing Road, No Improvements Proposed	10/01 – 12/31 10/1 – 5/31
McKean	Stream 081	PAR-25	10.0	Minor	UNT to Benson Hollow	IT	CWF	Yes <sup>5</sup> /NRT	Existing Road, No Improvements Proposed	10/01 – 12/31
McKean	Coleman Creek -2	PAR-25	10.0	Minor	Coleman Creek	IT	CWF	Yes <sup>5</sup> /NRT	Existing Road, No Improvements Proposed	10/01 – 12/31

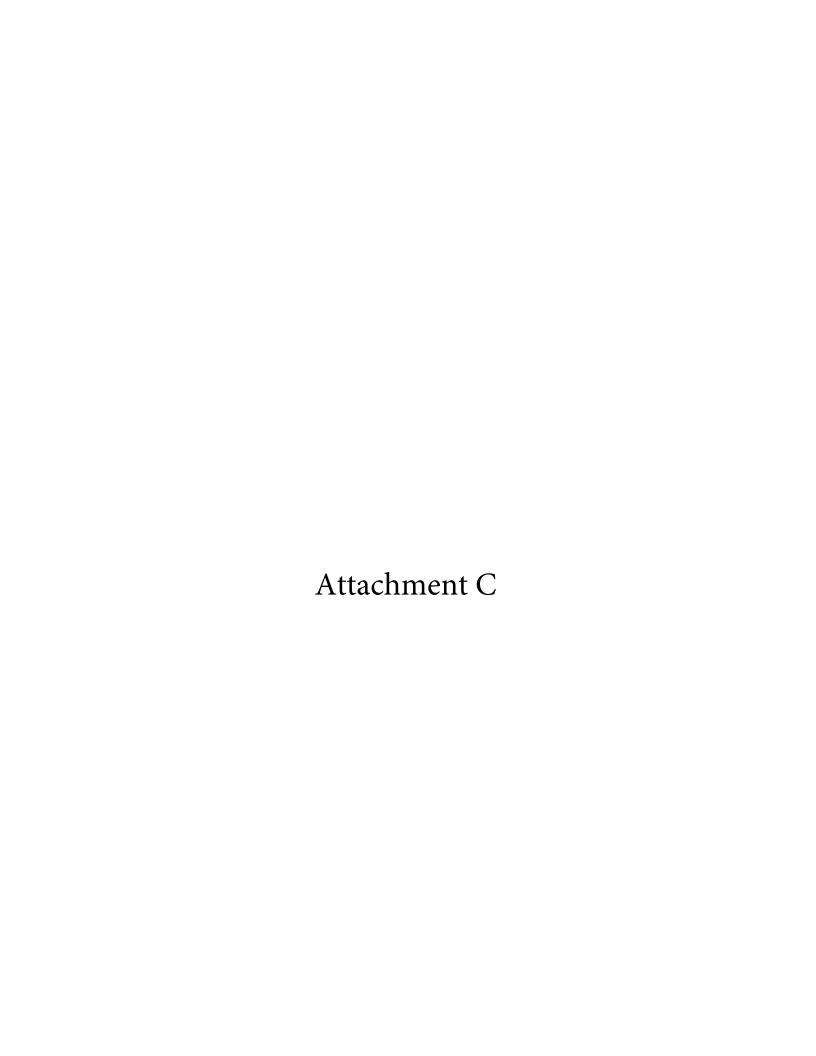
County	Waterbody Project ID	MP	Crossing Length <sup>1</sup> (ft.)	FERC Waterbody Classification	Waterbody Name	Flow Regime <sup>2</sup>	Designated Use and Water Quality Criteria <sup>3</sup>	Wild Trout <sup>4,5</sup>	Crossing Method <sup>6</sup>	In-Stream Work Restrictions <sup>7</sup>
McKean	Stream 082	PAR-25	3.0	Minor	UNT to Coleman Creek		CWF	Yes <sup>5</sup> /NRT	Existing Road, No Improvements Proposed	10/01 – 12/31
McKean	Stream 083	PAR-25	3.0	Minor	UNT to Coleman Creek	IT	CWF	Yes <sup>5</sup> /NRT	Existing Road, No Improvements Proposed	10/01 – 12/31
McKean	Stream 084	PAR-25	3.0	Minor	UNT to Coleman Creek	E	CWF	Yes <sup>5</sup> /NRT	Existing Road, No Improvements Proposed	10/01 – 12/31 10/1 – 5/31
McKean	Stream 085	PAR-25	3.0	Minor	UNT to Coleman Creek	Е	CWF	Yes <sup>5</sup> /NRT	Existing Road, No Improvements Proposed	10/01 – 12/31 10/1 – 5/31
McKean	Stream 196	PAR-25	3.0	Minor	UNT to Coleman Creek	E	CWF	Yes <sup>5</sup> /NRT	Existing Road, No Improvements Proposed	10/01 – 12/31 10/1 – 5/31
McKean	Stream 086	TAR-28	3.0	Minor	UNT to Coleman Creek	E	CWF	Yes <sup>5</sup> /NRT	Existing Road, No Improvements Proposed	10/01 – 12/31 10/1 – 5/31
McKean	Ditch 18-2	TAR-28	3.0	Minor		D			Existing Road, No Improvements Proposed	None
McKean	Stream 085c	TAR-26	3.0	Minor	UNT to Jordan Hollow	Е	CWF	Yes <sup>5</sup> /NRT	Existing Road, No Improvements Proposed	10/01 – 12/31 10/1 – 5/31
McKean	Stream 085b	TAR-26	3.0	Minor	UNT to Jordan Hollow	E	CWF	Yes <sup>5</sup> /NRT	Existing Road, No Improvements Proposed	10/01 – 12/31 10/1 – 5/31
McKean	Stream 085a	TAR-26	3.0	Minor	UNT to Jordan Hollow	E	CWF	Yes <sup>5</sup> /NRT	Existing Road, No Improvements Proposed	10/01 – 12/31 10/1 – 5/31
McKean	Ditch 18-3	TAR-26	3.0	Minor		D			Existing Road, No Improvements Proposed	None
McKean	Stream 195	SA-7	7.0	Minor	UNT to Potato Creek	Е	CWF	Yes <sup>5</sup> /NRT	Existing Road, install temporary bridge	10/01 – 12/31 10/1 – 5/31
Potter	Stream 155	PAR-31	13.5	Intermediate	UNT to Fishing Creek	Р	CWF	Yes <sup>5</sup> /NRT	Existing Road, No Improvements Proposed	10/01 – 12/31 10/1 – 5/31
Potter	Stream 153	PAR-31	1.5	Minor	UNT to Fishing Creek	IT	CWF	Yes <sup>5</sup> /NRT	Existing Road, No Improvements Proposed	10/01 – 12/31 10/1 – 5/31
Potter	Stream 154	PAR-31	1.0	Minor	UNT to Fishing Creek	IT	CWF	Yes <sup>5</sup> /NRT	Existing Road, No Improvements Proposed	10/01 – 12/31 10/1 – 5/31
Potter	Ditch 29	PAR-31	1.0	Minor		D			Existing Road, No Improvements Proposed	None
Potter	Ditch 30	PAR-31	1.0	Minor		D			Existing Road, No Improvements Proposed	None
Potter	Ditch 31	PAR-31	1.0	Minor		D			Existing Road, No Improvements Proposed	None

County	Waterbody Project ID	MP	Crossing Length <sup>1</sup> (ft.)	FERC Waterbody Classification	Waterbody Name	Flow Regime <sup>2</sup>	Use and Water Quality Criteria <sup>3</sup>	Wild Trout <sup>4,5</sup>	Crossing Method <sup>6</sup>	In-Stream Work Restrictions <sup>7</sup>
Potter	Ditch 32	PAR-31	1.0	Minor		D			Existing Road, No Improvements Proposed	None
Potter	Ditch 33	PAR-31	1.0	Minor		D			Existing Road, No Improvements Proposed	None
Potter	Ditch 34	PAR-31	1.0	Minor		D			Existing Road, No Improvements Proposed	None
Potter	Ditch 35	PAR-31	1.0	Minor		D			Existing Road, No Improvements Proposed	None
Potter	Ditch 36	PAR-31	1.0	Minor		D			Existing Road, No Improvements Proposed	None
Potter	Ditch 37	PAR-31	1.0	Minor		D			Existing Road, No Improvements Proposed	None
Potter	Ditch 38	PAR-31	1.0	Minor		D			Existing Road, No Improvements Proposed	None
Potter	Ditch 39	PAR-31	1.0	Minor		D			Existing Road, No Improvements Proposed	None
Potter	Ditch 40	PAR-31	1.0	Minor		D			Existing Road, No Improvements Proposed	None
Potter	Ditch 41	PAR-31	1.0	Minor		D			Existing Road, No Improvements Proposed	None
Potter	Ditch 42	PAR-31	1.0	Minor		D			Existing Road, No Improvements Proposed	None
Potter	Ditch 43	PAR-31	1.0	Minor		D			Existing Road, No Improvements Proposed	None
Potter	Ditch 44	PAR-31	1.0	Minor		D			Existing Road, No Improvements Proposed	None
Potter	Ditch 53	PAR-36	3.0	Minor		D			Existing Road, No Improvements Proposed	None
McKean	Ditch 58 – JUR <sup>8</sup>	PAR-14	3.0	Minor		D			Existing Road, No Improvements Proposed	None
McKean	Ditch 59 - JUR <sup>8</sup>	TAR-11	3.0	Minor		D			Existing Road, No Improvements Proposed	None
Potter	Ditch 28	PAR-32	1.5	Minor		D			Existing Road, No Improvements Proposed	None
Potter	Stream 150	PAR-33	3.0	Minor	UNT to Fishing Creek	IT	CWF	Yes <sup>5</sup> /NRT	Existing Road, No Improvements Proposed	10/01 – 12/31 10/1 – 5/31
Potter	Ditch 20	PAR-33	2.0	Minor		D			Existing Road, No Improvements Proposed	None

County	Waterbody Project ID	MP	Crossing Length <sup>1</sup> (ft.)	FERC Waterbody Classification	Waterbody Name	Flow Regime <sup>2</sup>	Use and Water Quality Criteria <sup>3</sup>	Wild Trout <sup>4,5</sup>	Crossing Method <sup>6</sup>	In-Stream Work Restrictions <sup>7</sup>
Potter	Ditch 21	PAR-33	1.0	Minor		D			Existing Road, No Improvements Proposed	None
Potter	Ditch 24	PAR-33	1.0	Minor		D			Existing Road, No Improvements Proposed	None
Potter	Ditch 22	PAR-33	1.0	Minor		D			Existing Road, No Improvements Proposed	None
Potter	Ditch 23	PAR-33	1.0	Minor		D			Existing Road, No Improvements Proposed	None
Potter	Ditch 25	PAR-33	1.0	Minor		D			Existing Road, No Improvements Proposed	None
Potter	Ditch 26	PAR-33	1.0	Minor		D			Existing Road, No Improvements Proposed	None
Potter	Ditch 27	PAR-33	1.0	Minor		D			Existing Road, No Improvements Proposed	None
Potter	Ditch 21a	PAR-36	3.0	Minor		D			Existing Road, No Improvements Proposed	None
Marvindale Co	mpressor Station	Access Ro	ads							
McKean	Stream 001	PAR-31	4.0	Minor	UNT to Warner Brook	IT	HQ-CWF	Yes <sup>5</sup> /NRT	Existing Road, No Improvements Proposed	10/01 – 12/31 10/1 – 5/31
McKean	Stream 005	PAR-31	4.0	Minor	UNT to Warner Brook	IT	HQ-CWF	Yes <sup>5</sup> /NRT	Existing Road, No Improvements Proposed	10/01 – 12/31 10/1 – 5/31

#### Notes:

- \* Facilities/Project components not represented do not cross waterbodies.
- <sup>1</sup> Crossing length is the bank-to-bank width of the stream at the pipeline or access road centerline crossing.
- <sup>2</sup> Flow regime based on onsite field review. IT Intermittent; E Ephemeral; P Perennial; D-Ditch. As classified by PA Code Title 25 Chapter 93.
- <sup>3</sup> As classified by PA Code Title 25 Chapter 93.9 Designated Use shapefile. WWF Warm Water Fishes; CWF Cold Water Fishes; MF Migratory Fishes; TSF Trout Stocked Fishery; HQ High Quality; and EV Exceptional Value.
- <sup>4</sup> As classified under PA Code Title 58, Chapters 57.4 and 57.11 as a Class A Wild Trout Water, Wild Trout Water, or Wilderness Trout Water. In-stream work restrictions for Naturally Reproducing Wild Trout Waters are in effect between October 1 and December 31; Class A October 1 and March 31; and Trout Stocked Waters March 1 through June 15. All streams classified as Wilderness Trout Waters qualify as EV resources; consultation with PFBC is required to obtain information regarding in-stream construction restriction periods. If a stream is not flowing at the time or crossing of if all activities avoid in-stream impacts (e.g., HDD/bore) no in-stream work restrictions will apply.
- <sup>5</sup> Stream is designated a wild trout stream because it is located upstream of a naturally reproducing wild trout stream and has a perennial flow regime.
- <sup>6</sup> If it is determined in the field during construction that either dam or pump or flume pipe methods are not possible; a wet trench method may be utilized. Open-cut methods will be evaluated at the time of construction to be used for streams if no flow is present.
- <sup>7</sup> The ESCAMP identifies approved cold water fisheries instream work period as June 1 through September 30; however, this column establishes periods of instream work restrictions. Therefore, for the purposes of continuity, National Fuel has listed the instream cold water fisheries work restriction window as October 1 through May 31. It is noted these restrictions will apply to any waterbody actively flowing at the time of crossing that is labeled as a CWF.
- <sup>8</sup> JUR in the Waterbody Project ID, seen in Ditch 06 JUR, Ditch 58 JUR, and Ditch 59 JUR, denotes a jurisdictional ditch. Ditches without the "JUR" designation represent non-jurisdictional ditches.





# COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION OFFICE OF WATER PROGRAMS OFFICE OF OIL AND GAS MANAGEMENT

OFFICIAL USE ONLY
ID#
Date Received
AUTH
SITE
CLNT
APS
Fee
Check No.
Check Date

NOTICE OF INTENT (NOI) FOR COVERAGE UNDER THE EROSION AND SEDIMENT CONTROL GENERAL PERMIT (ESCGP-3) FOR EARTH DISTURBANCE ASSOCIATED WITH OIL AND GAS EXPLORATION, PRODUCTION, PROCESSING, OR TREATMENT OPERATIONS OR TRANSMISSION FACILITIES

READ THE INSTRUCTIONS PROVIDED IN THIS PERMIT APPLICATION PACKAGE BEFORE COMPLETING THIS FORM. PLEASE PRINT OR TYPE INFORMATION IN BLACK OR BLUE INK.					
SEC	TION A. APPLICATION TY	PE			
Check one:  NEW  RENEWAL  MAJOR MO  PHASED  (check only if applicable; note: Most	DIFICATIONS (Provide ES) projects are not submitted as		•		
Check one: E	XPEDITED  STAI	NDAR	D 🖂		
If an Expedited Review Process being requested Refer to Section D - Expedited Review Process of					
SECT	ION B. CLIENT INFORMAT	ION			
Applicant's Last Name (If applicable) Kittka	First Name Jeffery	MI	Telephone No (814) 8	o. 371-8625	
Organization Name or Registered Fictitious Name National Fuel Gas Supply Corpo			Telephone No	).	
DEP Client ID No. 74892					
Headquarters Mailing Address 6363 Main Street	City Williamsville		State NY	ZIP Code 14221	
Email Address kittkaj@natfuel.com					
Co-Applicant's Last Name (If applicable) First Name MI			Telephone No	D.	
Organization Name or Registered Fictitious Name			Telephone No	0.	
Address	City		State	ZIP Code	
Email Address					

SECTION C. SITE INFORMATION						
Is there	e an existing	ESCGP associated w	ith this site?  Yes	⊠ No If yes, Permit I	No	
Has a	well permit a	pplication been submi	tted for this site?	Yes 🛛 No If yes, Per	rmit No	
Does t	his site have	a 911 address? ⊠ Ye	es 🗌 No If yes, pro	vide site location addre		n Foks Lane Jewett, PA 16740
Site Na	ame					
FM100	Moderniza	ation Project / A	Abandonment Pro	ject		
Site Lo				Site No. (if another po	ermit has bee	en issued for the site)
See S	ection 1-4	4 of this ESCGP-3	3 Application		1	
	cation – City				State	ZIP Code
		4 of this ESCGP-3	Application			
Line KL/L	ine YM58 Begin (		y): Take Grand Army of th	e Republic - Route 6 to Cler	mont Rd. Head so	outh on Clermont
	miles to Kin Fo		State Doute 44 N to South	Branch Rd. Follow South Bra	angh Ed 2 miles	to Common In
Existing	Line FM100 Aband	donment Begin (Huston Twp, (		s driveway via Bennetts Vall		
	with State Park Compressor Stati		nty): Take Tamarack Rd 14	4 to Stewart Hill Rd. Follow	v Stewart Hill Ro	d ~1.5 miles NE to
access dr	iveway.					_
Primar	Primary Location County Municipality City Boro Twp.  See Attachment 1 See Attachment 1					
SECTION D. EXPEDITED REVIEW						
I. Expedited Review Eligibility						
1.	<ol> <li>Is any part of the project in the watershed of a surface water with an existing or designated use of exceptional value or high quality pursuant to Chapter 93 (relating to water quality standards), in an exceptional value wetland in accordance with 25 Pa. Code § 105.17, or in the watershed of an impaired surface water where the cause of the impairment is identified as siltation?</li> </ol>					
2. Will the project in which the well pad will be constructed be in or on a floodplain? ☐ Yes ☒ No						
3. Is any earth disturbance located or proposed to be located on land known to be contaminated by the release of regulated substances as defined in Section 103 of Act 2, 35 P.S. § 6026.103? ☐ Yes ☑ No						
4.	4. Will naturally occurring geologic formations or soil conditions provide hazards to the project or surrounding environment or have the potential to cause or contribute to pollution when disturbed?					
5.	5. Do any unresolved non-compliance issues exist with the applicant or the facility? ☐ Yes ☒ No				☐ Yes ⊠ No	
6.	6. Is the project a transmission project?  ☐ Yes ☐ No					

	If yes to any of the above questions the project is not eligible for Expedited Review; If the project is eligible for Expedited Review, all the following items must be completed.						
II.	Ex	Expedited Review Process					
	1.	Is the technically and administratively complete and accurate NOI package prepared and certified by a licensed professional?	☐ Yes ☐ No				
	2.	Are E&S and PCSM/Site Restoration Plan drawings and narrative prepared and sealed by a licensed professional? (Include interim restoration details when needed)	☐ Yes ☐ No				
	3.	Include a Resource Delineation Report and answer the following questions: (If the then skip to #4. If the answer to a. is "No" the applicant must answer "Yes" to at through d. to be eligible for expedited review.)					
		a. Were all wetland resources delineated during the growing season?	☐ Yes ☐ No				
		b. If not during the growing season, was a follow-up visit conducted during the growing season to verify/adjust boundaries and look for potentially missed resources?	☐ Yes ☐ No				
		c. Was a quality assurance field review conducted at a later date by an independent qualified wetland professional to verify boundaries and look for potentially missed resources? (If yes, attach Quality Assurance Field Review Report)	☐ Yes ☐ No				
		d. Was a Jurisdictional Determination (JD) or Preliminary JD conducted by the US Army Corps of Engineers on the whole project? (If yes, attach Preliminary or Jurisdictional Determination Report)	☐ Yes ☐ No				
	4.	If applicable, have you included PNDI clearance letters or other documentation from applicable resource agencies?	☐ Yes ☐ No				
	5.	If the project site contains, is along, or within 100 feet of a river, stream, creek, lake, pond or reservoir, will you establish new or preserve existing riparian forest buffer at least 100 feet in width between the top of streambank or normal pool elevation of a lake, pond or reservoir and areas of earth disturbances.  If no, will a waiver be obtained?  Yes No	☐ Yes ☐ No				
	6.	Name of Licensed Professional					
		Company					
		Address					
		Phone					

SECTION E. PROJECT INFORMATION						
Total Project	ct Area/Project Site (Ac):	556.0	Total Dis	sturbed Area (	(Ac):	556.0
Increased disturbed acreage (for permit modification only)						
Fee: (For addi Fees.)	tional information regarding fe	ees, refer to N	IOI Instru	ctions #3 Pe	rmit NOI Filing	\$ See Section 1-3 of this ESCGP-3 Application
2. Project Nar	ne: FM100 Modernization	Project / P	Abandonm	ent Projec	t	
3. Project Type (Check all that apply)  Oil/Gas Well 1						
	See Section 2-1 of this ESCGP-3 Application					
Provide the date of pre-application meeting (if conducted with the Department)  4. Provide the latitude and longitude coordinates for the center of the project. The coordinates should be in Decimal degrees and North American Datum 1983. The coordinates must meet the current DEP policy regarding locational accuracy. For linear projects provide the project's termini.  Line KL Begin / End: 41.703, -78.500 / 41.705, -78.494 Line YM58 Begin / End: 41.702, -78.499 / 41.857, -78.017 Line YM 224 Begin / End: 41.878, -77.975 / 41.886, -77.950 Existing Line FM100 Abandonment Begin / End: 41.220, -78.559 / 41.590, -78.058 Tamarack Compressor Station: 41.436, -77.836  Horizontal Collection Method: GPS Interpolated from U.S.G.S. Topographic Map DEP's eMAP						
	5. U.S.G.S. 7.5 min. topographic quadrangle Name (Include a copy of the project area on the 7.5 min quad map)  See Section 1-4 of this ESCGP-3 Application					
	6. Will the project be conducted as a phased permit project?					
Phase No. or Name	Description	Тс	otal Area	Disturbed Area	Start Date	End Date

7.	List existing and previous land use for a minimum of the previous 5 years. See Section 2-1 of this ESCGP-3 Application
8.	Other Pollutants: Will the stormwater discharge contain pollutional substances other than sediment?   Yes   No
	If yes, explain and provide any available quantitative data.
9.	Will fuels, chemicals, solvents, other hazardous waste or materials be used or stored on site during earth disturbance activities or will Horizontal Directional Drilling (HDD) activities be conducted?
	Yes ⊠ No ☐ (If yes, Preparedness, Prevention and Contingency (PPC) Plan must be maintained on site during earth disturbance. See NOI Instructions, E.9 PPC Plan Guidance for further information.)
10.	Is the project in the watershed of an impaired surface water where the cause of the impairment is identified as siltation?
	Yes $\square$ No $\boxtimes$ (If yes, show how the project will not result in a net change in volume, rate or water quality. See section I below, and E.10 of NOI instructions.)
11.	Are there potentially hazardous naturally occurring geological or soil conditions in any portion of the project or surrounding area? Yes $\boxtimes$ No $\square$
	If yes, do the potentially hazardous geologic or soil conditions have the potential to cause or contribute to pollution as a result of the proposed earth disturbance activities? $No$ .
	If no, provide an explanation. See Section 2-1 of this ESCGP-3 Application.
	If yes, Geologic Hazard Mitigation Plan must be attached and explain where in this application details are provided.
12.	Has the Act 14 Municipal Notification and proof of receipt of notification been attached to the NOI?
	Yes $\boxtimes$ No $\square$ (If not, the NOI is not complete, see E.12 and #4 Municipal Notification in the NOI Instructions for additional guidance.)
13.	Has the PNDI receipt been attached to the NOI?
	Yes $\boxtimes$ No $\square$ (If not, the NOI is not complete, see E.13 and #5 PNHP in the NOI Instructions for additional guidance.)
14.	Have the E&S Plan and PCSM/SR Plan been planned and designed to be consistent?  Yes ⊠ No □
15	Have existing and/or proposed Riparian Forest Buffers been identified?
15.	Yes \( \subseteq \text{N/A} \subseteq \( \text{(If yes, they must be shown on the E&S Plan as well as the PCSM/SR Plans.)}
16.	Have antidegradation implementation requirements for special protection waters been addressed?
	Yes No No N/A (If yes, antidegradation requirements must be included in the plan.)
17.	Has the seasonal high groundwater level been identified and 20-inch separation established at all excavation locations for pits for conventional operations and Well Development Impoundments for unconventional operations?  Yes  No  N/A

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18. Receiving Waters	Chapter 93, Designated Use Stream	Chapter 93, Existing Use Stream			
Watersheds crossed (See ESCGP-3 Section 2-2A and 2-2B for locations in plan view):	Classification	Classification			
Allegheny Portage Creek (TSF), Allegheny River		☐ HQ ☐ EV ☐ Other			
(CWF), Baker Hollow (CWF), Bear Creek (CWF), Bemis Hollow (HQ), Bennett Branch Sinnemahoning Creek (CWF), Bennett Branch Sinnemahoning Creek	☐ Siltation-impaired	☐ Siltation-impaired			
(WWF), Benson Hollow (CWF), Berge Run (EV), Boyer Brook (HQ), Browns Mill Hollow (CWF), Coalbed Hollow (HQ), Coleman Hollow (CWF), Combs Creek					
(CWF), Deloy Hollow (EV), Donley Fork (HQ), Driftwood Branch Sinnemahoning Cr. (EV), Drury Run (EV), Dry Hollow (CWF), East Branch Fishing	☐ HQ ☐ EV ☐ Other	☐ HQ ☐ EV ☐ Other			
Creek (HQ), Ernst Hollow (CWF), First Fork Sinnemahoning Creek (EV), Fishing Creek (CWF),	☐ Siltation-impaired	☐ Siltation-impaired			
Fishing Creek (CWF), Fisk Hollow (CWF), Gifford Hollow (CWF), Green Hollow (CWF), Grove Run (HQ-CWF), Irons Hollow (CWF), Johnson Run (EV),					
Jordan Hollow (CWF), Lamb Hollow (CWF), Larson Hollow (CWF), Laurel Run (HQ-CWF), Lick Island Run (EV), Little Bailey Run (HQ), Medix Run	☐ HQ ☐ EV ☐ Other	☐ HQ ☐ EV ☐ Other			
(HQ-CWF), Mix Run (HQ-CWF), Oswayo Creek (CWF), Potato Creek (TSF), Red Mill Brook (CWF), Right Fork Big Run (EV), Right Fork Brooks Run (EV),	☐ Siltation-impaired	☐ Siltation-impaired			
Robbins Brook (HQ), Sartwell Creek (CWF), Saunders Run (HQ-CWF), Skinner Creek (HQ), South Branch Oswayo Creek (EV), Sullivan Run (HQ),					
Walcott Brook (CWF), Warner Brook (HQ), Wernwag Hollow (HQ), White Hollow (CWF), Whitney Creek (EV), Wiemer Hollow (CWF), Young Hollow (EV)	☐ HQ ☐ EV ☐ Other	☐ HQ ☐ EV ☐ Other			
See ESCGP-3 Section 2-1 for full list of receiving waters crossed by the Project	☐ Siltation-impaired	☐ Siltation-impaired			
	Secondary Chanter 02 Decimated Hea	Secondary Existing Use			
Secondary Receiving Water	Secondary Chapter 93, Designated Use	Secondary Existing Ose			
Name of Municipal or Private Se	parate Storm Sewer Operator, if applicable.	L			
·					
N/A					
Non-Surface Receiving Water: (i	nclude off-site discharges)				
N/A					

# SECTION F. EROSION AND SEDIMENT CONTROL (E&S) PLAN See the attached Instructions for additional guidance with E&S Plans

Erosion and Sediment Control Plan BMPs should be designed to minimize accelerated erosion and sedimentation through limiting the extent and duration of earth disturbance, protection of existing drainage and vegetation, limiting soil compaction and controlling the generation of increased runoff. The Department recommends the use of the *Pennsylvania Erosion & Sedimentation Pollution Control Program Manual (E&S Manual)* (363-2134-008) to achieve this goal. The E&S Plan must meet the requirements of Pa. Code § 102.4(b) and submitted with the NOI. Also, see section 2. of the NOI instruction for detailed information on completing the E&S plan and additional requirements.

#### a. E&S Plan Summary

Provide a summary of proposed E&S BMPs and their performance to manage E&S for the project.

Typical pipeline BMPs that are proposed include waterbars, trench plugs, sediment barriers (compost filter socks), rock filter outlets, erosion control blanket, rock construction entrances, temporary equipment bridges, timber mats, mulch, and seed. An appropriate sediment removal device (filter bag, dewatering structure) and well-vegetated area will be utilized for trench and hydrostatic test dewatering. Antidegradation Best Available Combination of Technolgies (ABACT) BMPs, including compost filter socks and extended rock construction entrances with daily maintenance, will be utilized in HQ/EV watersheds. Additional information about the proposed BMPs are discussed in the Erosion and Sediment Control Plan.

b.	E&S Plan BMP Design
	Check those that apply:
	☐ E&S Plan is designed using an alternative BMP or design standard approved by DEP.
	Note: NOI packages submitted with alternate BMPs not approved by the Department will be returned to the Applicant.

C.	Do you have any information regarding riparian buffer which differs from Section G, Riparian Buffer?  Yes □ No □  Explain:
d.	Thermal Impacts Analysis
	Explain how thermal impacts associated with this project were avoided, minimized, or mitigated.
Cle of res mir	beline earing and grading associated with the pipeline construction may result in temporary loss tree canopy and riparian vegetation along surface waters and wetlands, potentially sulting in thermal impacts from the loss of shading. However, the thermal impacts will be nimized by limiting the construction ROW to 75 feet, where possible, at wetlands and miting the maintained permanent ROW to 10 feet at wetlands.
the pra saf	streams and wetlands, trees and brush will be cut just above or to ground level, leaving e stumps and root systems intact. Tree stumps will be preserved to the maximum extent acticable and will be removed only over the trenchline and where the stumps present a fety hazard for construction. Leaving stumps and root systems in this manner will promote growth in some species.
Cle lin wil	cilities earing and grading associated with the site development for aboveground facilities was mited to the least amount of space required for safe construction. Runoff from the site ll flow over long stretches of vegetated areas before reaching receiving streams, which ll provide for additional cooling and infiltration. Additionally, shade areas will be eserved to the greatest extent possible.
e.	Off-Site Discharge Analysis  Does the activity propose any off-site discharges to areas other than surface waters?   Yes   No  If yes, it is the applicant's responsibility to ensure that they have legal authority for any off-site discharge to neighboring properties.  The applicant must provide a demonstration in both E&S and PCSM/SR plans that the discharge will not cause erosion,
	damage, or a nuisance to off-site properties.

	SECTION G. RIPARIAN BUFFER
1.	Will you be protecting, converting or establishing a voluntary riparian forest buffer as part of this project?   Yes  No  If yes, as part of the PCSM/SR Plan, provide a Buffer Management Plan.
2.	Will proposed earth disturbance activities be conducted in an EV or HQ watershed AND within 150 feet of a perennial or intermittent river, stream, or creek, or lake, pond, or reservoir? $\square$ Yes $\square$ No
	If no, proceed to the next section/module.
3.	Does this project qualify for an exception (see § 102.14(d)(1))? ☐ Yes ☒ No
	If yes, indicate below the type of project for which the exception applies by marking the appropriate box.
	Oil and gas activities for which site reclamation or restoration is part of the permit authorization in Chapter 78 and 78a.
	☐ Road maintenance activities.
	☐ The repair or maintenance of existing pipelines and utilities.
	☐ Other (see §102.14(d)(1))
	If exceptions are checked, explain how existing riparian buffer will be undisturbed to the extent practicable. Provide a demonstration that the requirements of §102.14(b) are met, or provide the necessary information to request a riparian buffer waiver.
4.	Are you requesting a riparian buffer waiver for this project (see § 102.14(d)(2))? ☐ Yes ☐ No
	If yes, indicate below the type of project for which you are requesting a waiver by marking the appropriate box.
	Project is of a temporary nature where the site will be fully restored to its preexisting conditions during the ESCGP permit term.
	Project where compliance with mandatory riparian buffers is not appropriate or feasible due to site characteristics or existing structures at the project site.
	☐ Other (see §102.14(d)(2)):
	If waivers are checked, explain how existing riparian buffers will be undisturbed to the extent practicable.
	Note: If "Yes" to #2 <b>AND</b> "No" to #3 and #4, provide an attachment to demonstrate how the requirements of §102.14 are met.
	Please refer to Section 2-1 of this ESCGP-3 Application for Riparian Buffer Waiver Request

# SECTION H. POST CONSTRUCTION STORMWATER MANAGEMENT (PCSM) AND/OR SITE RESTORATION(SR) PLAN See NOI Instructions for additional guidance with PCSM Plans

		See NOI Instructions for addit	tional guidance with Po	CSM Plans	
constructio proposed ii for conver <i>Manual)</i> (3	n/maintenance n the PCSM/S ntional operati 63-0300-002).	I be designed to use natural measure, promote pollutant reduction, and SR Plan must be designed in accordations and the <i>Pennsylvania Stormu</i> . If alternate design criteria are utilized Application will be returned to the Application will be retur	preserve the integrity on now with Ch. 102, Ch. 7 water Best Management of for the proposed project.	f stream channels. All PCSI 8a for unconventional operat Int Practices Manual (Storm	M/SR BMPs ions, Ch. 78 nwater BMP
	ruction is com conditions?	pleted, how much of the entire distul ☐ All	bed area will be restore	d to meadow in good condition	on or better,
	SM narrative toration plan.	and drawings for remaining impervious	ous area. Also include a	map showing the proposed	contours of
required by	/ subsection 'a	ages of the project prior to permit terr a' to section 'g' for each stage (e.g. p s areas). Upload a narrative for each	partial restoration or cha	nges to the amount of compa	
	EXAMPLE				
	Stage No	Stage Name	PCSM Plan	SR Plan	
	Stage 1				1
	Stage 2				
	Stage 3				-
	Stage 4				
A - 4 4 C 7 /	Consistence	Charle those that apply			_
	consistency. an Act 167 Pla	Check those that apply.  In? ☑ Yes ☐ No			
		M/SR Plan is consistent with an appl	icable approved Act 167	Plan.	
Complete	e the following	for all approved Act 167 Stormwater	Management Plans. (U	Jse additional sheets if neces	ssary)
	Plan Name		2010	Consistency Letter Included	
		acer nanagement rran	2010	/erification Report Included	
		letter is not required if a verification ther sub paragraph 1, 2, or 3 below.			SM/SR Plan
1.	with all	Plan approvals on or after January a requirements pertaining to rate, volus proved by DEP on or after January 2 ists.	me, and water quality from	om an Act 167 Stormwater M	/lanagement
2.	Stormw Chapter stormwa or to a co	CSM/SR Plan meets the standard vater BMP Manual. For projects invoice 78 or Chapter 78a (well pads) or pater management requirements are condition of meadow in good condition of the regulations, which a	living oil and gas activity bipelines and other simile met for all areas that and or better. [Note: PCS]	ies authorized by a permit is ar utility infrastructure, post re restored to preconstruction of plans must meet both the	ssued under construction n conditions volume and
3.	in 102.8 will be e	tive Design Standard – The attached 8(g)(2)(iv) and 102.8(g)(3)(iii). Demonstrate protective than what is regular water quality and existing and designate in the standard protective than what is regular water quality and existing and designate in the standard protection in the standard prot	onstrate/explain in the s equired in 102.8(g)(2) an	pace provided below how the	nis standard

PCSM/SR BMP Alternative Standards:
Has the alternative BMP or design standard been approved by the Department? NOT APPLICABLE
☐ Yes
□ No – Do not submit the ESCGP-3 application and see Section (H) of the NOI Instructions concerning the alternative BMP approval process.
Water Quality Compliance:
Does the PCSM/SR plan comply with requirements for volume control? 🛛 Yes 🔲 No
If yes, is at least 90% of the disturbed area controlled by a PCSM BMP? ⊠ Yes □ No
If yes, do you have the Standard PCSM Worksheet # 10 attached to show water quality compliance has achieved? ☑ Yes ☐ No
If no, attach Standard PCSM Worksheets # 12 and #13 to show water quality compliance has achieved.
If PCSM/SR plan is not complying with the requirements for volume control, attach Standard PCSM Worksheets # 11, # 12 and #13 to show water quality compliance has achieved.
a. PCSM/SR Plan Summary
Provide a summary of proposed BMPs and their performance to manage PCSM/SR for the project.  Along the mainline pipeline, typical E&S BMPs such as permanent waterbars and erosion control blanket will be left in place as part of site restoration for the project. At the aboveground facility sites, typical PCSM BMPs such as infiltration trenches, infiltration berms, retentive berms, and wet ponds will be used and left in place as part of site restoration for facility sites. refer to the PCSM/SR Plans for additional information.  Check all that apply PCSM BMPs
<b>b.</b> Do you have any information regarding riparian buffer which differs from what was submitted in the Section G, Riparian Buffer?
☐ Yes    No
Explain:
c. Thermal Impacts Analysis
Explain how thermal impacts associated with this project were avoided, minimized, or mitigated.  Aboveground Facilities Infiltration of runoff collected in the PCSM facilities will mitigate thermal impacts from post construction stormwater. Further, it is not expected that runoff collected in stormwater infiltration basins and discharged overland to the receiving water will be retained for more than 24 hours, thus providing additional mitigation of potential thermal impacts of discharge from the PCSM facilities. Existing shade trees will be preserved to the greatest extent possible, and excessive riprapping and installation of concrete channels is avoided, which will minimize the transfer of heat to the runoff.  Pipeline Once pipeline construction activities are complete, disturbed areas will be restored to pre-construction contours and seeded as described in the E&SCP. Temporary workspace disturbed for construction will be allowed to re-establish with woody and herbaceous vegetation species.
d. Off-Site Discharge Analysis.
Does the activity propose any off-site discharges to areas other than surface waters?   Yes   No
If yes, it is the applicant's responsibility to ensure that they have legal authority for any off-site discharge to neighboring properties.
The Applicant must provide a demonstration in both the E&S and PCSM/SR Plans that the discharge will not cause erosion, damage, or a nuisance to off-site properties.

#### Carpenter Hollow OPP

## e. Summary Table for Supporting Calculation and Measurement Data (See NOI Instructions for additional guidance with this section)

The remainder of this section (Summary Table for Calculation and Measurement Data) does not need to be completed for areas of projects involving oil and gas activities authorized by Chapter 78 or Chapter 78a (well pads) or pipelines and other similar utility infrastructure which will be restored to meadow in good condition or better or existing conditions.

Watershed Name: South Branch Oswayo Creek					
Volume Control design storm frequency 2-year Rainfall amount 2.41 inches	Pre-construction	Post Construction	Net Change		
Impervious area (acres)	0.000	0.000	+0.000		
Volume of stormwater runoff (acrefeet) without planned stormwater BMPs	0.061	0.085	+0.024		
Volume of stormwater runoff (acrefeet) with planned stormwater BMPs		0.000	-0.061		
Stormwater discharge rate for the design frequency storm	Pre-construction	Post Construction	Net Change		
1) 2-Year/24-Hour	0.765 cfs	0.000 cfs	-0.765 cfs		
2) 10-Year/24-Hour	1.563 cfs	0.036 cfs	-1.527 cfs		
3) 50-year/24-Hour	2.762 cfs	0.745 cfs	-2.017 cfs		
4) 100-year/24-Hour	3.466 cfs	2.085 cfs	-1.381 cfs		

#### f. Summary Description of PCSM/SR BMPs

In the lists below, check the BMPs identified in the PCSM Plan. The primary function(s) of the BMP listed in the functions column (infiltration/recharge; detention/retention; water quality). Additional functions may be added if applicable to that BMP. List the stormwater volume and area of runoff to be treated by each BMP type when calculations are required. If any BMP in the PCSM/SR Plan is not listed below, describe it in the space provided after "Other". A summary table with infiltration testing information (Attachment E, included in the NOI Instructions) must be submitted for all Bio-infiltration BMPs included in PCSM/SR plan.

For Rate control provide the volume of stormwater treated and acres treated for the 100-year/24-hour storm event.

For volume control and water quality provide the volume of stormwater treated and acres treated for the 2-year/24-hour storm event.

Key for BMP purpose(s): VC = Volume Control; RC = Rate Control; and WQ = Water Quality

ВМР	Function(s)	Purpose(s)	Volume of stormwater treated	Acres treated
Site Restoration ONLY				
Restore Site to Meadow in Good Condition or Better, or Existing Conditions	Infiltration/Recharge Detention/WQ Treatment	□VC □RC □WQ		
Bio-infiltration areas	Infiltration/Recharge			
		⊠ VC ⊠ RC ⊠ WQ	3 <u>,778</u> cf	1.109
☐ Infiltration Bed		□ VC □ RC □ WQ		
☐ Infiltration Basin		☐ VC ☐ RC ☐ WQ		
Rain Garden/ Bioretention		☐ VC ☐ RC ☐ WQ		
☐ Infiltration Berm		□ VC □ RC □ WQ		

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			T .	
Natural Area Conservation  Streamside Buffer Zone  Wetland Buffer Zone  Sensitive Area Buffer Zone  Pre-Construction Drainage Pattern Intact	Infiltration/Recharge	VC       RC       WQ         VC       RC       WQ         VC       RC       WQ         VC       RC       WQ         VC       RC       WQ		
Stormwater Retention	Detention/Retention			
<ul><li>☐ Constructed Wetlands</li><li>☐ Wet Ponds</li><li>☐ Retention Basin</li></ul>				
Sediment and Pollutant Removal	Water Quality Treatment			
<ul><li>☐ Vegetated Filter Strips</li><li>☐ Compost Filter Sock</li><li>☐ Detention Basins</li></ul>		<ul><li>□ VC □ RC □ WQ</li><li>□ VC □ RC □ WQ</li><li>□ VC □ RC □ WQ</li></ul>	<u> </u>	
Access Road Design	Infiltration/Recharge			
<ul> <li>☐ Road Crowning</li> <li>☐ Ditches</li> <li>☐ Turnouts</li> <li>☐ Culverts</li> <li>☐ Roadside Vegetated Filter</li> <li>Strips</li> </ul>	ŭ	VC       RC       WQ         VC       RC       WQ         VC       RC       WQ         VC       RC       WQ         VC       RC       WQ		
Stormwater Energy Dissipaters	Infiltration/Recharge			
Level Spreaders Riprap Aprons Upslope Diversions Other	ŭ	<ul> <li>□ VC</li> <li>□ RC</li> <li>□ WQ</li> <li>□ VC</li> <li>□ RC</li> <li>□ WQ</li> <li>□ VC</li> <li>□ RC</li> <li>□ WQ</li> </ul>		
g. Critical PCSM Plan stage	S			
Identify and list critical stages of implementation of the PCSM Plan for which a licensed professional or designee shall be present on site.				
1. Engineer shall insp 2. Engineer shall insp				

#### Marvindale Interconnect

## e. Summary Table for Supporting Calculation and Measurement Data (See NOI Instructions for additional guidance with this section)

The remainder of this section (Summary Table for Calculation and Measurement Data) does not need to be completed for areas of projects involving oil and gas activities authorized by Chapter 78 or Chapter 78a (well pads) or pipelines and other similar utility infrastructure which will be restored to meadow in good condition or better or existing conditions.

Watershed Name: Warner Brook				
Volume Control design storm frequency 2-year Rainfall amount 2.50 inches	Pre-construction	Post Construction	Net Change	
Impervious area (acres)	0.000	0.040	+0.040	
Volume of stormwater runoff (acrefeet) without planned stormwater BMPs	0.036	0.041	+0.005	
Volume of stormwater runoff (acrefeet) with planned stormwater BMPs		0.001	-0.035	
Stormwater discharge rate for the design frequency storm	Pre-construction	Post Construction	Net Change	
1) 2-Year/24-Hour	0.615 cfs	0.000 cfs	-0.615 cfs	
2) 10-Year/24-Hour	1.129 cfs	0.035 cfs	-1.094 cfs	
3) 50-year/24-Hour	1.782 cfs	0.754 cfs	-1.028 cfs	
4) 100-year/24-Hour	2.106 cfs	1.743 cfs	-0.363 cfs	

#### f. Summary Description of PCSM/SR BMPs

In the lists below, check the BMPs identified in the PCSM Plan. The primary function(s) of the BMP listed in the functions column (infiltration/recharge; detention/retention; water quality). Additional functions may be added if applicable to that BMP. List the stormwater volume and area of runoff to be treated by each BMP type when calculations are required. If any BMP in the PCSM/SR Plan is not listed below, describe it in the space provided after "Other". A summary table with infiltration testing information (Attachment E, included in the NOI Instructions) must be submitted for all Bio-infiltration BMPs included in PCSM/SR plan.

For Rate control provide the volume of stormwater treated and acres treated for the 100-year/24-hour storm event.

For volume control and water quality provide the volume of stormwater treated and acres treated for the 2-year/24-hour storm event.

Key for BMP purpose(s): VC = Volume Control; RC = Rate Control; and WQ = Water Quality

ВМР	Function(s)	Purpose(s)	Volume of stormwater treated	Acres treated
Site Restoration ONLY				
Restore Site to Meadow in Good Condition or Better, or Existing Conditions	Infiltration/Recharge Detention/WQ Treatment	□VC □RC □WQ		
Bio-infiltration areas	Infiltration/Recharge			
		⊠ VC ⊠ RC ⊠ WQ	1 <u>,706</u> cf	0.43
☐ Infiltration Bed		☐ VC ☐ RC ☐ WQ		
☐ Infiltration Basin		☐ VC ☐ RC ☐ WQ		
Rain Garden/ Bioretention		☐ VC ☐ RC ☐ WQ		
☐ Infiltration Berm		□ VC □ RC □ WQ		

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			1	
Natural Area Conservation  Streamside Buffer Zone	Infiltration/Recharge	□VC □RC □WQ		
Wetland Buffer Zone		□ VC □ RC □ WQ		
Sensitive Area Buffer Zone		□ VC □ RC □ WQ		
☐ Pre-Construction Drainage Pattern Intact		□VC □RC □WQ		
Stormwater Retention	Detention/Retention			
☐ Constructed Wetlands		□ VC □ RC □ WQ		
☐ Wet Ponds		□ VC □ RC □ WQ		
Retention Basin	Water Overlite	☐ VC ☐ RC ☐ WQ		
Sediment and Pollutant Removal	Water Quality Treatment			
☐ Vegetated Filter Strips		□ VC □ RC □ WQ		
Compost Filter Sock		□ VC □ RC □ WQ		
Detention Basins	L.Cleachard Davidson	□ VC □ RC □ WQ		
Access Road Design	Infiltration/Recharge			
☐ Road Crowning ☐ Ditches		│		
Turnouts		□ VC □ RC □ WQ		
Culverts		□ VC □ RC □ WQ		
Roadside Vegetated Filter		│		
Strips				
Stormwater Energy Dissipaters	Infiltration/Recharge			
Level Spreaders		VC RC WQ		
<ul><li>☐ Riprap Aprons</li><li>☐ Upslope Diversions</li></ul>		│ □ VC □ RC □ WQ		
Other		UVC □RC □WQ		
g. Critical PCSM Plan stage	s			
Identify and list critical stages of implementation of the PCSM Plan for which a licensed professional or designee shall				
be present on site.				
1. Engineer shall inspect the subsurface infiltration facilities prior to backfilling.				
2. Engineer shall inspect final stabilization prior to removal of temporary measures.				

# e. Summary Table for Supporting Calculation and Measurement Data (See NOI Instructions for additional guidance with this section)

The remainder of this section (Summary Table for Calculation and Measurement Data) does not need to be completed for areas of projects involving oil and gas activities authorized by Chapter 78 or Chapter 78a (well pads) or pipelines and other similar utility infrastructure which will be restored to meadow in good condition or better or existing conditions.

Watershed Name: White Hollow					
Volume Control design storm frequency 2-year Rainfall amount 2.4 inches	Pre-construction	Post Construction	Net Change		
Impervious area (acres)	0.000	0.040	+0.040		
Volume of stormwater runoff (acrefeet) without planned stormwater BMPs	0.006	0.155	+0.149		
Volume of stormwater runoff (acrefeet) with planned stormwater BMPs		0.000	-0.006		
Stormwater discharge rate for the design frequency storm	Pre-construction	Post Construction	Net Change		
1) 2-Year/24-Hour	0.841 cfs	0.654 cfs	-0.187 cfs		
2) 10-Year/24-Hour	1.594 cfs	1.233 cfs	-0.361 cfs		
3) 50-year/24-Hour	2.591 cfs	1.997 cfs	-0.594 cfs		
4) 100-year/24-Hour	3.101 cfs	2.739 cfs	-0.362 cfs		

## f. Summary Description of PCSM/SR BMPs

In the lists below, check the BMPs identified in the PCSM Plan. The primary function(s) of the BMP listed in the functions column (infiltration/recharge; detention/retention; water quality). Additional functions may be added if applicable to that BMP. List the stormwater volume and area of runoff to be treated by each BMP type when calculations are required. If any BMP in the PCSM/SR Plan is not listed below, describe it in the space provided after "Other". A summary table with infiltration testing information (Attachment E, included in the NOI Instructions) must be submitted for all Bio-infiltration BMPs included in PCSM/SR plan.

For Rate control provide the volume of stormwater treated and acres treated for the 100-year/24-hour storm event.

For volume control and water quality provide the volume of stormwater treated and acres treated for the 2-year/24-hour storm event.

Key for BMP purpose(s): VC = Volume Control; RC = Rate Control; and WQ = Water Quality

ВМР	Function(s)	Purpose(s)	Volume of stormwater treated	Acres treated
Site Restoration ONLY				
Restore Site to Meadow in Good Condition or Better, or Existing Conditions	Infiltration/Recharge Detention/WQ Treatment	□VC □RC □WQ		
Bio-infiltration areas	Infiltration/Recharge			
		⊠ VC ⊠ RC ⊠ WQ	467 cf	0.073
☐ Infiltration Bed		□ VC □ RC □ WQ		
☐ Infiltration Basin		☐ VC ☐ RC ☐ WQ		
☐ Rain Garden/ Bioretention		☐ VC ☐ RC ☐ WQ		
☐ Infiltration Berm		□ VC □ RC □ WQ		

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Natural Area Conservation  Streamside Buffer Zone  Wetland Buffer Zone  Sensitive Area Buffer Zone  Pre-Construction Drainage Pattern Intact	Infiltration/Recharge	VC       RC       WQ         VC       RC       WQ         VC       RC       WQ         VC       RC       WQ         VC       RC       WQ		
Stormwater Retention	Detention/Retention			
<ul><li>☐ Constructed Wetlands</li><li>☐ Wet Ponds</li><li>☐ Retention Basin</li></ul>		<pre></pre>	<u> </u>	
Sediment and Pollutant Removal	Water Quality Treatment			
<ul><li>☐ Vegetated Filter Strips</li><li>☐ Compost Filter Sock</li><li>☐ Detention Basins</li></ul>		<pre></pre>	<u> </u>	
Access Road Design	Infiltration/Recharge			
☐ Road Crowning ☐ Ditches ☐ Turnouts ☐ Culverts ☐ Roadside Vegetated Filter Strips	J	VC       RC       WQ         VC       RC       WQ         VC       RC       WQ         VC       RC       WQ         VC       RC       WQ		
Stormwater Energy Dissipaters	Infiltration/Recharge			
☐ Level Spreaders ☐ Riprap Aprons ☐ Upslope Diversions ☐ Other	g			
g. Critical PCSM Plan stage	s			
Identify and list critical stages be present on site.		he PCSM Plan for which	a licensed professional	or designee shall
1. Engineer shall inspe 2. Engineer shall inspe				_

# e. Summary Table for Supporting Calculation and Measurement Data (See NOI Instructions for additional guidance with this section)

The remainder of this section (Summary Table for Calculation and Measurement Data) does not need to be completed for areas of projects involving oil and gas activities authorized by Chapter 78 or Chapter 78a (well pads) or pipelines and other similar utility infrastructure which will be restored to meadow in good condition or better or existing conditions.

Watershed Name: Allegheny River					
	Pre-construction	Post Construction	Net Change		
Impervious area (acres)	0.000	0.040	+0.040		
Volume of stormwater runoff (acrefeet) without planned stormwater BMPs	0.000	0.009	+0.009		
Volume of stormwater runoff (acrefeet) with planned stormwater BMPs		0.000	+0.000		
Stormwater discharge rate for the design frequency storm	Pre-construction	Post Construction	Net Change		
1) 2-Year/24-Hour	0.260 cfs	0.221 cfs	-0.039 cfs		
2) 10-Year/24-Hour	0.832 cfs	0.682 cfs	-0.150 cfs		
3) 50-year/24-Hour	1.720 cfs	1.389 cfs	-0.331 cfs		
4) 100-year/24-Hour	2.207 cfs	1.776 cfs	-0.431 cfs		

## f. Summary Description of PCSM/SR BMPs

In the lists below, check the BMPs identified in the PCSM Plan. The primary function(s) of the BMP listed in the functions column (infiltration/recharge; detention/retention; water quality). Additional functions may be added if applicable to that BMP. List the stormwater volume and area of runoff to be treated by each BMP type when calculations are required. If any BMP in the PCSM/SR Plan is not listed below, describe it in the space provided after "Other". A summary table with infiltration testing information (Attachment E, included in the NOI Instructions) must be submitted for all Bio-infiltration BMPs included in PCSM/SR plan.

For Rate control provide the volume of stormwater treated and acres treated for the 100-year/24-hour storm event.

For volume control and water quality provide the volume of stormwater treated and acres treated for the 2-year/24-hour storm event.

Key for BMP purpose(s): VC = Volume Control; RC = Rate Control; and WQ = Water Quality

ВМР	Function(s)	Purpose(s)	Volume of stormwater treated	Acres treated
Site Restoration ONLY				
Restore Site to Meadow in Good Condition or Better, or Existing Conditions	Infiltration/Recharge Detention/WQ Treatment	□ VC □ RC □ WQ		
Bio-infiltration areas	Infiltration/Recharge			
	_	⊠ VC ⊠ RC ⊠ WQ	467 cf	0.07
☐ Infiltration Bed		☐ VC ☐ RC ☐ WQ		
☐ Infiltration Basin		□ VC □ RC □ WQ		
Rain Garden/ Bioretention		☐ VC ☐ RC ☐ WQ		
☐ Infiltration Berm		□ VC □ RC □ WQ		

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Natural Area Conservation  Streamside Buffer Zone	Infiltration/Recharge	□ VC □ RC □ WQ		
☐ Wetland Buffer Zone		VC RC WQ		
Sensitive Area Buffer Zone		□ VC □ RC □ WQ		
<ul><li>Pre-Construction Drainage Pattern Intact</li></ul>		□ VC □ RC □ WQ		
Stormwater Retention	Detention/Retention			
Constructed Wetlands		□ VC □ RC □ WQ		
<ul><li>☐ Wet Ponds</li><li>☐ Retention Basin</li></ul>		│ □ VC □ RC □ WQ		
Sediment and Pollutant	Water Quality			
Removal	Treatment			
☐ Vegetated Filter Strips		□ VC □ RC □ WQ		
<ul><li>☐ Compost Filter Sock</li><li>☐ Detention Basins</li></ul>		│ □ VC □ RC □ WQ		
Access Road Design	Infiltration/Recharge			
Road Crowning	_	□ VC □ RC □ WQ		
Ditches		□ VC □ RC □ WQ		
Turnouts		□ VC □ RC □ WQ		
Culverts		□ VC □ RC □ WQ		
☐ Roadside Vegetated Filter Strips		□ VC □ RC □ WQ		
Stormwater Energy Dissipaters	Infiltration/Recharge			
Level Spreaders		☐ VC ☐ RC ☐ WQ		
Riprap Aprons		□ VC □ RC □ WQ		
Upslope Diversions		□ VC □ RC □ WQ		
Other		□ VC □ RC □ WQ		
g. Critical PCSM Plan stage				
Identify and list critical stages be present on site.	s of implementation of t	he PCSM Plan for which	a licensed professional	or designee shall
<ol> <li>Engineer shall inspet</li> <li>Engineer shall inspet</li> </ol>				
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# e. Summary Table for Supporting Calculation and Measurement Data (See NOI Instructions for additional guidance with this section)

The remainder of this section (Summary Table for Calculation and Measurement Data) does not need to be completed for areas of projects involving oil and gas activities authorized by Chapter 78 or Chapter 78a (well pads) or pipelines and other similar utility infrastructure which will be restored to meadow in good condition or better or existing conditions.

Watershed Name: South Branch Oswayo Creek					
Volume Control design storm frequency 2-year Rainfall amount 2.39 inches	Pre-construction	Post Construction	Net Change		
Impervious area (acres)	0.000	0.014	+0.014		
Volume of stormwater runoff (acrefeet) without planned stormwater BMPs	0.000	0.005	+0.005		
Volume of stormwater runoff (acrefeet) with planned stormwater BMPs		0.000	+0.000		
Stormwater discharge rate for the design frequency storm	Pre-construction	Post Construction	Net Change		
1) 2-Year/24-Hour	0.000 cfs	0.000 cfs	+0.000 cfs		
2) 10-Year/24-Hour	0.000 cfs	0.000 cfs	+0.000 cfs		
3) 50-year/24-Hour	0.000 cfs	0.000 cfs	+0.000 cfs		
4) 100-year/24-Hour	0.000 cfs	0.003 cfs	+0.000 cfs		

## f. Summary Description of PCSM/SR BMPs

In the lists below, check the BMPs identified in the PCSM Plan. The primary function(s) of the BMP listed in the functions column (infiltration/recharge; detention/retention; water quality). Additional functions may be added if applicable to that BMP. List the stormwater volume and area of runoff to be treated by each BMP type when calculations are required. If any BMP in the PCSM/SR Plan is not listed below, describe it in the space provided after "Other". A summary table with infiltration testing information (Attachment E, included in the NOI Instructions) must be submitted for all Bio-infiltration BMPs included in PCSM/SR plan.

For Rate control provide the volume of stormwater treated and acres treated for the 100-year/24-hour storm event.

For volume control and water quality provide the volume of stormwater treated and acres treated for the 2-year/24-hour storm event.

Key for BMP purpose(s): VC = Volume Control; RC = Rate Control; and WQ = Water Quality

ВМР	Function(s)	Purpose(s)	Volume of stormwater treated	Acres treated
Site Restoration ONLY				
Restore Site to Meadow in Good Condition or Better, or Existing Conditions	Infiltration/Recharge Detention/WQ Treatment	□VC □RC □WQ		
Bio-infiltration areas	Infiltration/Recharge			
		⊠ VC ⊠ RC ⊠ WQ	<u>249</u> cf	0.071
☐ Infiltration Bed		☐ VC ☐ RC ☐ WQ		
☐ Infiltration Basin		☐ VC ☐ RC ☐ WQ		
☐ Rain Garden/ Bioretention		☐ VC ☐ RC ☐ WQ		
☐ Infiltration Berm		☐ VC ☐ RC ☐ WQ		

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Natural Area Conservation  Streamside Buffer Zone Wetland Buffer Zone Sensitive Area Buffer Zone Pre-Construction Drainage	Infiltration/Recharge	VC         RC         WQ           VC         RC         WQ           VC         RC         WQ           VC         RC         WQ		
Pattern Intact	Data dia /Data dia			
Stormwater Retention  Constructed Wetlands  Wet Ponds Retention Basin	Detention/Retention			
Sediment and Pollutant Removal	Water Quality Treatment			
<ul><li>☐ Vegetated Filter Strips</li><li>☐ Compost Filter Sock</li><li>☐ Detention Basins</li></ul>		<ul><li>□ VC □ RC □ WQ</li><li>□ VC □ RC □ WQ</li><li>□ VC □ RC □ WQ</li></ul>	<u> </u>	
Access Road Design	Infiltration/Recharge			
<ul> <li>☐ Road Crowning</li> <li>☐ Ditches</li> <li>☐ Turnouts</li> <li>☐ Culverts</li> <li>☐ Roadside Vegetated Filter</li> <li>Strips</li> </ul>		VC       RC       WQ         VC       RC       WQ         VC       RC       WQ         VC       RC       WQ         VC       RC       WQ		
Stormwater Energy Dissipaters	Infiltration/Recharge			
<ul><li>☐ Level Spreaders</li><li>☐ Riprap Aprons</li><li>☐ Upslope Diversions</li><li>☐ Other</li></ul>		<ul> <li>□ VC</li> <li>□ RC</li> <li>□ WQ</li> <li>□ VC</li> <li>□ RC</li> <li>□ WQ</li> <li>□ VC</li> <li>□ RC</li> <li>□ WQ</li> </ul>		
g. Critical PCSM Plan stage	S			
Identify and list critical stages be present on site.		he PCSM Plan for which	a licensed professional	or designee shall
1. Engineer shall insp 2. Engineer shall insp				

# e. Summary Table for Supporting Calculation and Measurement Data (See NOI Instructions for additional guidance with this section)

The remainder of this section (Summary Table for Calculation and Measurement Data) does not need to be completed for areas of projects involving oil and gas activities authorized by Chapter 78 or Chapter 78a (well pads) or pipelines and other similar utility infrastructure which will be restored to meadow in good condition or better or existing conditions.

Watershed Name: Oswayo Creek					
Volume Control design storm frequency 2-year Rainfall amount 2.39 inches	Pre-construction	Post Construction	Net Change		
Impervious area (acres)	0.00	0.032	+0.032		
Volume of stormwater runoff (acrefeet) without planned stormwater BMPs	0.011	0.019	+0.008		
Volume of stormwater runoff (acrefeet) with planned stormwater BMPs		0.000	-0.011		
Stormwater discharge rate for the design frequency storm	Pre-construction	Post Construction	Net Change		
1) 2-Year/24-Hour	0.100 cfs	0.077 cfs	-0.023 cfs		
2) 10-Year/24-Hour	0.527 cfs	0.265 cfs	-0.262 cfs		
3) 50-year/24-Hour	1.646 cfs	0.880 cfs	-0.078 cfs		
4) 100-year/24-Hour	2.445 cfs	2.330 cfs	-0.115 cfs		

## f. Summary Description of PCSM/SR BMPs

In the lists below, check the BMPs identified in the PCSM Plan. The primary function(s) of the BMP listed in the functions column (infiltration/recharge; detention/retention; water quality). Additional functions may be added if applicable to that BMP. List the stormwater volume and area of runoff to be treated by each BMP type when calculations are required. If any BMP in the PCSM/SR Plan is not listed below, describe it in the space provided after "Other". A summary table with infiltration testing information (Attachment E, included in the NOI Instructions) must be submitted for all Bio-infiltration BMPs included in PCSM/SR plan.

For Rate control provide the volume of stormwater treated and acres treated for the 100-year/24-hour storm event.

For volume control and water quality provide the volume of stormwater treated and acres treated for the 2-year/24-hour storm event.

Key for BMP purpose(s): VC = Volume Control; RC = Rate Control; and WQ = Water Quality

ВМР	Function(s)	Purpose(s)	Volume of stormwater treated	Acres treated
Site Restoration ONLY				
Restore Site to Meadow in Good Condition or Better, or Existing Conditions	Infiltration/Recharge Detention/WQ Treatment	□VC □RC □WQ		
Bio-infiltration areas	Infiltration/Recharge			
		⊠ VC ⊠ RC ⊠ WQ	849 cf	1.39
☐ Infiltration Bed		□ VC □ RC □ WQ		
☐ Infiltration Basin		☐ VC ☐ RC ☐ WQ		
☐ Rain Garden/ Bioretention		□ VC □ RC □ WQ		
☐ Infiltration Berm		□ VC □ RC □ WQ		

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Natural Area Conservation  Streamside Buffer Zone  Wetland Buffer Zone  Sensitive Area Buffer Zone  Pre-Construction Drainage Pattern Intact	Infiltration/Recharge	VC       RC       WQ         VC       RC       WQ         VC       RC       WQ         VC       RC       WQ         VC       RC       WQ		
Stormwater Retention	Detention/Retention			
<ul><li>☐ Constructed Wetlands</li><li>☐ Wet Ponds</li><li>☐ Retention Basin</li></ul>		<pre></pre>		
Sediment and Pollutant Removal	Water Quality Treatment			
<ul><li>☐ Vegetated Filter Strips</li><li>☐ Compost Filter Sock</li><li>☐ Detention Basins</li></ul>		<pre></pre>	<u>—</u>	<u> </u>
Access Road Design	Infiltration/Recharge			
☐ Road Crowning ☐ Ditches ☐ Turnouts ☐ Culverts ☐ Roadside Vegetated Filter Strips	J	VC       RC       WQ         VC       RC       WQ         VC       RC       WQ         VC       RC       WQ         VC       RC       WQ		
Stormwater Energy Dissipaters	Infiltration/Recharge			
Level Spreaders Riprap Aprons Upslope Diversions Other	g 	<ul> <li>□ VC</li> <li>□ RC</li> <li>□ WQ</li> <li>□ VC</li> <li>□ RC</li> <li>□ WQ</li> <li>□ VC</li> <li>□ RC</li> <li>□ WQ</li> </ul>		
g. Critical PCSM Plan stage	S			
Identify and list critical stages be present on site.		he PCSM Plan for which	a licensed professional	or designee shall
<ol> <li>Engineer shall insperation</li> <li>Engineer shall insperation</li> </ol>				

## Marvindale Compressor Station

# e. Summary Table for Supporting Calculation and Measurement Data (See NOI Instructions for additional guidance with this section)

The remainder of this section (Summary Table for Calculation and Measurement Data) does not need to be completed for areas of projects involving oil and gas activities authorized by Chapter 78 or Chapter 78a (well pads) or pipelines and other similar utility infrastructure which will be restored to meadow in good condition or better or existing conditions.

Watershed Name: Warner Brook				
Volume Control design storm frequency 2-year Rainfall amount 2.50 inches	Pre-construction	Post Construction	Net Change	
Impervious area (acres)	0.58	4.81	+4.23	
Volume of stormwater runoff (acrefeet) without planned stormwater BMPs	0.78	1.38	+0.60	
Volume of stormwater runoff (acrefeet) with planned stormwater BMPs		0.78	0.00	
Stormwater discharge rate for the design frequency storm	Pre-construction	Post Construction	Net Change	
1) 2-Year/24-Hour	0.03 cfs	0.00 cfs	-0.03 cfs	
2) 10-Year/24-Hour	0.54 cfs	0.22 cfs	-0.33 cfs	
3) 50-year/24-Hour	5.31 cfs	2.34 cfs	-2.96 cfs	
4) 100-year/24-Hour	10.00 cfs	5.31 cfs	-4.69 cfs	

## f. Summary Description of PCSM/SR BMPs

In the lists below, check the BMPs identified in the PCSM Plan. The primary function(s) of the BMP listed in the functions column (infiltration/recharge; detention/retention; water quality). Additional functions may be added if applicable to that BMP. List the stormwater volume and area of runoff to be treated by each BMP type when calculations are required. If any BMP in the PCSM/SR Plan is not listed below, describe it in the space provided after "Other". A summary table with infiltration testing information (Attachment E, included in the NOI Instructions) must be submitted for all Bio-infiltration BMPs included in PCSM/SR plan.

For Rate control provide the volume of stormwater treated and acres treated for the 100-year/24-hour storm event.

For volume control and water quality provide the volume of stormwater treated and acres treated for the 2-year/24-hour storm event.

Key for BMP purpose(s): VC = Volume Control; RC = Rate Control; and WQ = Water Quality

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ВМР	Function(s)	Purpose(s)	Volume of stormwater treated	Acres treated
Site Restoration ONLY				
Restore Site to Meadow in Good Condition or Better, or Existing Conditions	Infiltration/Recharge Detention/WQ Treatment	⊠ VC ⊠ RC ⊠ WQ		4.6
Bio-infiltration areas	Infiltration/Recharge			
☐ Infiltration Trench		□ VC □ RC □ WQ		
☐ Infiltration Bed		☐ VC ☐ RC ☐ WQ		
☐ Infiltration Basin		☐ VC ☐ RC ☐ WQ		
Rain Garden/ Bioretention		☐ VC ☐ RC ☐ WQ		
		⊠ VC ⊠ RC ⊠ WQ	26 <u>,196</u> cf	7.2

Natural Area Conservation  Streamside Buffer Zone  Wetland Buffer Zone  Sensitive Area Buffer Zone  Pre-Construction Drainage Pattern Intact	Infiltration/Recharge	□ VC     □ RC     □ WQ       □ VC     □ RC     □ WQ       □ VC     □ RC     □ WQ       □ VC     □ RC     □ WQ	<u>—</u> —	<u></u>
Stormwater Retention	Detention/Retention			
<ul><li>☐ Constructed Wetlands</li><li>☐ Wet Ponds</li><li>☐ Retention Basin</li></ul>		<ul><li>□ VC □ RC □ WQ</li><li>□ VC □ RC □ WQ</li><li>□ VC □ RC □ WQ</li></ul>		
Sediment and Pollutant Removal	Water Quality Treatment			
<ul><li>☐ Vegetated Filter Strips</li><li>☐ Compost Filter Sock</li><li>☐ Detention Basins</li></ul>			<u> </u>	<u> </u>
Access Road Design	Infiltration/Recharge			
<ul> <li>☐ Road Crowning</li> <li>☐ Ditches</li> <li>☐ Turnouts</li> <li>☐ Culverts</li> <li>☐ Roadside Vegetated Filter</li> <li>Strips</li> </ul>		VC       RC       WQ         VC       RC       WQ         VC       RC       WQ         VC       RC       WQ         VC       RC       WQ		13.8
Stormwater Energy Dissipaters	Infiltration/Recharge			
<ul><li>☐ Level Spreaders</li><li>☐ Riprap Aprons</li><li>☐ Upslope Diversions</li><li>☐ Other_Retentive Berm</li></ul>				0.5
g. Critical PCSM Plan stages Identify and list critical stages of implementation of the PCSM Plan for which a licensed professional or designee shall be present on site.  1. A licensed professional or designee shall be present on site during installation of bioretention sock infiltration/retention berms to verify that the BMP is being implemented in accordance with the approved plan.				

- 2. Upon completion of construction, a licensed professional or designee shall complete an inspection to verify that BMPs are in place and functioning as designed.
- 3. After the first growing season, a licensed professional or designee shall perform an inspection to verify that BMPs continue to function as designed and verify that permanent vegetative stabilization has been established.

## Tamarack Compressor Station

# e. Summary Table for Supporting Calculation and Measurement Data (See NOI Instructions for additional guidance with this section)

The remainder of this section (Summary Table for Calculation and Measurement Data) does not need to be completed for areas of projects involving oil and gas activities authorized by Chapter 78 or Chapter 78a (well pads) or pipelines and other similar utility infrastructure which will be restored to meadow in good condition or better or existing conditions.

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Watershed Name: Drury Run -	North Watershe	d	
Volume Control design storm frequency 2 year/24 hour Rainfall amount 2.50 inches	Pre-construction	Post Construction	Net Change
Impervious area (acres)	0.00	0.40	0.40
Volume of stormwater runoff (acrefeet) without planned stormwater BMPs	0.11	0.17	0.17
Volume of stormwater runoff (acrefeet) with planned stormwater BMPs		0.03	-0.08
Stormwater discharge rate for the design frequency storm	Pre-construction	Post Construction	Net Change
1) 2-Year/24-Hour	1.55	1.17	-0.38
2) 10-Year/24-Hour	5.17	3.75	-1.42
3) 50-year/24-Hour	11.18	8.21	-2.97
4) 100-year/24-Hour	14.60	10.77	-3.83
Watershed Name: Drury Run -	South Watershe	d	
Volume Control design storm frequency 2 year/24 hour Rainfall amount 2.50 inches	Pre-construction	Post Construction	Net Change
Impervious area (acres)	0.00	4.97	4.97
Volume of stormwater runoff (acrefeet) without planned stormwater BMPs	0.57	1.24	0.67
Volume of stormwater runoff (acrefeet) with planned stormwater BMPs		0.48	-0.08
Stormwater discharge rate for the design frequency storm	Pre-construction	Post Construction	Net Change
1) 2-Year/24-Hour	6.34	4.49	-1.85
2) 10-Year/24-Hour	19.92	17.64	-2.28
3) 50-year/24-Hour	41.95	38.33	-3.62
4) 100-year/24-Hour	54.43	49.60	-4.83
		•	

## f. Summary Description of PCSM/SR BMPs

In the lists below, check the BMPs identified in the PCSM Plan. The primary function(s) of the BMP listed in the functions column (infiltration/recharge; detention/retention; water quality). Additional functions may be added if applicable to that BMP. List the stormwater volume and area of runoff to be treated by each BMP type when calculations are required. If any BMP in the PCSM/SR Plan is not listed below, describe it in the space provided after "Other". A summary table with infiltration testing information (Attachment E, included in the NOI Instructions) must be submitted for all Bio-infiltration BMPs included in PCSM/SR plan.

For Rate control provide the volume of stormwater treated and acres treated for the 100-year/24-hour storm event.

For volume control and water quality provide the volume of stormwater treated and acres treated for the 2-year/24-hour storm event.

Key for BMP purpose(s): VC = Volume Control; RC = Rate Control; and WQ = Water Quality

ВМР	Function(s)	Purpose(s)	Volume of stormwater treated	Acres treated
Site Restoration ONLY				
Restore Site to Meadow in Good Condition or Better, or Existing Conditions	Infiltration/Recharge Detention/WQ Treatment	⊠ VC ⊠ RC ⊠ WQ		10.2
Bio-infiltration areas	Infiltration/Recharge			
<ul> <li>☐ Infiltration Trench</li> <li>☐ Infiltration Bed</li> <li>☐ Infiltration Basin</li> <li>☐ Rain Garden/ Bioretention</li> <li>☐ Infiltration Berm</li> </ul>		<ul> <li>VC</li></ul>	5,998 cf	2.5
Natural Area Conservation	Infiltration/Recharge			
<ul><li>☐ Streamside Buffer Zone</li><li>☐ Wetland Buffer Zone</li><li>☐ Sensitive Area Buffer Zone</li><li>☐ Pre-Construction Drainage Pattern Intact</li></ul>	G .	VC       RC       WQ         VC       RC       WQ         VC       RC       WQ         VC       RC       WQ		
Stormwater Retention	Detention/Retention			
<ul><li>☐ Constructed Wetlands</li><li>☑ Wet Ponds</li><li>☐ Retention Basin</li></ul>		<pre></pre>	32,833 cf	8.0
Sediment and Pollutant Removal	Water Quality Treatment			
<ul><li>☐ Vegetated Filter Strips</li><li>☑ Compost Filter Sock</li><li>☐ Detention Basins</li></ul>		<ul><li> ∨C</li></ul>	<u>—</u>	<u> </u>
Access Road Design	Infiltration/Recharge			
☐ Road Crowning ☐ Ditches ☐ Turnouts ☐ Culverts ☐ Roadside Vegetated Filter Strips		VC       RC       WQ         VC       RC       WQ         VC       RC       WQ         VC       RC       WQ         VC       RC       WQ		

Stormwater Energy Dissipaters	Infiltration/Recharge			
☐ Level Spreaders		□ VC □ RC □ WQ		
☐ Riprap Aprons		☐ VC ☐ RC ☐ WQ		
□ Upslope Diversions		☐ VC ☐ RC ⊠ WQ		<u>37.0</u>
Other		☐ VC ☐ RC ☐ WQ		
g. Critical PCSM Plan stage	s			
Identify and list critical stages of implementation of the PCSM Plan for which a licensed professional or designee shall be present on site.				
1. A licensed professional or designee shall be present on site during installation of the bioretention sock infiltration berm and the conversion of the sediment basin into a wet pond to verify that the BMPs are being implemented in accordance with the approved plan.				
2. Upon completion of construction, a licensed professional or designee shall complete an inspection to verify that BMPs are in place and functioning as designed.				
3. After the first growing season, a licensed professional or designee shall perform an inspection to verify that BMPs continue to function as designed and verify that permanent vegetative stabilization has been established.				

## SECTION I. ANTIDEGRADATION ANALYSIS

This section must be completed where earth disturbance activities will be conducted in the watershed of a surface water with an existing or designated use of exceptional value or high quality pursuant to Chapter 93 (relating to water quality standards), projects where any part is located in an exceptional value wetland in accordance with 25 Pa. Code § 105.17, and projects where any part is located in the watershed of an impaired surface water where the cause of impairment is identified as siltation.

## Part 1 - NONDISCHARGE ALTERNATIVES EVALUATION

The applicant must consider and describe any and all non-discharge alternatives for the entire project area which are environmentally sound and will:

- Minimize accelerated erosion and sedimentation during the earth disturbance activity
- Achieve no net change from pre-development to post-development volume, rate and concentration of pollutants in water quality

## E & S Plan PCSM/SR Plan Check off the environmentally sound nondischarge Best Check off the environmentally sound nondischarge Best Management Practices (BMPs) listed below to be used Management Practices (BMPs) listed below to be used after prior to, during, and after earth disturbance activities that construction that have been incorporated into the PCSM/SR Plan based on your site analysis. For non-discharge BMPs have been incorporated into your E & S Plan based on the For non-discharge BMPs not checked, not checked, provide an explanation of why they were not site analysis. provide an explanation of why they were not utilized. Also utilized. Also for BMPs checked, provide an explanation of for BMPs checked, provide an explanation of why they why they were utilized. (Provide the analysis and attach were utilized. (Provide the analysis and attach additional additional sheets if necessary) sheets if necessary) Nondischarge BMPs Nondischarge BMPs ☐ Alternative Siting ☐ Alternative Siting Alternative location Alternative location Alternative configuration Alternative configuration Alternative location of discharge Alternative location of discharge Low Impact Development (LID / BSD) □ Limiting Extent & Duration of Disturbance (Phasing). Riparian Buffers (150 ft. min.) Sequencing) Riparian Forest Buffer (150 ft. min.) $\boxtimes$ Riparian Buffers (150 ft. min.) Infiltration Riparian Forest Buffer (150 ft. min.) Water Reuse Other \_ Other Will the non-discharge alternative BMPs eliminate the net Will the non-discharge alternative BMPs eliminate the net change in rate, volume and quality during construction? change in rate, volume and quality after construction? ☐ Yes ☐ No ⊠ Yes □ No If yes, antidegradation analysis is complete. If yes, antidegradation analysis is complete. If no, proceed to Part 2. If no, proceed to Part 2.

## PART 2 - ANTIDEGRADATION BEST AVAILABLE COMBINATION OF TECHNOLOGIES (ABACT)

If the net change in stormwater discharge from or after construction is not fully managed by nondischarge BMPs, the applicant must utilize ABACT BMPs to manage the difference. The Applicant must specify whether the discharge will occur during construction, post-construction or both, and identify the technologies that will be used to ensure that the discharge will be a non-degrading discharge. ABACT BMPs include but are not limited to:

E & S Plan	PCSM/SR Plan		
☐ Treatment BMPs:   ☐ Sediment basin with skimmer   ☐ Sediment basin ratio of 4:1 or greater (flow length to basin width)   ☐ Sediment basin with 4-7 day detention   ☐ Flocculants   ☐ Compost Filter Socks   ☐ Compost Filter Sock Sediment Basin   ☐ RCE w/ Wash Rack   ☐ Land disposal:   ☐ Vegetated filters   ☐ Riparian buffers <150ft.	<ul> <li>☑ Treatment BMPs:</li> <li>☑ Infiltration Practices</li> <li>☑ Wet ponds</li> <li>☐ Created wetland treatment systems</li> <li>☐ Vegetated swales</li> <li>☐ Manufactured devices</li> <li>☐ Bio-retention/infiltration</li> <li>☐ Green Roofs</li> <li>☐ Land disposal:</li> <li>☐ Vegetated filters</li> <li>☐ Riparian Buffers &lt;150ft.</li> <li>☐ Disconnection of roof drainage</li> <li>☐ Bio-retention/bio-infiltration</li> <li>☑ Pollution prevention:</li> <li>☐ Street sweeping</li> <li>☐ Nutrient, pesticide, herbicide or other chemical application plan alternatives</li> <li>☐ PPC Plans</li> <li>☑ Non-structural Practices</li> <li>☐ Restoration BMPs</li> <li>☐ Stormwater reuse technologies:</li> <li>☐ Divert rainwater into impoundment</li> <li>☐ Underground storage</li> <li>☐ Spray/Drip Irrigation</li> <li>☐ Other</li> </ul>		
Are the ABACT BMPs selected sufficient to minimize E&S discharges to the extent that existing or designated surface water uses are protected?  Yes No If yes, Antidegradation analysis is complete. If no, NOI Application will be returned to the Applicant.	Are the ABACT BMPs selected sufficient to achieve no net change and assure that existing or designated surface water uses are protected?  Yes No If yes, Antidegradation analysis is complete. If no, NOI Application will be returned to the Applicant.		

SECTION J. COMPLIA	ANCE HISTORY REVIEW		
Is/was the applicant(s) in violation of any Department regulation, order, schedule of compliance or permit or in violation of any department regulated activities within the past five years?  ☐ Yes ☐ No			
If yes, provide the permit number or facility name, a brief de dates and steps to achieve compliance) and the current comsheet, when necessary)	escription of the violation, the compliance schedule (including appliance status. (Attach additional information on a separate		
Permit Program or Activity:	Permit Number (if applicable):		
Steps taken to achieve compliance	Date(s) compliance achieved		
Current Compliance Status:   In-Compliance	In Non-Compliance		
If in non-compliance, attach schedule for achieving compliance	e.		

## PERSON PREPARING E&S PLANS

## SECTION K. CERTIFICATION BY PERSON PREPARING E&S AND PCSM/SR PLANS

I do hereby certify to the best of my knowledge, information, and belief, that the Erosion and Sediment Control and PCSM/Site Restoration Plans are true and correct, represent actual field conditions, and are in accordance with the 25 Pa. Code Chapters 78/78a and 102 of the Department's rules and regulations. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Signature **Print Name** Michael DeNichilo REGISTERED Company Mott MacDonald PROFESSIONAL 111 Wood Avenue South, Iselin, NJ 08830-4112 Address MICHAEL DENICHIL (973)379 - 3400Phone Most Recent DEP Training Attended Date Location ENGINEER e-Mail Address michael.denichilo@mottmac.com

## **EXPEDITED REVIEW PROCESS**

In addition to the certification required above, applicants using the expedited permit review process must attach an E&S and PCSM/Site Restoration Plans developed and sealed by a licensed professional engineer, surveyor or professional geologist. The plans shall contain the following certification:

I do hereby certify to the best of my knowledge, information, and belief, that the E & S Control and PCSM/SR BMPs are true and correct, represent actual field conditions and are in accordance with the 25 Pa. Code Chapters 78 / 78a and 102 of the Department's rules and regulations. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

## SECTION L. APPLICANT CERTIFICATION

## **Applicant Certification**

I certify under penalty of law, as provided by 18 Pa. C.S.A. § 4904, that this application and all related attachments were prepared by me or under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my own knowledge and on inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. The responsible official's signature also verifies that the activity is eligible to participate in the ESCGP, and that the applicant agrees to abide by the terms and conditions of the permit. BMP's, E&S Plan, PPC Plan, PCSM Plan, and other controls are being or will be, implemented to ensure that water quality standards and effluent limits are attained.

I grant permission to the agencies responsible for the permitting of this work, or their duly authorized representative to enter the project site for inspection purposes. I will abide by the conditions of the permit if issued and will not begin work prior to permit issuance.

(For individuals no indication of title is necessary, choose the box below. All others proceed to the next paragraph)

## ☐ Individual; proceed to signature portion.

I hereby certify under penalty of law, as provided by 18 Pa. C.S.A. § 4904, that I am the person who is responsible for decision-making regarding environmental compliance functions for <a href="Entity name">Enter Entity name</a>, the manager of one or more manufacturing, production, or operating facilities of the applicant and am authorized to make management decisions which govern the operation of regulated facility including having explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure the applicant's long term environmental compliance with environmental laws and regulations; and I am responsible for ensuring that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements.

# PERSON PREPARING PCSM PLANS FOR MARVINDALE INTERCONNECT, CARPENTER HOLLOW OPP, MLV-1, MLV-2, MLV-3, MLV-4

## SECTION K. CERTIFICATION BY PERSON PREPARING E&S AND PCSM/SR PLANS

I do hereby certify to the best of my knowledge, information, and belief, that the Erosion and Sediment Control and PCSM/Site Restoration Plans are true and correct, represent actual field conditions, and are in accordance with the 25 Pa. Code Chapters 78/78a and 102 of the Department's rules and regulations. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

e-Mail Address michael.clark@mottmac.com

## **EXPEDITED REVIEW PROCESS**

In addition to the certification required above, applicants using the expedited permit review process must attach an E&S and PCSM/Site Restoration Plans developed and sealed by a licensed professional engineer, surveyor or professional geologist. The plans shall contain the following certification:

10/25/2019

I do hereby certify to the best of my knowledge, information, and belief, that the E & S Control and PCSM/SR BMPs are true and correct, represent actual field conditions and are in accordance with the 25 Pa. Code Chapters 78 / 78a and 102 of the Department's rules and regulations. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

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## Applicant Certification

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## Individual; proceed to signature portion.

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# PERSON PREPARING E&S AND PCSM PLANS FOR MARVINDALE COMPRESSOR STATION AND TAMARACK COMPRESSOR STATION

SECTION K.	CERTIFICATION BY PERSON PREPARING E&S AND PCSM/SR PLANS	

I do hereby certify to the best of my knowledge, information, and belief, that the Erosion and Sediment Control and PCSM/Site Restoration Plans are true and correct, represent actual field conditions, and are in accordance with the 25 Pa. Code Chapters 78/78a and 102 of the Department's rules and regulations. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

for submitting false information, including the po	TO THE PARTY OF TH	
Print Name Gregory Heilman, P.E.	Signature Srs Helm	REGISTERED REGISTERED
Company Michael Baker International	PROFESSIONAL	
Address 100 Airside Drive, Moon Township, PA	GREGORY A. HEILMAN	
Phone 412-269-6096		ENGINEER
Most Recent DEP Training Attended Loc	ation Date	437 7-E
DEP Oil and Gas Training Gre	entree, PA <u>12/2017</u>	NSYLVATION
e-Mail Address gheilman@mbakerintl.com		

## **EXPEDITED REVIEW PROCESS**

In addition to the certification required above, applicants using the expedited permit review process must attach an E&S and PCSM/Site Restoration Plans developed and sealed by a licensed professional engineer, surveyor or professional geologist. The plans shall contain the following certification:

I do hereby certify to the best of my knowledge, information, and belief, that the E & S Control and PCSM/SR BMPs are true and correct, represent actual field conditions and are in accordance with the 25 Pa. Code Chapters 78 / 78a and 102 of the Department's rules and regulations. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

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I grant permission to the agencies responsible for the permitting of this work, or their duly authorized representative to enter the project site for inspection purposes. I will abide by the conditions of the permit if issued and will not begin work prior to permit issuance.

(For individuals no indication of title is necessary, choose the box below. All others proceed to the next paragraph)

## Individual; proceed to signature portion.

I hereby certify under penalty of law, as provided by 18 Pa. C.S.A. § 4904, that I am the person who is responsible for decision-making regarding environmental compliance functions for National Fuel Supply Corporation, the manager of one or more manufacturing, production, or operating facilities of the applicant and am authorized to make management decisions which govern the operation of regulated facility including having explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure the applicant's long term environmental compliance with environmental laws and regulations; and I am responsible for ensuring that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements.

(choose one of the following; not applicable for individuals):			
☐ The responsible corporate officer ☐ president ☐ vice president ☐ secretary ☐ treasure of NATIONAL FUEL GAS SUPPLY Corporation Company Entity name			
☐ The ☐ member or ☐ manager ofEntity name	LLC		
The general partner of partnership/LF	P/LLP		
☐ The principal executive officer or ranking elected official of	Municipality/State/Federal/other public agency		
Power of Attorney/delegation of contractual authority (documust be provided) for  Entity name	umentation supporting delegation of contracting authority		
JEFFERY J. KITTKA, VICE PRESIDENT  Print Name and Title of Applicant	Print Name and Title of Co-Applicant (if applicable)		
Signature of Applicant	Signature of Co-Applicant		
Date Application Signed	Date Application Signed		
Notarization Sworn to and subscribed to before me this	Commonwealth of Pennsylvania		
5th day of November, 20 19	County of		
Motary Public M. Bacher	My Commission expires		
AFFIX SEAL			
COMMONWEALTH OF PENNSYLVANIA  NOTARIAL SEAL  Jeannine M. Bacher, Notary Public  City of Erie, Erie County  My Commission Expires Nov. 24, 2019  MEMBER, PENNSYLVANIA ASSOCIATION OF NOTARIES			

SECTION M. ADDITIONAL CONTACT INFORMATION				
Contact's Last Name	First Name	MI	Phone	(801) 571-6522
Gibbons	Douglas		FAX	
Mailing Address	City		State	ZIP + 4
5295 S. Commerce Drive	Murray		UT	84107-4719
e-Mail Address douglas.gibbons@mottmac.com				

	Summary of Bio-Infiltration BMPs													
		Infiltration Information					Drainage Information			BMP Information				
Proposed Structural bio-Infiltration BMPs (site specific)	Measured Infiltration Rate <sup>1</sup> (in./hr)	Factor of safety (min. of 2)	Design Infiltration rate (in./hr)	De-watering time <sup>2</sup> (hr)		Total drainage area to BMP (sq. ft)	Total impervious drainage area to BMP (sq. ft)	Infiltration BMP Surface area (sq. ft)	Volume of runoff tributary to BMP during the 2yr/24 hr design storm <sup>4</sup> (cf)	Calculated removed volume (cf)	Maximum water surface elevation in BMP from 2yr storm <sup>6</sup>	Infiltration elevation bottom of bed/basin <sup>6</sup>	Elevation of infiltration test <sup>7</sup>	Elevation of E&S sediment basin bottom (if applies)
CARPENTER HALLOW OPP INFILTRATION TRENCH	0.125 IN/HR	2	0.063 IN/HR	19.20 HR	N/A	1.109 ACRES	0.356 ACRES	0.356 ACRES	3,699 CF	3,778 CF	2,268.91	2,268.30	2,269.00	N/A
MARVINDALE INTERCONNECT INFILTRATION TRENCH	0.38 IN/HR	2	0.19 IN/HR	39.40 HR	N/A	0.431 ACRES	0.107 ACRES	0.067 ACRES	1,766 CF	2,343 CF	2,090.56	2,089.10	2,092	N/A
MLV 1 INFILTRATION TRENCH	8.31 IN/HR	2	4.16 IN/HR	2.76 HR	N/A	0.155 ACRES	0.094 ACRES	0.036 ACRES	676 CF	896 CF	1,584.92	1,583.50	1,584	N/A
MLV 2 INFILTRATION TRENCH	10.28 IN/HR	2	5.14 IN/HR	11.94 HR	N/A	0.268 ACRES	0.048 ACRES	0.036 ACRES	382 CF	467 CF	1,512.24	1,511.50	1,511	N/A
MLV 3 INFILTRATION TRENCH	4.50 IN/HR	2	2.25 IN/HR	27.92 HR	N/A	0.517 ACRES	0.071 ACRES	0.071 ACRES	237 CF	249 CF	2,233.20	2,233	2,233.5	N/A
MLV 4 INFILTRATION TRENCH	3.00 IN/HR	2	1.50 IN/HR	6.20 HR	N/A	1.387 ACRES	0.090 ACRES	0.090 ACRES	840 CF	849 CF	2,271.04	2,270.50	2,274	N/A

All information should be based on the 2-yr/24-hr storm.

Provide page numbers from the stormwater narrative identifying the location of the above information.

Any deviation from the recommendations above should be adequately justified by a qualified professional and included with the application.

Note: This chart is for summary purposes only and should be consistent with all design calculations and worksheets.

<sup>&</sup>lt;sup>1</sup>The infiltration testing information should be located on the plan view of the PCSM plan and should include infiltration test elevation and rate

<sup>&</sup>lt;sup>2</sup>Can include active infiltration time-dewatering time should not exceed 72 hours after the 2-yr/24-hr storm

<sup>&</sup>lt;sup>3</sup>Depth to limiting zone is recommended to be at least 2 ft below infiltration

<sup>&</sup>lt;sup>4</sup>The value should be greater than or equal to the volume to be infiltrated or managed by the BMP

<sup>&</sup>lt;sup>6</sup>A maximum of 2 ft hydraulic head is recommended

<sup>&</sup>lt;sup>7</sup>Provide supporting field notes/documentation from soil evaluation

### TAMARACK COMPRESSOR STATION

	Summary of Bio-Infiltration BMPs													
	Infiltration Information					Drainage Information			BMP Information					
Proposed Structural bio-Infiltration BMPs (site specific)	Measured Infiltration Rate <sup>1</sup> (in./hr)	safety	Design Infiltration rate (in./hr)	De-watering time <sup>2</sup> (hr)	limiting	Total drainage area to BMP (sq. ft)		area (sq. ft)	runoff tributary to	Calculated removed volume (cf)		Infiltration elevation bottom of bed/basin <sup>6</sup>		Elevation of E&S sediment basin bottom (if applies)
Infiltration Berm	***	***	水水水	***	***	111,513	12,632	7,055	5,998	5,998	1741.0	1739.0	水水水	N/A

All information should be based on the 2-yr/24-hr storm.

Provide page numbers from the stormwater narrative identifying the location of the above information.

Any deviation from the recommendations above should be adequately justified by a qualified professional and included with the application.

Note: This chart is for summary purposes only and should be consistent with all design calculations and worksheets.

\*\*\* As per item 7 on Page 117 of the BMP Manual, since the proposed berms are located in existing woodlands, infiltration testing was not required.

<sup>&</sup>lt;sup>1</sup>The infiltration testing information should be located on the plan view of the PCSM plan and should include infiltration test elevation and rate

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<sup>&</sup>lt;sup>7</sup>Provide supporting field notes/documentation from soil evaluation

### MARVINDALE COMPRESSOR STATION

Summary of Bio-Infiltration BMPs														
	Infiltration Information					Drainage Information			BMP Information					
Proposed Structural bio-Infiltration BMPs (site specific)	Measured Infiltration Rate <sup>1</sup> (in./hr)	safety (min. of	Design Infiltration rate (in./hr)	De-watering time <sup>2</sup> (hr)	Elevation of limiting zone-water table bedrock, etc. <sup>3</sup>	Total drainage area to BMP (sq. ft)	Total impervious drainage area to BMP (sq. ft)	Infiltration BMP Surface area (sq. ft)	Volume of runoff tributary to BMP during the 2yr/24 hr design storm <sup>4</sup> (cf)	Calculated removed volume (cf)	Maximum water surface elevation in BMP from 2yr storm <sup>6</sup>	Infiltration elevation bottom of bed/basin <sup>6</sup>	Elevation of infiltration test <sup>7</sup>	Elevation of E&S sediment basin bottom (if applies)
Infiltration Berm 1	***	***	***	***	***	190,916	131,867	10,213	18,060	18,060	2103.5	2101.0	***	N/A
Infiltration Berm 2	***	***	***	***	***	264,148	164,734	8,794	6,086	6,086	2098.2	2097.0	***	N/A
Infiltration Berm 3	***	***	***	***	***	313,404	167,343	9,371	2,050	2,050	2092.4	2092.0	***	N/A

All information should be based on the 2-yr/24-hr storm.

Provide page numbers from the stormwater narrative identifying the location of the above information.

Any deviation from the recommendations above should be adequately justified by a qualified professional and included with the application.

Note: This chart is for summary purposes only and should be consistent with all design calculations and worksheets.

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<sup>&</sup>lt;sup>3</sup>Depth to limiting zone is recommended to be at least 2 ft below infiltration

<sup>&</sup>lt;sup>4</sup>The value should be greater than or equal to the volume to be infiltrated or managed by the BMP

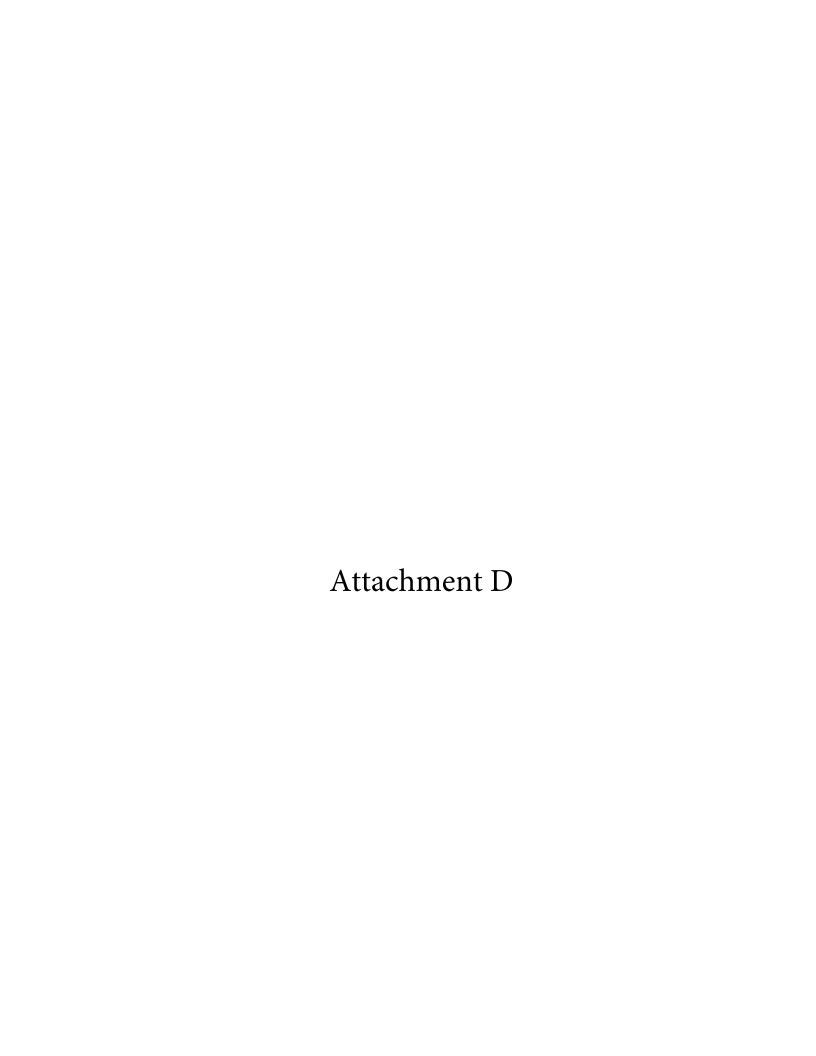
<sup>&</sup>lt;sup>6</sup>A maximum of 2 ft hydraulic head is recommended

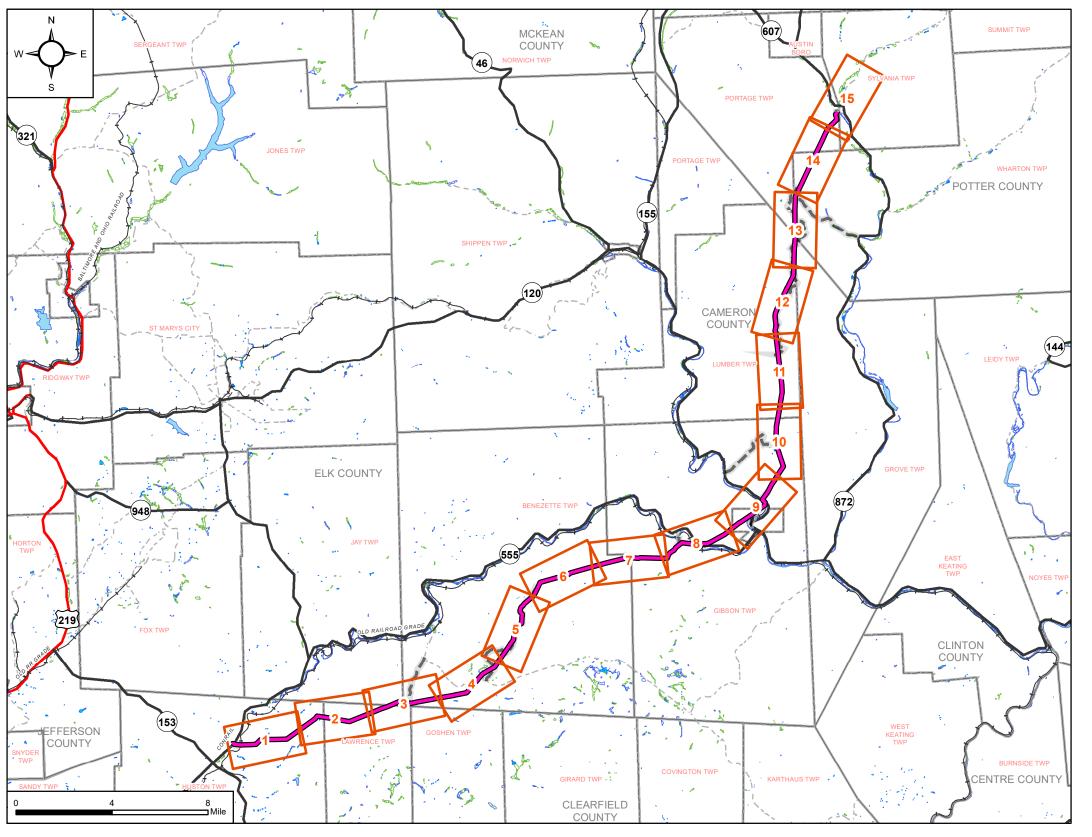
<sup>&</sup>lt;sup>7</sup>Provide supporting field notes/documentation from soil evaluation

## Attachment 1

# Municipalities/Counties Impacted by Project

McKean County				
Keating Twp				
Liberty Twp				
Norwich Twp				
Sergeant Twp				
Potter County				
Allegany Twp				
Clara Twp				
Hebron Twp				
Pleasant Valley Twp				
Portage Twp				
Roulette Twp				
Sylvania Twp				
Wharton Twp				
Cameron County				
Driftwood Boro				
Gibson Twp				
Grove Twp				
Lumber Twp				
Elk County				
Benezette Twp				
Clearfield County				
Huston Twp				
Lawrence Twp				
Clinton County				
Leidy Twp				







## **CONSTRUCTION MAP LEGEND**

Existing Pipeline to be

Railroad

NRCS Soil Boundary

NHD Stream

Existing NFG Pipeline Parcels Requesting Removal Limits of Disturbance/ Milepost **ESCGP Boundary** Watershed Boundary XXXX Access Road (Chapter 93 Designated or Existing Use) CWF Cold Water Fishery Major Road Exceptional Value High Quality Local Roads

Existing Casing

HQ-CWF High Quality-Cold Water Fishes
TSF Trout Stocking

Exclusion Zone Parcels No Hydrocarbon refueling, hazardous material Municipal Boundary storage, overnight equipment parking, or concrete coating activities within exclusion County Boundary

zones. Pumps & fuel vessels operating in exclusion zones will require secondary containment. **EROSION & SEDIMENT CONTROLS** 

- Compost Filter Sock - 12" Compost Filter Sock - 18" **Delineated Stream** 

Compost Filter Sock - 24" **Delineated Wetlands** Compost Filter Sock - 32" Timber Mat

Approximate 100 Year Floodway Waterbar (Temporary)

Cut & Cap Location **Erosion Control Matting** Grout End Point Rock Construction Entrance

Cut/Cap/Grout Insertion LAND USE BAND Removal Locations

Forest/Woodland Industrial/Commercial Land Rectifier

Open Land Valve

NOTE:

Riparian Buffers
For Riparian Buffers and forested riparian impacts, please refer to the "Forested Riparian Impacts" mapbook, provided under separate cove

# Know what's below.

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These maps have been provided as a tool to assist the contractor in building the pipeline. National Fuel has made responsible efforts to provide this information and verify its accuracy; however, the contractor shall not rely solely on the information provided. National Fuel Gas Company recommends the contractor perform their own due diligence to determine the location of underground facilities, including appropriate state One Call, etc. National Fuel Gas Co. makes no warranty regarding the completeness or accuracy of the information provided

## SOURCES:

Parcel Data Provided by NFG

Mapped Streams
National Hydrography Dataset (NHD)
U.S. Geological Survey on cooperation with U.S. Environmental Protection
Agency, USDA Forest Service, and other Federal, State and local partners http://www.nhd.usgs.gov

Mapped Wetlands
U.S. Fish and Wildlife Service, October 01, 2014, National Wetlands Inventory
Website. U.S. Department of the Interior, Fish and Wildlife Service,
Washington, D.C.

http://www.fws.gov/wetlands

Provided by NFG

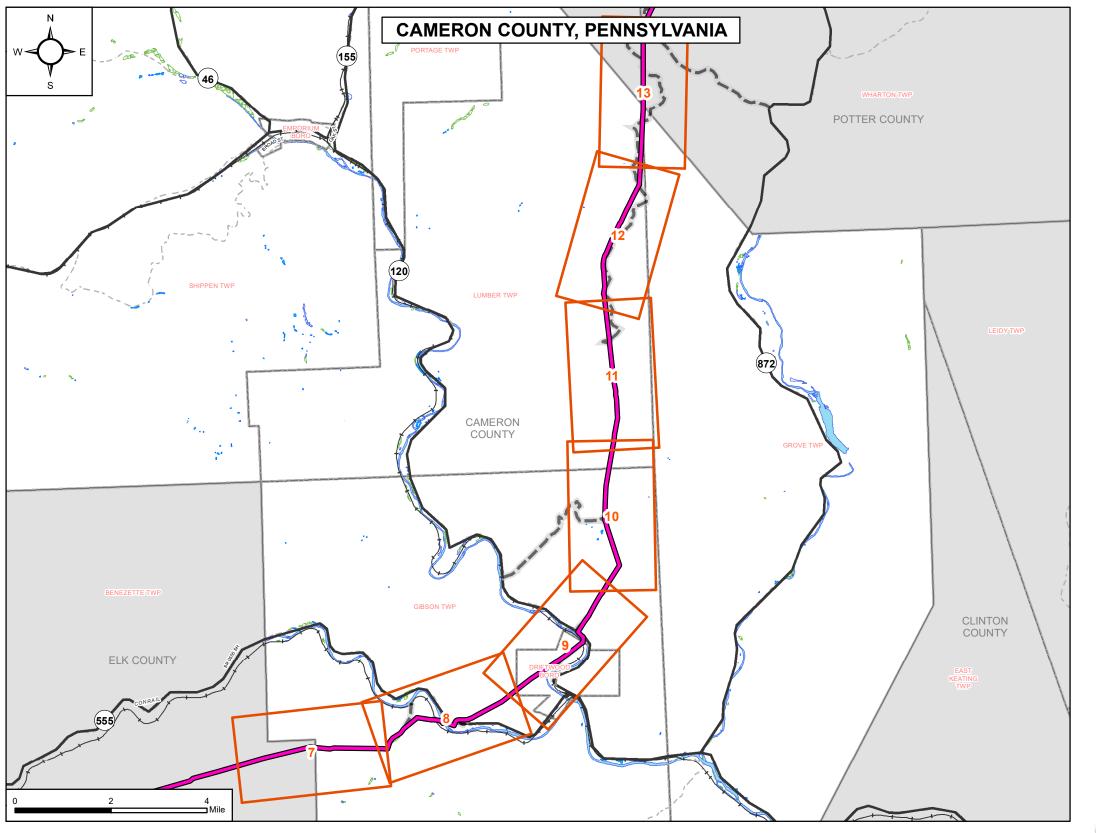
http://www.stentec.com

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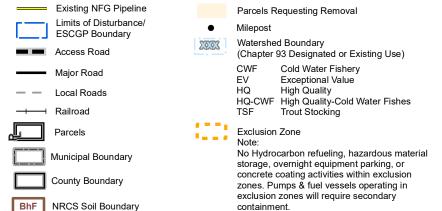


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Existing Pipeline to be





## containment. **EROSION & SEDIMENT CONTROLS**



Existing Casing

Compost Filter Sock - 32" Timber Mat

Waterbar (Temporary)

Cut & Cap Location **Erosion Control Matting** Grout End Point Rock Construction Entrance

Cut/Cap/Grout Insertion LAND USE BAND Removal Locations

Rectifier

NHD Stream

**Delineated Stream** 

**Delineated Wetlands** 

Approximate 100 Year

Floodway

**(**3) V Valve

Тар

## Forest/Woodland

Industrial/Commercial Land

Open Land

NOTE:

Riparian Buffers
For Riparian Buffers and forested riparian impacts, please refer to the "Forested Riparian Impacts" mapbook, provided under separate cove

M. DENICHILO

M. DENICHILO

03/2020

**INDEX** 

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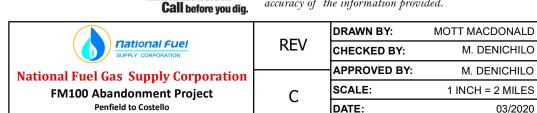
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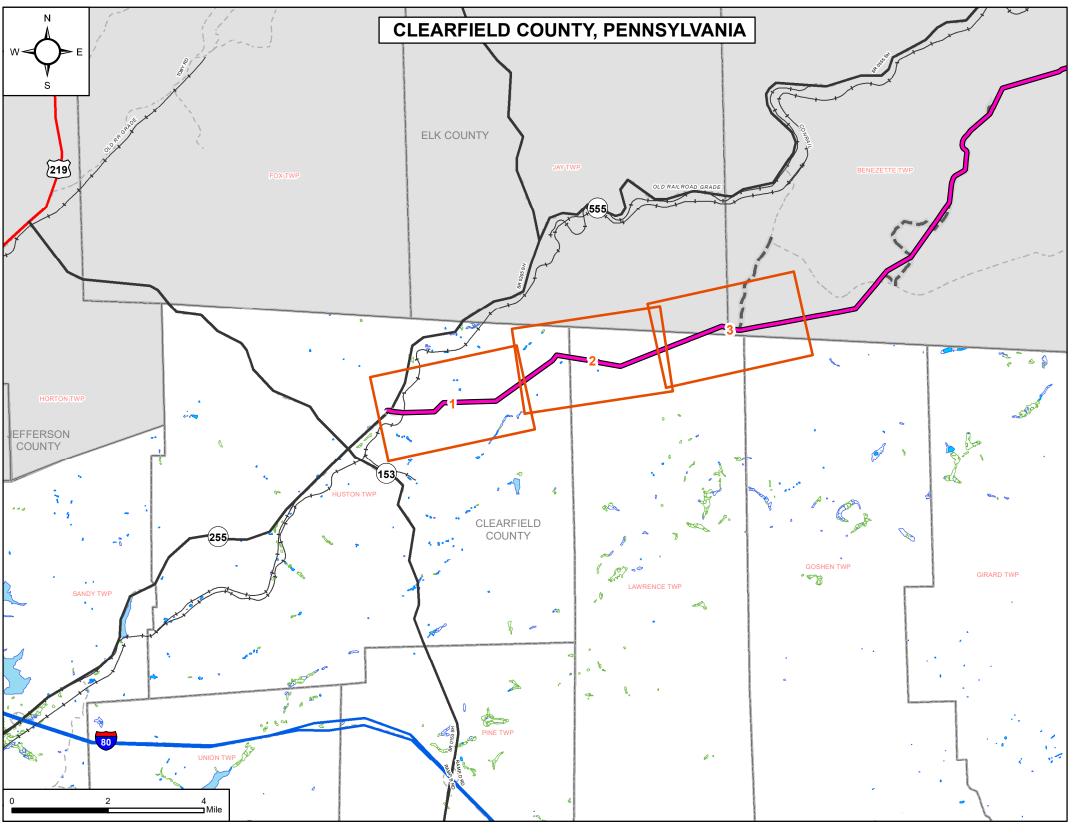
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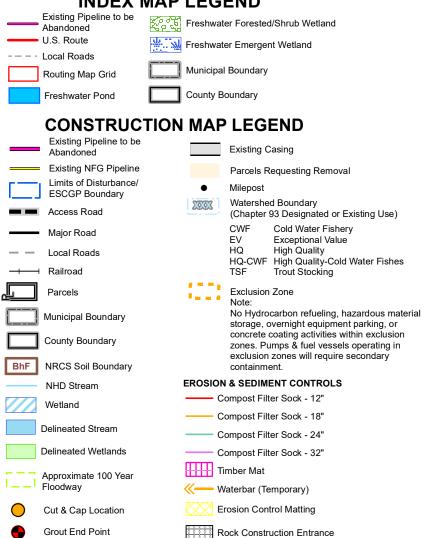
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Cut/Cap/Grout Insertion

Removal Locations

Rectifier

Valve

Тар



**(**3)

V

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LAND USE BAND

Open Land

NOTE:

Forest/Woodland

Industrial/Commercial Land

Riparian Buffers
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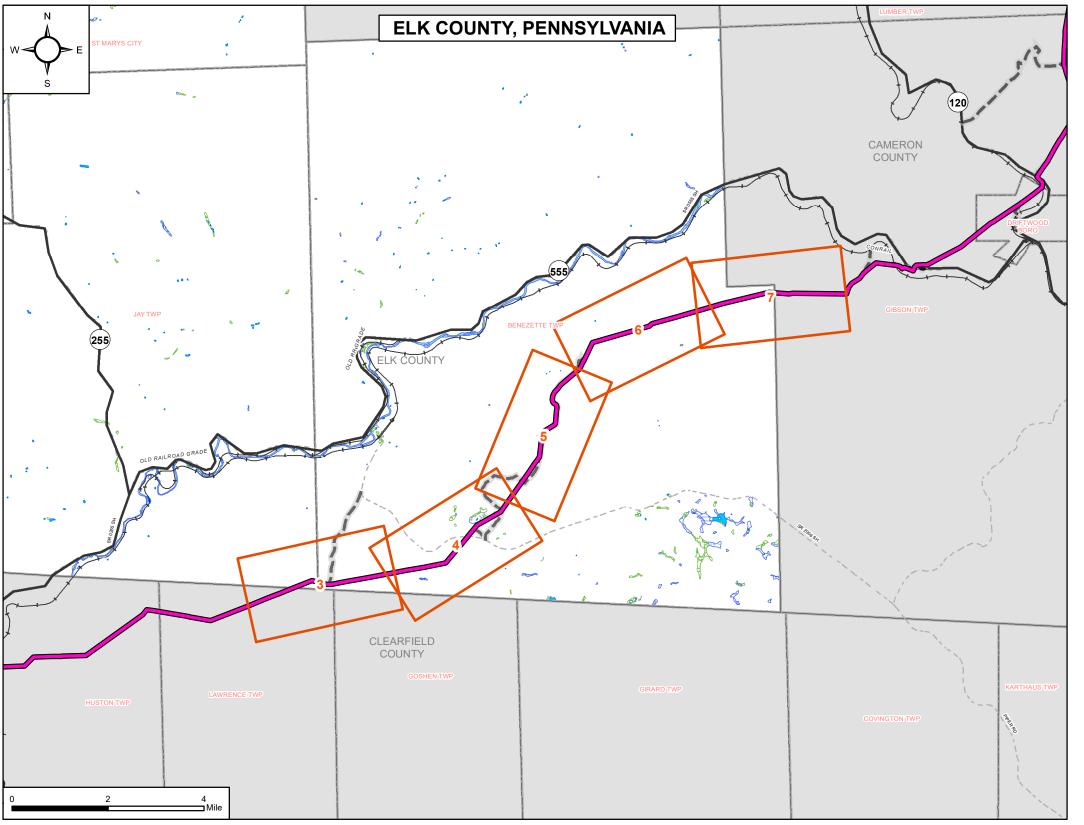
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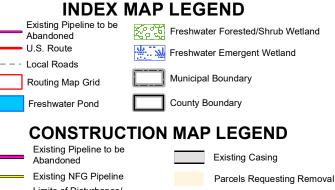
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Limits of Disturbance/ Milepost **ESCGP Boundary** Watershed Boundary XXXX

Access Road (Chapter 93 Designated or Existing Use) CWF Cold Water Fishery Major Road Exceptional Value High Quality Local Roads

HQ-CWF High Quality-Cold Water Fishes
TSF Trout Stocking

**Exclusion Zone** Parcels

No Hydrocarbon refueling, hazardous material Municipal Boundary storage, overnight equipment parking, or concrete coating activities within exclusion **County Boundary** zones. Pumps & fuel vessels operating in exclusion zones will require secondary NRCS Soil Boundary containment.

## **EROSION & SEDIMENT CONTROLS**

- Compost Filter Sock - 12" Compost Filter Sock - 18"

Compost Filter Sock - 24" **Delineated Wetlands** Compost Filter Sock - 32"

Floodway Waterbar (Temporary)

Cut & Cap Location **Erosion Control Matting** Grout End Point Rock Construction Entrance

Cut/Cap/Grout Insertion

Railroad

NHD Stream

**Delineated Stream** 

Approximate 100 Year

Removal Locations

**(**3) Rectifier

Тар

V Valve

LAND USE BAND Forest/Woodland

Timber Mat

Industrial/Commercial Land

Open Land

NOTE:

Riparian Buffers
For Riparian Buffers and forested riparian impacts, please refer to the "Forested Riparian Impacts" mapbook, provided under separate cove

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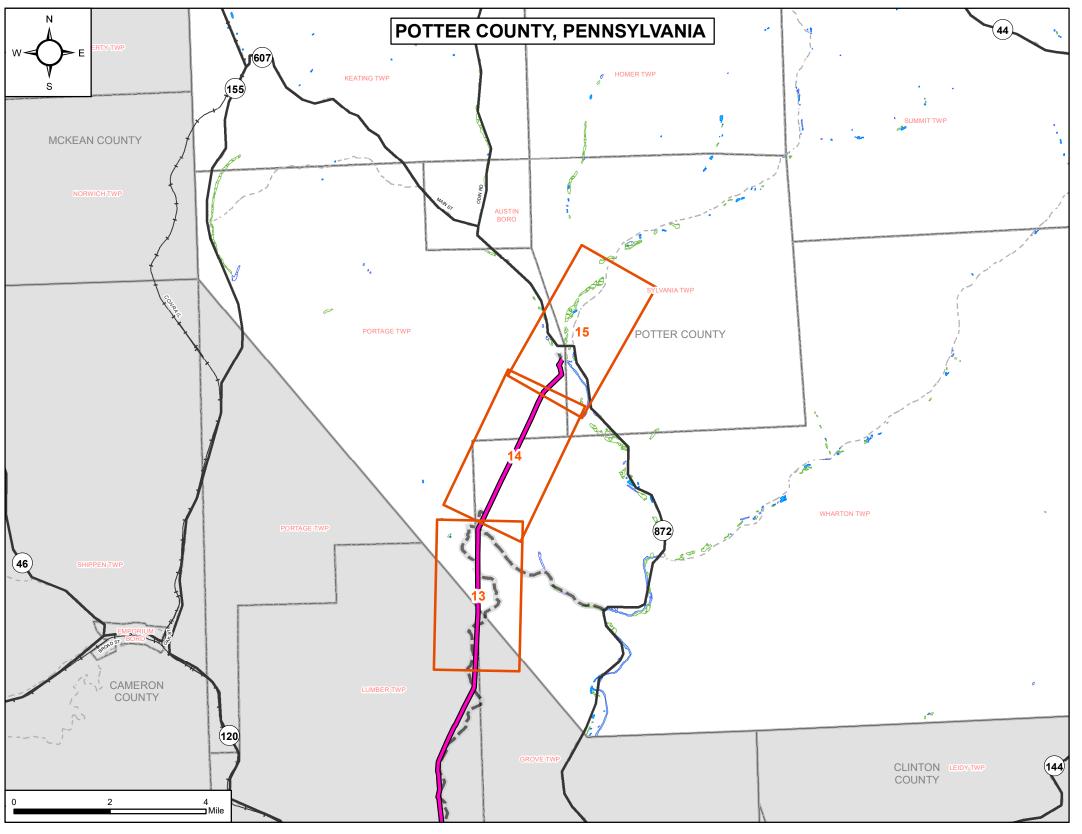
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## **CONSTRUCTION MAP LEGEND**

Existing Pipeline to be

Abandoned Existing NFG Pipeline

County Boundary

NHD Stream

**Delineated Stream** 

Floodway

**Delineated Wetlands** 

Approximate 100 Year

NRCS Soil Boundary

Parcels Requesting Removal Limits of Disturbance/ Milepost **ESCGP Boundary** Watershed Boundary **XXXX** Access Road (Chapter 93 Designated or Existing Use) CWF Cold Water Fishery Major Road Exceptional Value High Quality Local Roads HQ-CWF High Quality-Cold Water Fishes
TSF Trout Stocking Railroad Exclusion Zone Parcels No Hydrocarbon refueling, hazardous material Municipal Boundary

Existing Casing

## containment. **EROSION & SEDIMENT CONTROLS**

- Compost Filter Sock - 12" Compost Filter Sock - 18" Compost Filter Sock - 24"

storage, overnight equipment parking, or

concrete coating activities within exclusion

zones. Pumps & fuel vessels operating in exclusion zones will require secondary

Compost Filter Sock - 32"

Timber Mat Waterbar (Temporary)

Cut & Cap Location Erosion Control Matting

Grout End Point Rock Construction Entrance

Cut/Cap/Grout Insertion LAND USE BAND Removal Locations

**(**3) Rectifier

Тар

V Valve

Forest/Woodland

Industrial/Commercial Land

Open Land NOTE:

Riparian Buffers
For Riparian Buffers and forested riparian impacts, please refer to the "Forested Riparian Impacts" mapbook, provided under separate cove

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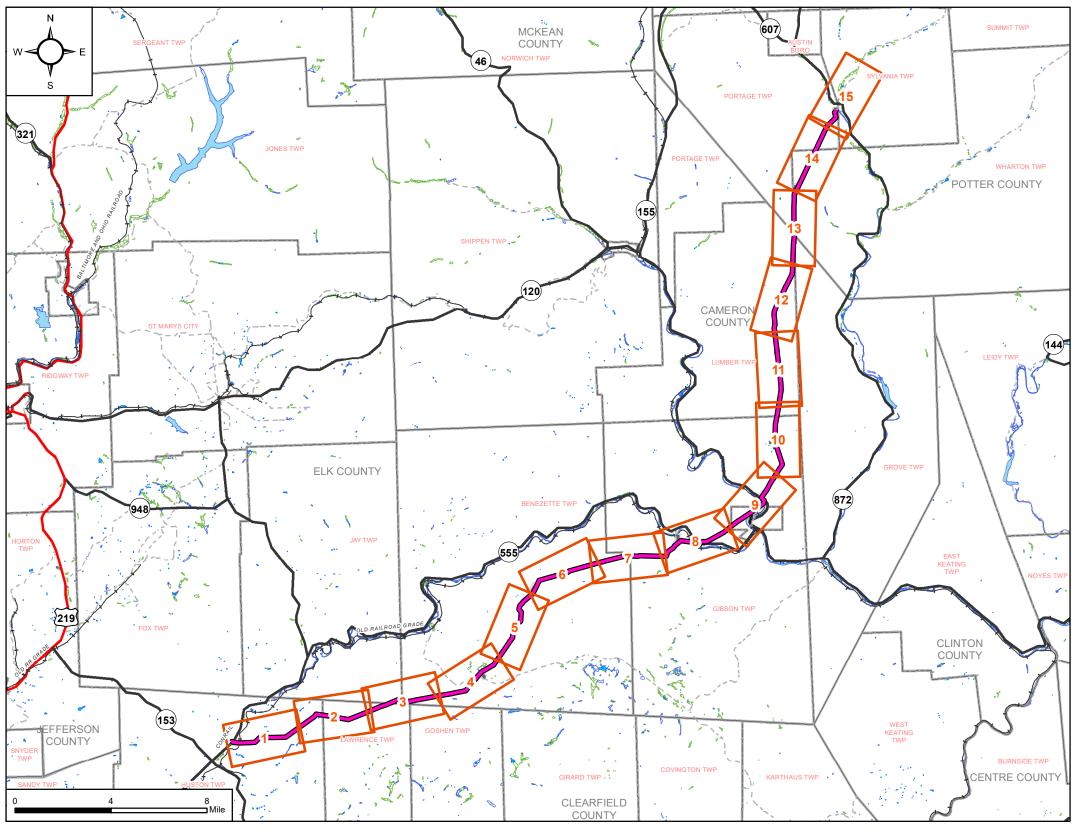
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Call before you dig. **National Fuel National Fuel Gas Supply Corporation FM100 Abandonment Project** Penfield to Costello

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Existing Pipeline to be Freshwater Forested/Shrub Wetland U.S. Route Freshwater Emergent Wetland Municipal Boundary Routing Map Grid County Boundary Freshwater Pond

## **CONSTRUCTION MAP LEGEND**

Existing Pipeline to be Existing Casing Existing NFG Pipeline Parcels Requesting Removal Limits of Disturbance/ Milepost **ESCGP Boundary** Watershed Boundary XXXX Access Road (Chapter 93 Designated or Existing Use) CWF Major Road Local Roads HQ-CWF High Quality-Cold Water Fishes
TSF Trout Stocking Railroad Exclusion Zone Parcels No Hydrocarbon refueling, hazardous material Municipal Boundary storage, overnight equipment parking, or concrete coating activities within exclusion County Boundary zones. Pumps & fuel vessels operating in exclusion zones will require secondary NRCS Soil Boundary containment. **EROSION & SEDIMENT CONTROLS** NHD Stream **Erosion Control Matting** Wetland LAND USE BAND Delineated Stream Forest/Woodland **Delineated Wetlands** 

Approximate 100 Year

Cut & Cap Location

Cut/Cap/Grout Insertion Removal Locations

Grout End Point

Floodway

Rectifier

R

V

Industrial/Commercial Land

Open Land

Riparian Buffers

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For Riparian Buffers and forested riparian impacts, please refer to the
"Forested Riparian Impacts" mapbook, provided under senarate cover

Cold Water Fishery

Exceptional Value High Quality

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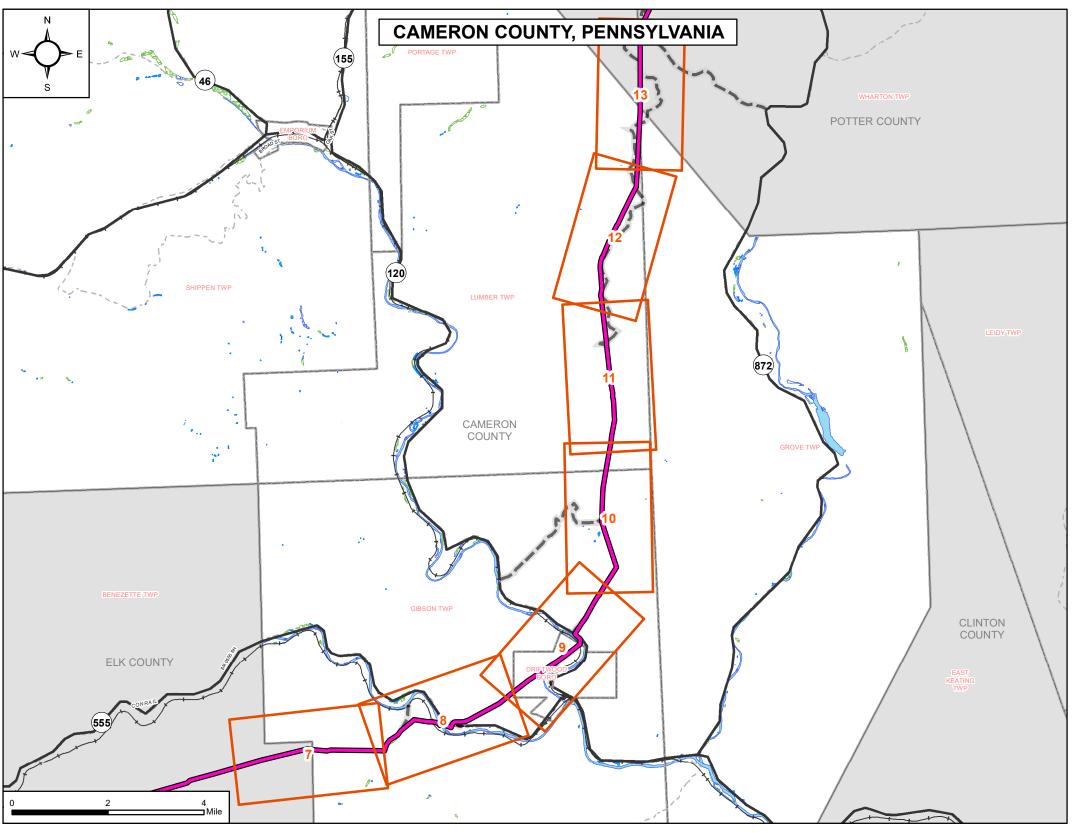
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## **CONSTRUCTION MAP LEGEND**



Parcels Requesting Removal Milepost

Existing Casing

Watershed Boundary SQQX (Chapter 93 Designated or Existing Use) CWF Cold Water Fishery Exceptional Value

High Quality HQ-CWF High Quality-Cold Water Fishes
TSF Trout Stocking

Exclusion Zone

No Hydrocarbon refueling, hazardous material storage, overnight equipment parking, or concrete coating activities within exclusion zones. Pumps & fuel vessels operating in exclusion zones will require secondary containment.

## **EROSION & SEDIMENT CONTROLS**



Forest/Woodland Industrial/Commercial Land

Open Land

Тар

Riparian Buffers
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# **National Fuel National Fuel Gas Supply Corporation FM100 Abandonment Project**

Penfield to Costello

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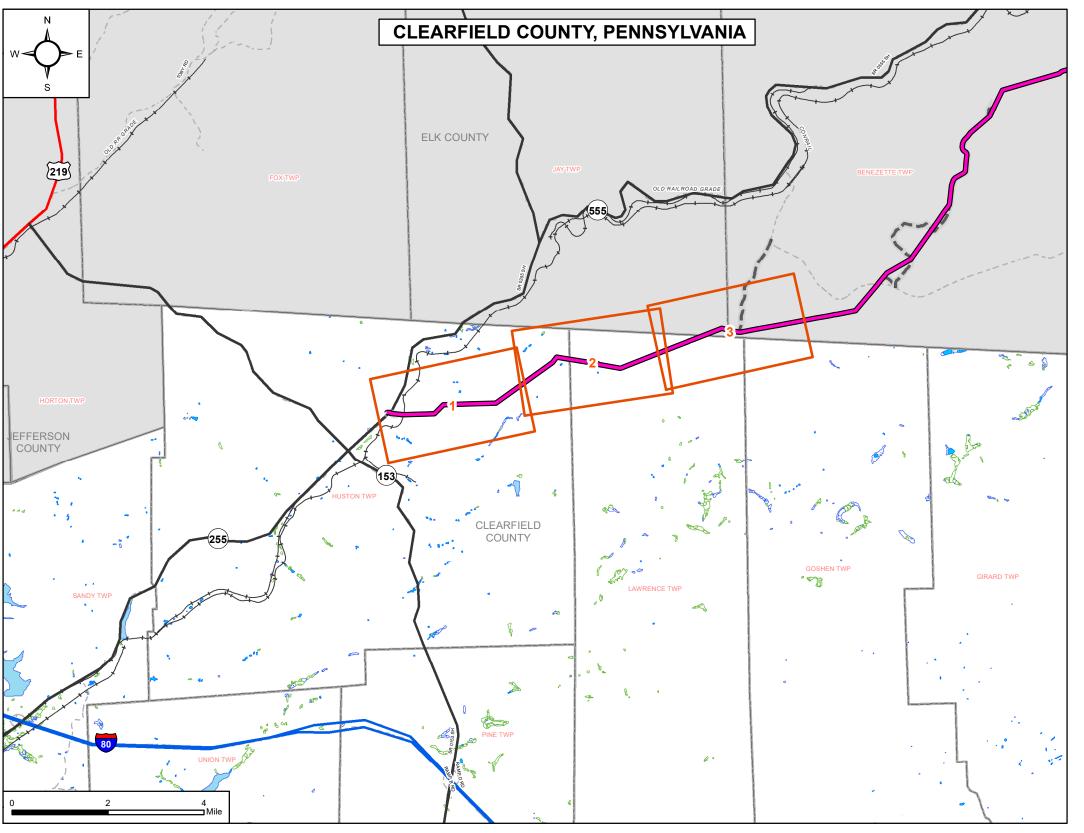
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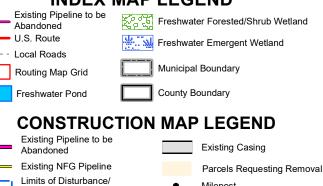
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**ESCGP Boundary** XXXX

Major Road

Local Roads Railroad

Parcels

Municipal Boundary

Access Road

County Boundary

NHD Stream

NRCS Soil Boundary

**Delineated Stream** 

**Delineated Wetlands** 

Approximate 100 Year Floodway

Cut & Cap Location Grout End Point

Cut/Cap/Grout Insertion

Removal Locations Rectifier

Тар

**(**3) V Valve

Milepost

Watershed Boundary (Chapter 93 Designated or Existing Use) CWF Cold Water Fishery

Exceptional Value High Quality

HQ-CWF High Quality-Cold Water Fishes
TSF Trout Stocking

**Exclusion Zone** 

No Hydrocarbon refueling, hazardous material storage, overnight equipment parking, or concrete coating activities within exclusion zones. Pumps & fuel vessels operating in exclusion zones will require secondary containment.

## **EROSION & SEDIMENT CONTROLS**



LAND USE BAND

Forest/Woodland Industrial/Commercial Land

Open Land

Riparian Buffers

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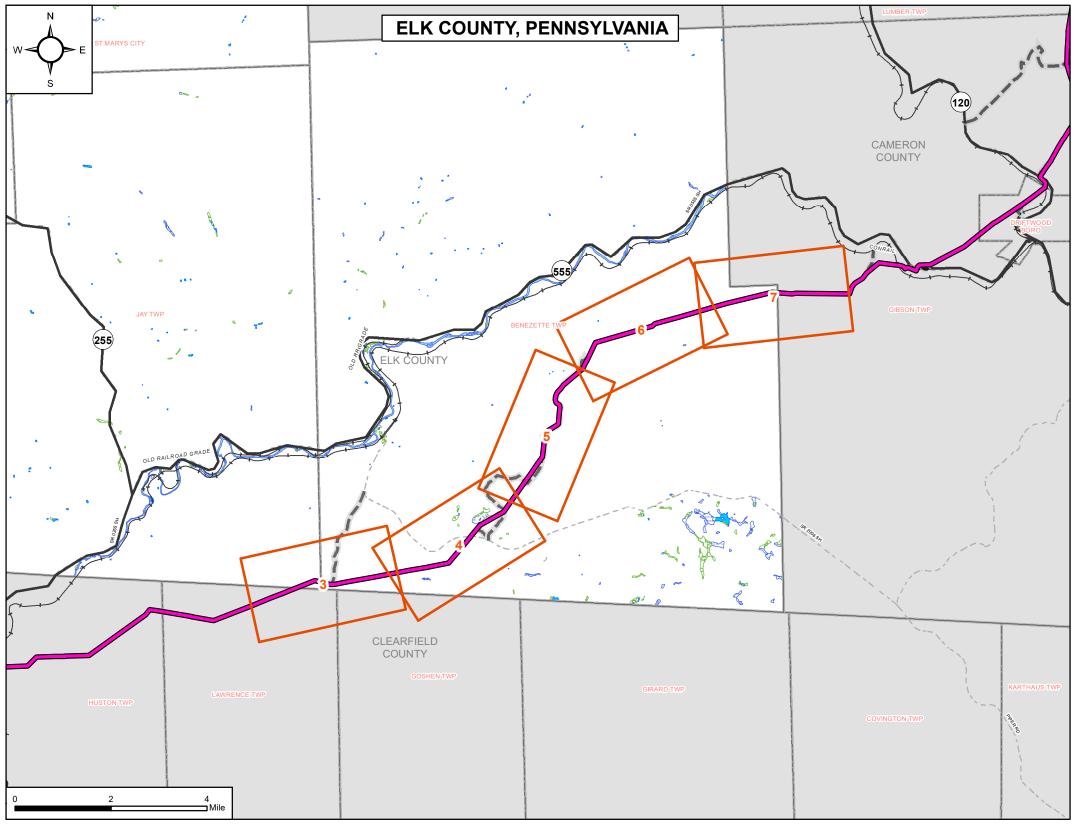
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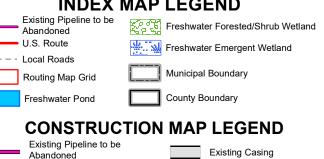
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Existing NFG Pipeline Limits of Disturbance/ Milepost **ESCGP Boundary** XXXX Access Road

Major Road Local Roads

Railroad

Parcels Municipal Boundary

**County Boundary** 

NRCS Soil Boundary NHD Stream

**Delineated Stream** 

**Delineated Wetlands** Approximate 100 Year

Floodway Cut & Cap Location

Grout End Point

Cut/Cap/Grout Insertion

Removal Locations R Rectifier

Тар

**W** Valve

Parcels Requesting Removal

Watershed Boundary (Chapter 93 Designated or Existing Use)

CWF Cold Water Fishery Exceptional Value High Quality

HQ-CWF High Quality-Cold Water Fishes
TSF Trout Stocking

**Exclusion Zone** 

No Hydrocarbon refueling, hazardous material storage, overnight equipment parking, or concrete coating activities within exclusion zones. Pumps & fuel vessels operating in exclusion zones will require secondary containment.

## **EROSION & SEDIMENT CONTROLS**

Erosion Control Matting

LAND USE BAND

Forest/Woodland Industrial/Commercial Land

Open Land

Riparian Buffers
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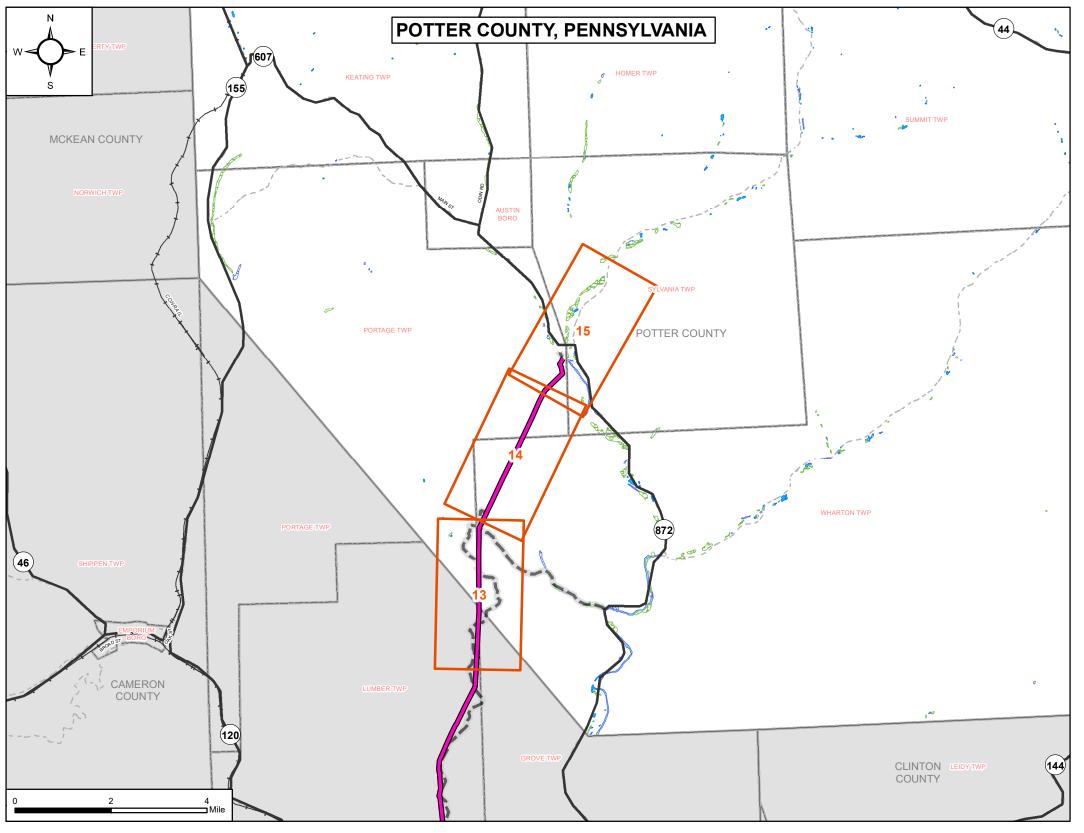
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## **CONSTRUCTION MAP LEGEND**

Existing NFG Pipeline Parcels Requesting Removal Limits of Disturbance/ Milepost **ESCGP Boundary** Watershed Boundary **XXXX** Access Road (Chapter 93 Designated or Existing Use) CWF Major Road

Existing Pipeline to be

Abandoned

County Boundary

NHD Stream

**Delineated Stream** 

Floodway

Rectifier

Valve

Тар

R

V

**Delineated Wetlands** 

Approximate 100 Year

Cut & Cap Location

Removal Locations

Grout End Point Cut/Cap/Grout Insertion

NRCS Soil Boundary

High Quality Local Roads HQ-CWF High Quality-Cold Water Fishes
TSF Trout Stocking Railroad Exclusion Zone

Parcels Municipal Boundary

No Hydrocarbon refueling, hazardous material storage, overnight equipment parking, or concrete coating activities within exclusion zones. Pumps & fuel vessels operating in exclusion zones will require secondary containment.

Cold Water Fishery

Exceptional Value

## **EROSION & SEDIMENT CONTROLS**



Existing Casing

## Forest/Woodland

Industrial/Commercial Land Open Land

## Riparian Buffers

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DRAWN BY: MOTT MACDONALD **National Fuel REV** CHECKED BY: M. DENICHILO SR APPROVED BY: M. DENICHILO **INDEX National Fuel Gas Supply Corporation** SCALE: 1 INCH = 2 MILES **FM100 Abandonment Project** SHEET C Penfield to Costello DATE: 03/2020



Table 2.2-1B: Wetlands Located within Project Work Areas

Wetland Name*         County         Begin         End         Classification*         (YesNo)*         Impact Dimensions (It.)         Workspace (acres)*         Footprint (at University)*           Wetland 005         McKean         0.5         0.6         PEM         No         304.00 - 53.01         0.381         0.066           Wetland 006         McKean         0.7         0.8         PEM         No         284.60 - 27.16         0.169         0.023           Wetland 007a         McKean         0.9         1.0         PFM         Yes         452.00 - 16.96         0.176            Wetland 007b         McKean         1.1         1.1         PFM         Yes         824.00 - 43.34         0.822         0.135           Wetland 007b         McKean         1.1         1.1         PFM         No         60.00 - 14.52         0.020            Wetland 008         McKean         1.1         1.1         PFM         No         120.00 - 37.02         0.105         0.016           Wetland 009         McKean         1.2         1.2         PFM         Yes         823.00 - 55.89         1.087         0.183           Wetland 009a         McKean         1.2         1.2 <td< th=""><th></th><th></th><th>MP</th><th>MP</th><th>Wetland Type</th><th>Qualify as EV</th><th>Wetland Construction</th><th>Area within Construction</th><th>Area within Operational</th></td<>			MP	MP	Wetland Type	Qualify as EV	Wetland Construction	Area within Construction	Area within Operational
Wetland 005         McKean         0.5         0.6         PEM         No         304.00 - 53.01         0.381         0.068           Wetland 006         McKean         0.7         0.8         PEM         No         264.60 - 27.16         0.169         0.023           Wetland 007a         McKean         0.9         1.0         PFO         Yes         452.00 - 16.96         0.176            Wetland 007b         McKean         0.9         1.0         PEM         Yes         824.00 - 43.34         0.822         0.135           Wetland 007b         McKean         1.1         1.1         PFO         No         60.00 - 14.52         0.020            Wetland 008         McKean         1.1         1.1         PFO         No         60.00 - 14.52         0.020            Wetland 008         McKean         1.2         1.3         PEM         Yes         823.00 - 55.89         1.087         0.168           Wetland 009a         McKean         1.2         1.2         PFO         Yes         271.00 - 18.64         0.116            Pond 03         McKean         1.2         1.2         PFO         Yes         38.00 - 22.92	Wetland Name <sup>1</sup>	County	Begin	End	Classification <sup>2</sup>	(Yes/No) <sup>5</sup>	Impact Dimensions (ft.)	Workspace (acres) <sup>3</sup>	Footprint (acres) <sup>4</sup>
Wetland 006         McKean         0.7         0.8         PEM         No         264.60 - 27.16         0.169         0.023           Wetland 007a         McKean         0.9         1.0         PFO         Yes         452.00 - 16.96         0.176            Wetland 007         McKean         0.9         1.0         PEM         Yes         824.00 - 43.34         0.822         0.135           Wetland 007b         McKean         1.1         1.1         PFO         No         60.00 - 14.52         0.020            Wetland 008         McKean         1.1         1.1         PFO         No         60.00 - 37.02         0.105         0.016           Wetland 009         McKean         1.2         1.3         PEM         Yes         823.00 - 55.89         1.087         0.183           Wetland 009a         McKean         1.2         1.2         PFO         Yes         271.00 - 18.64         0.116            Pond 03         McKean         1.2         1.2         PPG         Yes         38.00 - 22.92         0.020            Wetland 0109         McKean         1.3         1.3         PFO         No         105.00 - 20.74 <t< th=""><th>Line YM58</th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></t<>	Line YM58								
Wetland 007a         McKean         0.9         1.0         PFO         Yes         452.00 - 16.96         0.176            Wetland 007         McKean         0.9         1.0         PEM         Yes         824.00 - 43.34         0.822         0.135           Wetland 007b         McKean         1.1         1.1         PFO         No         60.00 - 14.52         0.020            Wetland 008         McKean         1.1         1.1         PFM         No         120.00 - 37.02         0.105         0.016           Wetland 009         McKean         1.2         1.3         PEM         Yes         823.00 - 55.89         1.087         0.183           Wetland 009a         McKean         1.2         1.2         PFO         Yes         271.00 - 18.64         0.116            Pond 03         McKean         1.2         1.2         PFO         Yes         38.00 - 22.92         0.020            Wetland 09b         McKean         1.3         1.3         PFO         No         105.00 - 20.74         0.050            Wetland 010a         McKean         1.4         1.5         PFO         Yes         823.00 - 62.77         1.	Wetland 005	McKean	0.5	0.6	PEM	No	304.00 - 53.01	0.381	0.066
Wetland 007         McKean         0.9         1.0         PEM         Yes         824.00 - 43.34         0.822         0.135           Wetland 007b         McKean         1.1         1.1         PFO         No         60.00 - 14.52         0.020            Wetland 008         McKean         1.1         1.1         PEM         No         120.00 - 37.02         0.105         0.016           Wetland 009         McKean         1.2         1.3         PEM         Yes         823.00 - 55.89         1.087         0.183           Wetland 009a         McKean         1.2         1.2         PFO         Yes         271.00 - 18.64         0.116            Pond 03         McKean         1.2         1.2         PPB         Yes         38.00 - 22.92         0.020            Wetland 009b         McKean         1.3         1.3         PFO         No         105.00 - 20.74         0.050            Wetland 010a         McKean         1.4         1.5         PFO         Yes         557.00 - 13.76         0.176            Wetland 010         McKean         1.4         1.5         PEM         Yes         823.00 - 62.77         1	Wetland 006	McKean	0.7	0.8	PEM	No	264.60 – 27.16	0.169	0.023
Wetland 007b         McKean         1.1         1.1         PFO         No         60.00 - 14.52         0.020            Wetland 008         McKean         1.1         1.1         PEM         No         120.00 - 37.02         0.105         0.016           Wetland 009         McKean         1.2         1.3         PEM         Yes         823.00 - 55.89         1.087         0.183           Wetland 009a         McKean         1.2         1.2         PFO         Yes         271.00 - 18.64         0.116            Pond 03         McKean         1.2         1.2         PUB         Yes         38.00 - 22.92         0.020            Wetland 09b         McKean         1.3         1.3         PFO         No         105.00 - 20.74         0.050            Wetland 010a         McKean         1.4         1.5         PFO         Yes         557.00 - 13.76         0.176            Wetland 010         McKean         1.4         1.5         PEM         Yes         823.00 - 62.77         1.218         0.190           Wetland 010b         McKean         1.6         1.6         PEM         Yes         125.00 - 10.80         0.	Wetland 007a	McKean	0.9	1.0	PFO	Yes	452.00 - 16.96	0.176	
Wetland 008         McKean         1.1         1.1         PEM         No         120.00 - 37.02         0.105         0.016           Wetland 009         McKean         1.2         1.3         PEM         Yes         823.00 - 55.89         1.087         0.183           Wetland 009a         McKean         1.2         1.2         PFO         Yes         271.00 - 18.64         0.116            Pond 03         McKean         1.2         1.2         PUB         Yes         38.00 - 22.92         0.020            Wetland 009b         McKean         1.3         1.3         PFO         No         105.00 - 20.74         0.050            Wetland 009b         McKean         1.4         1.5         PFO         Yes         557.00 - 13.76         0.176            Wetland 010         McKean         1.4         1.5         PEM         Yes         823.00 - 62.77         1.218         0.190           Wetland 010b         McKean         1.5         1.5         PFO         Yes         208.00 - 8.79         0.042            Wetland 011         McKean         1.6         1.6         PEM         Yes         125.00 - 10.80         0	Wetland 007	McKean	0.9	1.0	PEM	Yes	824.00 - 43.34	0.822	0.135
Wetland 009         McKean         1.2         1.3         PEM         Yes         823.00 – 55.89         1.087         0.183           Wetland 009a         McKean         1.2         1.2         PFO         Yes         271.00 - 18.64         0.116            Pond 03         McKean         1.2         1.2         PUB         Yes         38.00 - 22.92         0.020            Wetland 009b         McKean         1.3         1.3         PFO         No         105.00 - 20.74         0.050            Wetland 010a         McKean         1.4         1.5         PFO         Yes         557.00 - 13.76         0.176            Wetland 010         McKean         1.4         1.5         PEM         Yes         823.00 - 62.77         1.218         0.190           Wetland 010b         McKean         1.5         1.5         PFO         Yes         208.00 - 8.79         0.042            Wetland 011         McKean         1.6         1.6         PEM         Yes         125.00 - 10.80         0.032         0.005           Wetland 014         McKean         1.6         1.6         PEM         No         182.00 - 10.53         0	Wetland 007b	McKean	1.1	1.1	PFO	No	60.00 - 14.52	0.020	
Wetland 009a         McKean         1.2         1.2         PFO         Yes         271.00 - 18.64         0.116            Pond 03         McKean         1.2         1.2         PUB         Yes         38.00 - 22.92         0.020            Wetland 009b         McKean         1.3         1.3         PFO         No         105.00 - 20.74         0.050            Wetland 010a         McKean         1.4         1.5         PFO         Yes         557.00 - 13.76         0.176            Wetland 010         McKean         1.4         1.5         PEM         Yes         823.00 - 62.77         1.218         0.190           Wetland 010b         McKean         1.5         1.5         PFO         Yes         208.00 - 8.79         0.042            Wetland 011         McKean         1.6         1.6         PEM         Yes         125.00 - 10.80         0.032         0.005           Wetland 145         McKean         1.6         1.6         PEM         No         182.00 - 10.53         0.044            Wetland 012b         McKean         1.6         1.6         PEM         No         43.00 - 12.15         0.012	Wetland 008	McKean	1.1	1.1	PEM	No	120.00 - 37.02	0.105	0.016
Pond 03 McKean 1.2 1.2 PUB Yes 38.00 - 22.92 0.020 Wetland 009b McKean 1.3 1.3 PFO No 105.00 - 20.74 0.050 Wetland 010a McKean 1.4 1.5 PFO Yes 557.00 - 13.76 0.176 Wetland 010 McKean 1.4 1.5 PEM Yes 823.00 - 62.77 1.218 0.190 Wetland 010b McKean 1.5 1.5 PFO Yes 208.00 - 8.79 0.042 Wetland 011 McKean 1.6 1.6 PEM Yes 125.00 - 10.80 0.032 0.005 Wetland 145 McKean 1.6 1.6 PEM No 182.00 - 10.53 0.044 Wetland 012b McKean 1.6 1.6 PEM No 43.00 - 12.15 0.012 Wetland 014 McKean 1.8 1.8 PEM Yes 44.00 - 17.82 0.018 Wetland 015 McKean 1.8 1.8 PEM Yes 35.00 - 6.22 0.005 Wetland 016 McKean 2.2 2.2 PEM Yes 122.00 - 61.05 0.175 0.024 Wetland 016 McKean 2.2 2.2 PEM Yes 106.00 - 4.10 0.010 Wetland 016b McKean 2.2 2.2 PEM Yes 220.00 - 44.15 0.230 0.044	Wetland 009	McKean	1.2	1.3	PEM	Yes	823.00 - 55.89	1.087	0.183
Wetland 009b         McKean         1.3         1.3         PFO         No         105.00 - 20.74         0.050            Wetland 010a         McKean         1.4         1.5         PFO         Yes         557.00 - 13.76         0.176            Wetland 010         McKean         1.4         1.5         PEM         Yes         823.00 - 62.77         1.218         0.190           Wetland 010b         McKean         1.5         1.5         PFO         Yes         208.00 - 8.79         0.042            Wetland 011         McKean         1.6         1.6         PEM         Yes         125.00 - 10.80         0.032         0.005           Wetland 145         McKean         1.6         1.6         PEM         No         182.00 - 10.53         0.044            Wetland 012b         McKean         1.6         1.6         PEM         No         43.00 - 12.15         0.012            Wetland 014         McKean         1.8         1.8         PEM         Yes         44.00 - 17.82         0.018            Wetland 015         McKean         1.8         1.8         PEM         Yes         35.00 - 6.22         0.00	Wetland 009a	McKean	1.2	1.2	PFO	Yes	271.00 - 18.64	0.116	
Wetland 010a         McKean         1.4         1.5         PFO         Yes         557.00 - 13.76         0.176            Wetland 010         McKean         1.4         1.5         PEM         Yes         823.00 - 62.77         1.218         0.190           Wetland 010b         McKean         1.5         1.5         PFO         Yes         208.00 - 8.79         0.042            Wetland 011         McKean         1.6         1.6         PEM         Yes         125.00 - 10.80         0.032         0.005           Wetland 145         McKean         1.6         1.6         PEM         No         182.00 - 10.53         0.044            Wetland 012b         McKean         1.6         1.6         PEM         No         43.00 - 12.15         0.012            Wetland 014         McKean         1.8         1.8         PEM         Yes         44.00 - 17.82         0.018            Wetland 015         McKean         1.8         1.8         PEM         Yes         35.00 - 6.22         0.005            Wetland 016a         McKean         2.2         2.2         PEM         Yes         106.00 - 4.10         0.01	Pond 03	McKean	1.2	1.2	PUB	Yes	38.00 - 22.92	0.020	
Wetland 010         McKean         1.4         1.5         PEM         Yes         823.00 – 62.77         1.218         0.190           Wetland 010b         McKean         1.5         1.5         PFO         Yes         208.00 - 8.79         0.042            Wetland 011         McKean         1.6         1.6         PEM         Yes         125.00 - 10.80         0.032         0.005           Wetland 145         McKean         1.6         1.6         PEM         No         182.00 - 10.53         0.044            Wetland 012b         McKean         1.6         1.6         PEM         No         43.00 - 12.15         0.012            Wetland 014         McKean         1.8         1.8         PEM         Yes         44.00 - 17.82         0.018            Wetland 015         McKean         1.8         1.8         PEM         Yes         35.00 - 6.22         0.005            Wetland 016a         McKean         2.2         2.2         PEM         Yes         106.00 - 4.10         0.010            Wetland 016b         McKean         2.2         2.2         PEM         Yes         220.00 - 44.15         0.23	Wetland 009b	McKean	1.3	1.3	PFO	No	105.00 - 20.74	0.050	
Wetland 010b         McKean         1.5         1.5         PFO         Yes         208.00 - 8.79         0.042            Wetland 011         McKean         1.6         1.6         PEM         Yes         125.00 - 10.80         0.032         0.005           Wetland 145         McKean         1.6         1.6         PEM         No         182.00 - 10.53         0.044            Wetland 012b         McKean         1.6         1.6         PEM         No         43.00 - 12.15         0.012            Wetland 014         McKean         1.8         1.8         PEM         Yes         44.00 - 17.82         0.018            Wetland 015         McKean         1.8         1.8         PEM         Yes         35.00 - 6.22         0.005            Wetland 016a         McKean         2.2         2.2         PEM         Yes         122.00 - 61.05         0.175         0.024           Wetland 016b         McKean         2.2         2.2         PFO         Yes         106.00 - 4.10         0.010            Wetland 016b         McKean         2.2         2.2         PEM         Yes         220.00 - 44.15         0.2	Wetland 010a	McKean	1.4	1.5	PFO	Yes	557.00 - 13.76	0.176	
Wetland 011         McKean         1.6         1.6         PEM         Yes         125.00 - 10.80         0.032         0.005           Wetland 145         McKean         1.6         1.6         PEM         No         182.00 - 10.53         0.044            Wetland 012b         McKean         1.6         1.6         PEM         No         43.00 - 12.15         0.012            Wetland 014         McKean         1.8         1.8         PEM         Yes         44.00 - 17.82         0.018            Wetland 015         McKean         1.8         1.8         PEM         Yes         35.00 - 6.22         0.005            Wetland 016a         McKean         2.2         2.2         PEM         Yes         122.00 - 61.05         0.175         0.024           Wetland 016         McKean         2.2         2.2         PFO         Yes         106.00 - 4.10         0.010            Wetland 016b         McKean         2.2         2.2         PEM         Yes         220.00 - 44.15         0.230         0.044	Wetland 010	McKean	1.4	1.5	PEM	Yes	823.00 - 62.77	1.218	0.190
Wetland 145         McKean         1.6         1.6         PEM         No         182.00 - 10.53         0.044            Wetland 012b         McKean         1.6         1.6         PEM         No         43.00 - 12.15         0.012            Wetland 014         McKean         1.8         1.8         PEM         Yes         44.00 - 17.82         0.018            Wetland 015         McKean         1.8         1.8         PEM         Yes         35.00 - 6.22         0.005            Wetland 016a         McKean         2.2         2.2         PEM         Yes         122.00 - 61.05         0.175         0.024           Wetland 016         McKean         2.2         2.2         PFO         Yes         106.00 - 4.10         0.010            Wetland 016b         McKean         2.2         2.2         PEM         Yes         220.00 - 44.15         0.230         0.044	Wetland 010b	McKean	1.5	1.5	PFO	Yes	208.00 - 8.79	0.042	
Wetland 012b         McKean         1.6         1.6         PEM         No         43.00 - 12.15         0.012            Wetland 014         McKean         1.8         1.8         PEM         Yes         44.00 - 17.82         0.018            Wetland 015         McKean         1.8         1.8         PEM         Yes         35.00 - 6.22         0.005            Wetland 016a         McKean         2.2         2.2         PEM         Yes         122.00 - 61.05         0.175         0.024           Wetland 016         McKean         2.2         2.2         PFO         Yes         106.00 - 4.10         0.010            Wetland 016b         McKean         2.2         2.2         PEM         Yes         220.00 - 44.15         0.230         0.044	Wetland 011	McKean	1.6	1.6	PEM	Yes	125.00 - 10.80	0.032	0.005
Wetland 014         McKean         1.8         1.8         PEM         Yes         44.00 - 17.82         0.018            Wetland 015         McKean         1.8         1.8         PEM         Yes         35.00 - 6.22         0.005            Wetland 016a         McKean         2.2         2.2         PEM         Yes         122.00 - 61.05         0.175         0.024           Wetland 016         McKean         2.2         2.2         PFO         Yes         106.00 - 4.10         0.010            Wetland 016b         McKean         2.2         2.2         PEM         Yes         220.00 - 44.15         0.230         0.044	Wetland 145	McKean	1.6	1.6	PEM	No	182.00 - 10.53	0.044	
Wetland 015         McKean         1.8         1.8         PEM         Yes         35.00 - 6.22         0.005            Wetland 016a         McKean         2.2         2.2         PEM         Yes         122.00 - 61.05         0.175         0.024           Wetland 016         McKean         2.2         2.2         PFO         Yes         106.00 - 4.10         0.010            Wetland 016b         McKean         2.2         2.2         PEM         Yes         220.00 - 44.15         0.230         0.044	Wetland 012b	McKean	1.6	1.6	PEM	No	43.00 - 12.15	0.012	
Wetland 016a         McKean         2.2         2.2         PEM         Yes         122.00 – 61.05         0.175         0.024           Wetland 016         McKean         2.2         2.2         PFO         Yes         106.00 - 4.10         0.010            Wetland 016b         McKean         2.2         2.2         PEM         Yes         220.00 - 44.15         0.230         0.044	Wetland 014	McKean	1.8	1.8	PEM	Yes	44.00 - 17.82	0.018	
Wetland 016         McKean         2.2         2.2         PFO         Yes         106.00 - 4.10         0.010            Wetland 016b         McKean         2.2         2.2         PEM         Yes         220.00 - 44.15         0.230         0.044	Wetland 015	McKean	1.8	1.8	PEM	Yes	35.00 - 6.22	0.005	
Wetland 016b         McKean         2.2         2.2         PEM         Yes         220.00 – 44.15         0.230         0.044	Wetland 016a	McKean	2.2	2.2	PEM	Yes	122.00 - 61.05	0.175	0.024
	Wetland 016	McKean	2.2	2.2	PFO	Yes	106.00 - 4.10	0.010	
Pond 06 McKean 2.8 2.8 PUB No 84.50 - 46.39 0.090	Wetland 016b	McKean	2.2	2.2	PEM	Yes	220.00 – 44.15	0.230	0.044
	Pond 06	McKean	2.8	2.8	PUB	No	84.50 - 46.39	0.090	
Wetland 018         McKean         3.0         3.0         PEM         Yes         41.00 - 9.56         0.009	Wetland 018	McKean	3.0	3.0	PEM	Yes	41.00 - 9.56	0.009	

Wetland Name <sup>1</sup>	County	MP Begin	MP End	Wetland Type Classification <sup>2</sup>	Qualify as EV (Yes/No) <sup>5</sup>	Wetland Construction Impact Dimensions (ft.)	Area within Construction Workspace (acres) <sup>3</sup>	Area within Operational Footprint (acres)
Wetland 020a	McKean	3.3	3.3	PFO	Yes	295.00 - 30.41	0.227	0.021
Wetland 020	McKean	3.3	3.4	PEM	Yes	565.00 - 36.46	0.488	0.083
Wetland 023	McKean	3.4	3.6	PEM	No	797.00 - 43.01	0.815	0.161
Wetland 025	McKean	3.6	3.6	PEM	No	90.00 – 52.75	0.112	0.019
Wetland 026	McKean	3.6	3.7	PSS	Yes	375.00 - 33.10	0.335	0.050
Wetland 026a	McKean	3.6	3.7	PEM	Yes	292.00 - 31.47	0.221	0.036
Wetland 027	McKean	3.7	3.7	PEM	Yes	167.00 – 50.34	0.198	0.031
Wetland 028	McKean	4.1	4.1	PEM	No	398.00 - 33.92	0.320	0.059
Wetland 029	McKean	4.3	4.3	PEM	No	156.00 – 44.67	0.165	0.028
Wetland 031	McKean	4.9	5.0	PFO	No	244.00 - 26.24	0.147	
Wetland 031a	McKean	4.9	5.0	PEM	Yes	218.00 – 35.16	0.183	0.042
Wetland 035-1	McKean	6.6	6.6	PSS	No	231.00- 4.52	0.030	
Wetland 034	McKean	6.6	6.6	PSS	No	86.00 - 20.26	0.040	
Wetland 039	McKean	6.7	6.7	PEM	No	146.00 - 31.32	0.105	
Wetland 037c	McKean	6.8	6.8	PSS	No	101.00 - 62.10	0.159	0.015
Wetland 037b	McKean	6.8	6.8	PEM	No	49.00 - 12.44	0.014	
Wetland 041	McKean	6.8	6.8	PEM	No	18.00 - 2.42	0.001	
Wetland 042	McKean	6.9	6.9	PEM	No	30.00 - 11.61	0.008	
Wetland 045	McKean	7.2	7.2	PEM	No	159.00 - 13.97	0.051	<0.001
Wetland 049	McKean	7.7	7.7	PEM	No	20.00 - 2.17	0.001	
Wetland 051	McKean	7.8	7.8	PEM	No	392.00 - 31.55	0.293	0.057
Wetland 054	McKean	7.9	7.9	PEM	Yes	50.00 - 40.07	0.047	0.008
Wetland 055	McKean	8.0	8.0	PEM	Yes	200.00 - 32.01	0.148	0.010
Wetland 056	McKean	7.62	7.62	PEM	Yes	16.00 - 2.72	0.001	
Wetland 059a	McKean	9.3	9.3	PEM	No	92.00 - 48.76	0.105	0.013
Wetland 061	McKean	9.7	9.7	PEM	No	395.00 – 54.69	0.509	0.077

Wetland Name <sup>1</sup>	County	MP Begin	MP End	Wetland Type Classification <sup>2</sup>	Qualify as EV (Yes/No) <sup>5</sup>	Wetland Construction Impact Dimensions (ft.)	Area within Construction Workspace (acres) <sup>3</sup>	Area within Operational Footprint (acres) <sup>4</sup>
Wetland 066a	McKean	9.9	10.0	PEM	No	412.00 - 46.30	0.453	0.093
Wetland 127	McKean	9.9	10.0	PFO	No	308.00 - 20.22	0.143	
Wetland 067	McKean	10.4	10.4	PEM	Yes	93.00 - 10.30	0.022	<0.001
Wetland 126	McKean	11.2	11.2	PEM	Yes	7.50 - 0.74	<0.001	
Wetland 126c	McKean	11.2	11.2	PEM	Yes	22.00 - 1.98	0.001	
Wetland 070	McKean	11.2	11.2	PEM	Yes	59.00 - 14.02	0.019	
Wetland 071	McKean	11.2	11.2	PEM	Yes	55.00 - 15.04	0.019	
Wetland 075	McKean	13.9	13.9	PEM	Yes	50.00 - 6.96	0.008	
Wetland 076	McKean	14.0	14.0	PEM	Yes	116.00 - 10.89	0.029	0.003
Wetland 077	McKean	14.0	14.0	PEM	Yes	104.00 - 23.03	0.056	0.007
Wetland 078	McKean	14.1	14.1	PEM	Yes	42.00 - 12.44	0.012	
Wetland 080	McKean	14.1	14.1	PUB	Yes	200.00 - 12.41	0.058	0.004
Pond 07	McKean	14.1	14.1	PUB	Yes	25.40 - 17.14	0.010	
Wetland 082	McKean	14.1	14.1	PEM	No	7.26 - 2.10	<0.001	
Wetland 083	McKean	14.3	14.3	PEM	Yes	224.00 - 24.89	0.131	0.018
Wetland 086	McKean	14.5	14.5	PEM	No	134.00 - 21.12	0.065	
Wetland 088	McKean	14.5	14.6	PEM	No	357.00 - 40.26	0.330	
Wetland 091	McKean	15.1	15.2	PSS	No	765.00 - 37.58	0.801	0.141
Wetland 091a	McKean	15.2	15.2	PEM	No	692.00 - 24.04	0.385	0.017
Wetland 094	McKean	15.3	15.4	PEM	No	161.00 - 11.63	0.043	
Wetland 096	McKean	18.0	18.0	PEM	Yes	21.00 - 8.29	0.004	
Wetland 101	Potter	19.0	19.0	PEM	Yes	160.00 - 26.40	0.099	0.014
Wetland 143	Potter	19.2	19.2	PEM	Yes	75.00 - 31.36	0.056	0.010
Wetland 142	Potter	23.0	23.1	PSS	Yes	157.00 - 57.98	0.241	0.032
Wetland 141a	Potter	23.2	23.2	PEM	Yes	202.00 - 60.81	0.289	0.045
Wetland 141	Potter	23.2	23.3	PSS	Yes	206.00 -18.39	0.094	0.007

Wetland Name <sup>1</sup>	County	MP Begin	MP End	Wetland Type Classification <sup>2</sup>	Qualify as EV (Yes/No) <sup>5</sup>		tland Construction act Dimensions (ft.)	Area within Construction Workspace (acres) <sup>3</sup>	Area within Operational Footprint (acres) <sup>4</sup>
Wetland 125	Potter	26.6	26.6	PEM	No		84.00 – 62.22	0.121	0.018
Wetland 124a	Potter	26.7	26.7	PEM	Yes		143.00 - 11.88	0.040	0.004
Wetland 124b	Potter	26.7	26.7	PEM	Yes		125.00 - 10.80	0.032	0.007
							Line YM58 Total:	13.288	1.817
Line YM58 Access R	Roads								
Wetland 017	McKean		PAR-3	PEM		No	82.00 - 4.78	0.009	
Wetland 017a	McKean		PAR-3	PEM		No	83.00 - 5.77	0.011	
Wetland 117	McKean		PAR-5	PEM		No	26.00 - 6.70	0.004	
Wetland 118	McKean		PAR-5	PEM		Yes	147.00 - 8.29	0.028	
Wetland 119	McKean		PAR-5	PEM		No	328.00 - 3.05	0.023	
Wetland 119a	McKean		PAR-5	PEM		No	651.00 - 9.16	0.137	
Wetland 120	McKean		PAR-5	PEM		No	122.00 - 8.92	2 0.025	
Wetland 121	McKean		PAR-5	PEM		No	156.00 - 4.18	0.015	
Wetland 121a	McKean		PAR-5	PEM		No	30.00 - 11.61	0.008	
Wetland 122	McKean		PAR-5	PEM		No	342.00 - 10.5	7 0.083	
Wetland 123	McKean		PAR-5	PEM		No	84.00 - 0.51	0.001	
Wetland 123a	McKean		PAR-5	PEM		No	168.00 - 15.5	5 0.060	
Wetland 035-2	McKean		TAR-7	PSS		Yes	231.00 - 4.52	0.024	
Wetland 035a	McKean		TAR-7	PEM		No	74.00 - 10.59	0.018	
Wetland 057	McKean		TAR-10	PEM		Yes	48.00 - 6.35	0.007	
Wetland 058	McKean		PAR-12	PEM		No	220.00 - 9.90	0.050	
Wetland 058a	McKean		PAR-12	PEM		No	62.00 - 7.02	0.010	
Wetland 159	McKean		TAR-10	PEM		No	45.00 - 1.93	0.002	
Wetland 160	McKean		TAR-10	PEM		No	92.00 - 5.68	0.012	
Wetland 060a	McKean		PAR-12	PEM		No	283.00 - 9.08	0.059	
Wetland 060	McKean		PAR-12	PEM		No	281.00 - 7.59	0.049	

Wetland Name <sup>1</sup>	County	MP Begin	MP End	Wetland Type Classification <sup>2</sup>	Qualify as EV (Yes/No) <sup>5</sup>		and Construction	Area within Construction Workspace (acres) <sup>3</sup>	Area within Operational Footprint (acres) <sup>4</sup>
Wetland 061b	McKean	_	TAR-13	PEM		No	98.00 - 12.44	0.028	
Wetland 061c	McKean		TAR-13	PEM		No	95.00 - 3.20	0.007	
Wetland 062	McKean		TAR-13	PEM		No	118.00 - 13.28	0.036	
Wetland 062A	McKean		TAR-13	PEN		No	14.00 - 0.16	<0.001	
Wetland 063	McKean		TAR-13	PEM		No	330.00 - 7.26	0.055	
Wetland 063a	McKean		TAR-13	PEN		No	277.00 - 1.72	0.011	
Wetland 064	McKean		TAR-13	PEN		No	45.00 - 1.93	0.002	
Wetland 065	McKean		TAR-13	PEN		No	92.00 - 13.25	0.028	
Wetland 065a	McKean		TAR-13	PEM		Yes	62.00 - 0.70	0.001	
Wetland 140	McKean		PAR-14	PEN		No	35.00 - 8.71	0.007	
Wetland 089	McKean		TAR-22	PEM		No	47.00 - 9.26	0.010	
Wetland 089a	McKean		TAR-22	PEM		No	10.00 - 4.35	0.001	
Wetland 106	Potter		PAR-30	PUB		No	327.00 - 3.99	0.030	
							Line YM58 Total:	0.854	
Line KL Extension									
Wetland 004b	McKean	0.2		0.2 PE	M	Yes	243.00 - 103.61	0.583	0.095
						Line	KL Extension Total:	0.583	0.095
Marvindale Compres	ssor Station Access	Roads							
Wetland 002	McKean		PAR-1	PEM		Yes	40.00 - 7.62	0.007	
Wetland 003	McKean		PAR-1	PFC		Yes	65.00 - 4.02	0.006	
Pond 01	McKean		PAR-1	PUB		Yes	17.20 - 7.59	0.003	
Wetland 004a	McKean		PAR-1	PEM		Yes	55.00 - 11.08	0.014	
Wetland 004	McKean		PAR-1	PFC		Yes	112.00 - 11.66	0.030	
				Mar	vindale Comp	ressor S	Station Access Roads	Total: 0.060	
Line YM224 Loop									
Wetland 112	Potter	1.1	1.1	PEM	No		73.00 -23.27	0.039	0.002

Wetland Name <sup>1</sup>	County	MP Begin	MP End	Wetland Type Classification <sup>2</sup>	Qualify as EV (Yes/No) <sup>5</sup>	Wetland Construction Impact Dimensions (ft.)	Area within Construction Workspace (acres) <sup>3</sup>	Area within Operational Footprint (acres) <sup>4</sup>
Wetland 114	Potter	1.1	1.1	PEM	No	227.00 - 8.82	0.046	
						YM224 Loop Total:	0.085	0.002
Line FM100 Abando	onment							
Wetland 149	Clearfield	0.0	0.1	PSS	Yes	53.00 - 36.98	0.045	
Wetland 149b	Clearfield	0.2	0.2	PEM	Yes	57.00 - 2.29	0.003	
Wetland 149c	Clearfield	0.2	0.2	PEM	Yes	190.00 – 22.00	0.096	
Wetland 149d	Clearfield	0.2	0.2	PSS	Yes	74.00 - 15.89	0.027	
Wetland 139a	Clearfield	4.8	4.8	PEM	Yes	51.35 - 19.51	0.023	
Wetland 139	Clearfield	4.9	4.9	PEM	Yes	50.00 - 19.16	0.022	
Wetland 137	Elk	7.9	7.9	PEM	Yes	22.00 - 5.94	0.003	
Wetland 138	Elk	8.0	8.0	PEM	Yes	50.00 - 13.06	0.015	
Wetland 135	Elk	11.1	11.1	PEM	No	44.00 – 25.74	0.026	
Wetland 134a	Elk	12.0	12.0	PEM	No	56.00 - 48.22	0.062	
Wetland 148	Cameron	22.1	22.1	PSS	Yes	48.00 – 13.60	0.015	
					Line	FM100 Abandonment Total:	0.337	
						PEM Total:	12.042	1.853
						PSS Total:	1.811	0.040
						PFO Total:	1.143	0.021
						PUB Total:	0.211	
						Wetlands Total:	15.207	1.914

Field designations represent unique identifiers assigned to each wetland during field surveys.

<sup>&</sup>lt;sup>2</sup> Wetland classifications are based on the Cowardin classification systems whereby P = Palustrine, EM = Emergent, FO = Forested, and SS = Scrub-Shrub.

<sup>&</sup>lt;sup>3</sup> Land within the Construction Workspace includes disturbance to the ATWS, TWS, and the permanent easement.

<sup>&</sup>lt;sup>4</sup> Operational impacts account for the permanently maintained 10-foot-wide easement.

<sup>&</sup>lt;sup>5</sup> Exceptional Value (EV) wetlands include wetland areas that: A) serve as habitat for endangered/threated species; B) are located within 0.5 miles of wetlands that maintain the habitat of a threatened/endangered species; c) are located in or along the floodplain of a wild trout stream of waters listed as exceptional value under chapter 93 and the floodplain of streams tributary thereto; d) are located along existing public or private drinking water supplies (surface or groundwater); or e) are in natural/wild areas within state forest or parks or federal wilderness areas https://www.pacode.com/secure/data/025/chapter105/s105.17.html

Table 2.2-1C: Floodplains Crossed by the Project

County	MP/ Access Road Name	Latitude	Longitude	Waterbody Project ID	Waterbody Name	Designated Use and Water Quality Criteria
Line YM58						
McKean	0.9	41.70952384	-78.48415010	Stream 006	UNT to Wernway Hollow	HQ-CWF
McKean	1.2	41.71148123	-78.47999842	Stream 007	UNT to Wernway Hollow	HQ-CWF
McKean	1.4	41.71328078	-78.47698812	Stream 008	Wernway Hollow	HQ-CWF
McKean	1.5	41.71436376	-78.47474427	Stream 011	UNT to Wernway Hollow	HQ-CWF
McKean	1.6	41.71464539	-78.47414846	Stream 012	UNT to Wernway Hollow	HQ-CWF
McKean	1.6	41.71479147	-78.47411364	Stream 014	UNT to Wernway Hollow	HQ-CWF
McKean	1.8	41.71685195	-78.47032115	Stream 017	UNT to Wernway Hollow	HQ-CWF
McKean	2.2	41.71984324	-78.46531115	Stream 019	UNT to Browns Mill Hollow Run	HQ-CWF
McKean	2.2	41.7200442	-78.46492246	Stream 020	UNT to Browns Mill Hollow Run	HQ-CWF
McKean	3.0	41.72633739	-78.45228861	Stream 026	UNT to Robbins Brook	HQ-CWF
McKean	3.3	41.72975562	-78.44757736	Stream 027	UNT to Robbins Brook	HQ-CWF
McKean	3.4	41.73038108	-78.44719633	Robbins Brook	Robbins Brook	HQ-CWF
McKean	3.6	41.73307059	-78.44369357	Donley Fork	Donley Fork	HQ-CWF
McKean	4.6	41.74251833	-78.43158935	Stream 160	UNT to Robbins Brook	HQ-CWF
McKean	4.9	41.74315861	-78.42554339	Stream 030 -1	UNT to Robbins Brook	HQ-CWF
McKean	6.6	41.75293467	-78.39749265	Stream 037	UNT to Potato Creek	TSF
McKean	6.7	41.7544034	-78.39399173	Potato Creek	Potato Creek	TSF
McKean	7.1	41.7544615	-78.38972579	Stream 038	UNT to Potato Creek	TSF
McKean	7.1	41.75444543	-78.38935917	Stream 039	UNT to Potato Creek	CWF
McKean	7.2	41.75441042	-78.38743214	Stream 159	UNT to Potato Creek	CWF
McKean	7.9	41.75706657	-78.37493616	Stream 040	UNT to Walcott Brook	CWF
McKean	7.9	41.75697296	-78.37485919	Stream 041	UNT to Walcott Brook	CWF
McKean	8.0	41.75699609	-78.37249149	Stream 043	UNT to Walcott Brook	CWF

County	MP/ Access Road Name	Latitude	Longitude	Waterbody Project ID	Waterbody Name	Designated Use and Water Quality Criteria
McKean	10.4	41.76355628	-78.32941825	Stream 054	Coalbed Hollow	HQ-CWF
McKean	11.2	41.76718262	-78.3146635	Stream 122	UNT to Bemis Hollow	HQ-CWF
McKean	11.2	41.76724807	-78.31686750	Stream 121	UNT to Bemis Hollow	HQ-CWF
McKean	11.3	41.76712779	-78.3145119	Stream 055	Bemis Hollow	HQ-CWF
McKean	11.3	41.76712281	-78.31426231	Stream 056	UNT to Bemis Hollow	HQ-CWF
McKean	11.3	41.76734102	-78.31398342	Stream 057	UNT to Bemis Hollow	HQ-CWF
McKean	13.6	41.78305035	-78.27729453	Stream 066	UNT to Alleghany Portage Creek	CWF
McKean	14.0	41.78829673	-78.27052216	Allegheny Portage Creek	Allegheny Portage Creek	TSF
McKean	14.1	41.7887135	-78.26995579	Stream 067	UNT to Alleghany Portage Creek	CWF
McKean	14.2	41.78988336	-78.26787878	Stream 068	UNT to Alleghany Portage Creek	CWF
McKean	14.3	41.79097787	-78.26622532	Stream 070	UNT to Alleghany Portage Creek	CWF
McKean	14.5	41.7925588	-78.26424459	Stream 071	UNT to Allegheny River	CWF
McKean	14.6	41.79351298	-78.26314877	Stream 073	UNT to Allegheny River	CWF
McKean	14.7	41.79421314	-78.26217648	Stream 074	UNT to Allegheny River	CWF
McKean	14.7	41.79442351	-78.2619073	Stream 075	UNT to Allegheny River	CWF
McKean	14.9	41.79592939	-78.26034516	Allegheny River	Allegheny River	CWF
McKean	15.4	41.795592	-78.248992	Stream 078	UNT to Allegheny River	CWF
McKean	15.7	41.80863178	-78.22251845	Coleman Creek	Coleman Creek	CWF
McKean	18.0	41.81016678	-78.20603292	Stream 086	UNT to Jordan Hollow	CWF
McKean	18.1	41.8110168	-78.20534566	Stream 089	UNT to Jordan Hollow	CWF
McKean	PAR-3	41.7178022	-78.45295649	Stream 022	UNT to Red Mill Brook	CWF
McKean	PAR-3	41.71663716	-78.45152507	Stream 023	UNT to Red Mill Brook	CWF
McKean	PAR-3	41.71277612	-78.44639801	Stream 025	Stream 025 UNT to Red Mill Brook	
McKean	PAR-3	41.71380682	-78.44632243	Stream 024	Stream 024 UNT to Red Mill Brook	
McKean	PAR-3	41.72249441	-78.45397676	Stream 021	UNT to Red Mill Brook	CWF

County	MP/ Access Road Name	Latitude	Longitude	Waterbody Project ID	Waterbody Name	Designated Use and Water Quality Criteria
McKean	PAR-5	41.76275543	-78.47466734	Stream 109	UNT to Irons Hollow	CWF
McKean	PAR-5	41.76165361	-78.4739665	Stream 110	UNT to Irons Hollow	CWF
McKean	PAR-5	41.75557959	-78.47233415	Stream 111	UNT to Irons Hollow	CWF
McKean	PAR-5	41.75714654	-78.47049738	Stream 112	UNT to Irons Hollow	CWF
McKean	PAR-5	41.75778345	-78.46514879	Stream 113	UNT to Irons Hollow	CWF
McKean	PAR-5	41.74456085	-78.43976928	Stream 114	UNT to Irons Hollow	CWF
McKean	PAR-5	41.74315861	-78.42554339	Stream 030-2	UNT to Robbins Brook	HQ-CWF
McKean	TAR-6	41.73616244	-78.40797283	Stream 032	UNT to Robbins Brook	HQ-CWF
McKean	TAR-6	41.73596673	-78.40637594	Stream 033	UNT to Robbins Brook	HQ-CWF
McKean	TAR-6	41.73650956	-78.40428649	Stream 034	UNT to Robbins Brook	HQ-CWF
McKean	TAR-6	41.73702569	-78.40279245	Stream 035	UNT to Robbins Brook	HQ-CWF
McKean	TAR-6	41.737596	-78.40079208	Stream 036	UNT to Robbins Brook	HQ-CWF
McKean	TAR-10	41.74903927	-78.37653927	Stream 044	UNT to Walcott Brook	CWF
McKean	PAR-12	41.76034218	-78.36627787	Stream 045	UNT to Walcott Brook	CWF
McKean	TAR-10	41.75373402	-78.36461709	Stream 198	UNT to Walcott Brook	CWF
McKean	PAR-12	41.76108322	-78.3644886	Stream 046	UNT to Walcott Brook	CWF
McKean	PAR-12	41.76105066	-78.35817164	Stream 047	UNT to Walcott Brook	CWF
McKean	PAR-12	41.76093737	-78.3579907	Stream 048	UNT to Walcott Brook	CWF
McKean	PAR-12	41.76041497	-78.35498313	Stream 049	UNT to Walcott Brook	CWF
McKean	PAR-12	41.76322064	-78.3500265	Stream 050	UNT to Walcott Brook	CWF
McKean	TAR-13	41.74881982	-78.32859692	Stream 051	UNT to Walcott Brook	CWF
McKean	TAR-13	41.74802283	-78.32751972	Stream 052	UNT to Walcott Brook	CWF
McKean	TAR-13	41.74798343	-78.32602203	Stream 053	UNT to Walcott Brook	CWF
McKean	PAR-14	41.77139407	-78.31068016	Stream 058	UNT to Bemis Hollow	HQ-CWF
McKean	PAR-14	41.76735896	-78.3083331	Stream 118	UNT to Bemis Hollow	HQ-CWF

County	MP/ Access Road Name	Latitude	Longitude	Waterbody Project ID	Waterbody Name	Designated Use and Water Quality Criteria
McKean	PAR-14	41.77688244	-78.30974868	Stream 059	UNT to Bemis Hollow	HQ-CWF
McKean	PAR-14	41.77998706	-78.30778801	Stream 060	UNT to Bemis Hollow	HQ-CWF
McKean	PAR-14	41.78092323	-78.30711247	Stream 061	UNT to Bemis Hollow	HQ-CWF
McKean	PAR-14	41.78404182	-78.30766374	Stream 062	Bemis Hollow	HQ-CWF
McKean	PAR-25	41.81054173	-78.2381618	Stream 080	UNT to Benson Hollow	CWF
McKean	PAR-25	41.81025457	-78.2337313	Stream 081	Benson Hollow	CWF
McKean	PAR-25	41.79599358	-78.24327073	Coleman Creek	Coleman Creek	CWF
McKean	PAR-25	41.80961941	-78.2212397	Stream 082	UNT to Coleman Creek	CWF
McKean	PAR-25	41.80998285	-78.22089958	Stream 083	UNT to Coleman Creek	CWF
McKean	PAR-25	41.81351769	-78.21890368	Stream 084	UNT to Coleman Creek	CWF
McKean	PAR-25	41.81661466	-78.2189201	Stream 085	UNT to Coleman Creek	CWF
McKean	PAR-25	41.75373402	-78.36461709	Stream 196	UNT to Coleman Creek	CWF
McKean	TAR-26	41.81393544	-78.20897827	Stream 085c	UNT to Jordan Hollow	CWF
McKean	TAR-26	41.81581804	-78.20923341	Stream 085b	UNT to Jordan Hollow	CWF
McKean	TAR-26	41.81744083	-78.20848581	Stream 085a	UNT to Jordan Hollow	CWF
McKean	SA-7	41.80948877	-78.42597083	Stream 195	UNT to Potato Creek	CWF
Potter	18.1	41.8111870	-78.2051968	Stream 091	UNT to Jordan Hollow	CWF
Potter	18.1	41.8111918	-78.2050226	Stream 092	UNT to Jordan Hollow	CWF
Potter	18.1	41.8112494	-78.2051133	Stream 090	Jordan Hollow	CWF
Potter	18.9	41.8180475	-78.1947849	Stream 093	Ernst Hollow	CWF
Potter	19.1	41.8202685	-78.1930235	Stream 094	UNT to Sartwell Creek	CWF
Potter	19.2	41.8216804	-78.1916060	Sartwell Creek	Sartwell Creek	CWF
Potter	19.6	41.8238897	-78.1841700	Stream 096	UNT to Sartwell Creek	CWF
Potter	19.7	41.8247684	-78.1828970	Stream 098	UNT to Sartwell Creek	CWF
Potter	19.9	41.82744521	-78.18129453	Stream 197	UNT to Sartwell Creek	CWF

County	MP/ Access Road Name	Latitude	Longitude	Waterbody Project ID	Waterbody Name	Designated Use and Water Quality Criteria
Potter	21.8	41.8370533	-78.14919817	Stream 099	Baker Hollow	CWF
Potter	23.0	41.8359036	-78.1282262	Stream 156	Fishing Creek	CWF
Potter	23.2	41.83548861	-78.12540536	Stream 152	UNT to Fishing Creek	CWF
Potter	25.0	41.8391466	-78.0965789	Stream 151	UNT to East Branch Fishing Creek	HQ-CWF
Potter	26.0	41.8448506	-78.0796395	Stream 117	UNT to Fishing Creek	CWF
Potter	26.8	41.8452839	-78.0647304	Stream 116	East Branch Fishing Creek	HQ-CWF
Potter	27.4	41.8447063	-78.0527711	Whitney Creek	Whitney Creek	EV
Potter	27.8	41.84510165	-78.0444320	Stream 102	UNT to Whitney Creek	EV
Potter	28.7	41.85001485	-78.02968847	Stream 103	UNT to Whitney Creek	EV
Potter	PAR-31	41.8374915	-78.1201519	Stream 155	UNT to Fishing Creek	CWF
Potter	PAR-31	41.8393374	-78.1087150	Stream 153	UNT to Fishing Creek	CWF
Potter	PAR-31	41.8396724	-78.1078149	Stream 154	UNT to Fishing Creek	CWF
Potter	PAR-33	41.8462215	-78.0841382	Stream 150	UNT to Fishing Creek	CWF
Line KL Ex	tension					
McKean	0.0	41.70435834	-78.50000496	Stream 005	UNT to Warner Brook	HQ-CWF
McKean	0.0	41.70416085	-78.49996793	Stream 001	UNT to Warner Brook	HQ-CWF
FM100 Aba	ndonment					
Clearfield	0.1	41.21946422	-78.55628606	Stream 180	Bennett Branch Sinnemahoning Creek	CWF
Clearfield	0.2	41.21946422	-78.55628606	Stream 181	UNT to Bennett Branch Sinnemahoning Creek	CWF
Clearfield	4.9	41.23290907	-78.47525624	Stream 145	Laurel Run	HQ-CWF
Elk	7.9	41.24112555	-78.41853688	Stream 144	UNT to Medix Run	HQ-CWF
Elk	7.9	41.24119763	-78.41819764	Stream 143	Medix Run	HQ-CWF
Cameron	23.2	41.33125816	-78.18382838	Stream 174	Bennett Branch Sinnemahoning Creek	WWF
Cameron	26.8	41.35497645	-78.12688099	Stream 169	Driftwood Branch Sinnemahoning Creek	TSF

Table 2.2-1D: Water Supply Wells and Springs within 150-feet of Project Work Areas

Facility <sup>1</sup> / County	MP	Latitude	Longitude	Well Type	Well ID	Workspace Type	Approx. Distance from Construction Workspace (feet)	e Current Use
Line YM58								
McKean	19.1	41.820862	-78.193240	Spring	N/A	ATWS	Q1 ()	Not utilized as a source of potable water
Potter	23.8	41.835457	-78.125261	Spring	N/A	ATWS	114 5	Not utilized as a source of potable water
Potter	23.2	41.83570	-78.12474	Spring	N/A	TWS	75.1	Not utilized as a source of potable water
Line KL Extens	sion							
McKean	0.0	41.70135	-78.49992	Agricultural Irrigation	594683	ATWS	0	Withdrawal
McKean	0.0	41.70167	-78.49972	Domestic	131079	ATWS	0	Withdrawal
Line FM100 Ab	andonmen	t						
Elk	8.0	41.24098	-78.417066	Spring	N/A	TWS	28.4	Not utilized as a source of potable water
Potter	44.0	41.59083	-78.05917	Domestic	N/A	Access Road	53.2	Withdrawal

<sup>&</sup>lt;sup>1</sup> Project components not addressed in table do not have water supply wells/springs within 150 feet of Project workspaces. Source: PAGWIS 2018, landowner coordination and Project environmental survey.