

Floodplain Development Permit

Doddridge County, WV Floodplain Management

This permit gives approval for the development/ project listed that impacts the FEMA-designated floodplain and/or floodway of Doddridge County, WV, pursuant to the rules and regulations established by all applicable Federal, State and local laws and ordinances, including the Doddridge County Floodplain Ordinance. This permit must be posted at the site of work as to be clearly visible and must remain posted during entirety of development.

Permit #: 18-503

Date Approved: March 8, 2018 Expires: March 8, 2019

Issued to: Antero Midstream, LLC POC: Rachel McKinney

Company Address: 535 White Oaks Blvd. Bridgeport, WV 26330

Project Address: Crystal Lake

Firm: 54017C0110C Lat/Long: 39.323731N,-80.805153W

39.327781N,-80.802003W

Purpose of development: Middle Pipeline

Issued by: George C, Eidel, Doddridge County FPM (or designee)

Date: March 8, 2018

CERTIFIED MAIL® RECEIPT Domestic Mail Only WEST UNEDNEWY 28436 Certified Mail Fee 33.35 0532 Extra Services & Fees (check box, Return Receipt (hardcopy) 04 2 Return Receipt (electronic) \$0.00 Postmark Certified Mail Restricted Delivery \$0.00 Here Adult Signature Required \$0.00 Adult Signature Restricted Delivery \$. 490.50 02/03/2018 Total Postage and Fees Sent TO Crystal Lake Club <u> 18-503</u>

U.S. Postal Service™

U.S. Postal Service™ **CERTIFIED MAIL® RECEIPT** Domestic Mail Only WEST UNEDNE WY 26456 A Certified Mail Fee 53-45 0532 04 ra Services & Fees (check be Extra Services & Fees (chec Return Receipt (hardcopy) Return Receipt (electronic) \$0.00 Postmark Certified Mail Restricted Delivery \$0.00 Here Adult Signature Required \$0.00 Adult Signature Restricted Delivery \$.49 \$0.50 02/03/2018 Stralling Kling Farm

Union luv 26456

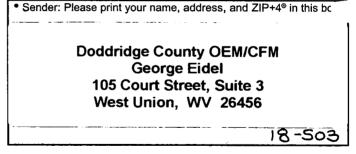
U.S. Postal Service™ CERTIFIED MAIL® RECEIPT 750,5 Domestic Mail Only For delivery information, visit our website MEST NATONE MY SOUZE ! 5871 Certified Mail Fee \$ \$45 0532 Services & Fees (check box, edd fees as approprieturn Receipt (hardcopy) 04 Return Receipt (hardcopy)
Return Receipt (electronic) \$0.00 Certified Mail Restricted De **Postmark** \$0.00 Adult Signature Required Here Adult Signature Restricted Deliv 49\$0.50 Total Postage and Fees 70 02/03/2018 7077 west Union, w values 18-503

94.7	The state of the s	
SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON	DELIVERY
 Complete items 1, 2, and 3. Print your name and address on the reverse so that we can return the card to you. Attach this card to the back of the mailpiece, or on the front if space permits. 	A. Signature X. Releas Mare B. Received by (Printed Name)	Agent Addressee C. Date of Delivery 2-6-18
	 D. Is delivery address different fro If YES, enter delivery address 	
John Paul Strickling (ETAL) 756 Strickling Farm Lane West Union, WV 26456		
9590 9402 2228 6193 5135 83	3. Service Type ☐ Adult Signature ☐ Adult Signature Restricted Delivery ☐ Certified Mail® ☐ Certified Mail Restricted Delivery ☐ Collect on Delivery	☐ Priority Mail Express®☐ Registered Mail™☐ Registered Mail Restricted Delivery☐ Return Receipt for Merchandise
2. Article Number (Transfer from service label)	 □ Collect on Delivery Restricted Delivery □ Insured Mail □ Insured Mail Restricted Delivery (over \$500) 	☐ Signature Confirmation™☐ Signature Confirmation Restricted Delivery
PS Form 3811, July 2015 PSN 7530-02-000-9053		Domestic Return Receipt





United States
Postal Service



■ Complete items 1, 2, and 3. ■ Print your name and address on the reverse so that we can return the card to you. ■ Attach this card to the back of the mailpiece, or on the front if space permits. Randall Lynch & Dixie Janet Craig (SURV) 5534 WV Rt. 18N West Union, WV 26456	B. Received by (Printed Name) D. Is delivery address different fro If YES, enter delivery address	A Agent Addressee C. Date of Delivery 2-7-18 m item 1? Yes
9590 9402 2228 6193 5135 90 2. Article Number (<i>Transfer from service label</i>)	3. Service Type □ Adult Signature □ Adult Signature Restricted Delivery □ Certified Mail® □ Certified Mail Restricted Delivery □ Collect on Delivery □ Collect on Delivery □ Insured Mail □ Insured Mail Restricted Delivery (over \$500)	□ Priority Mail Express® □ Registered Mail™ □ Registered Mail Restricted Delivery □ Return Receipt for Merchandise □ Signature Confirmation™ □ Signature Confirmation Restricted Delivery
PS Form 3811, July 2015 PSN 7530-02-000-9053		Domestic Return Receipt





United States Postal Service • Sender: Please print your name, address, and ZIP+4® in this b

Doddridge County OEM/CFM George Eidel 105 Court Street, Suite 3 West Union, WV 26456

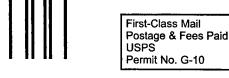
18-503

William

. 201205

SENDER: COMPLETE THIS SECTION COMPLETE THIS SECTION ON DELIVERY A. Signature ■ Complete items 1, 2, and 3. ☐ Agent ■ Print your name and address on the reverse so that we can return the card to you. B. Received by (Printed Name) C. Date of Delivery Attach this card to the back of the mailpiece, or on the front if space permits. D. Is delivery address different from item 1? If YES, enter delivery address below: Crystal Lake Club 561 Crystal Lake Road West Union, WV 26456 Service Type □ Priority Mail Express® Adult Signature □ Registered Mail™ ☐ Adult Signature Restricted Delivery □ Registered Mail Restricted ☐ Certified Mail® Delivery 9590 9402 2228 6193 5136 06 ☐ Return Receipt for □ Certified Mail Restricted Delivery Merchandise □ Collect on Delivery ☐ Signature Confirmation™ ☐ Collect on Delivery Restricted Delivery 2. Article Number (Transfer from service label) ☐ Signature Confirmation ☐ Insured Mail. Restricted Delivery ☐ ffisered Mail Restricted Delivery PS Form 3811, July 2015 PSN 7530-02-000-9053 Domestic Return Receipt





United States
Postal Service

Sender: Please print your name, address, and ZIP+4® in this box

Doddridge County OEM/CFM George Eidel 105 Court Street, Suite 3 West Union, WV 26456

- միուինիրի հինդիսին կուվունին ինչ իրի այլ որ այլ ու իրանական հայարակին հանաբանում և հայարակին հայարակին հայար

18-503



Vendor Name	Vendor No.	Date	Check Number	Check Total
DODDRIDGE COUNTY COMMISSION	43312	Feb-28-2018	109533	\$500.00

AMOUNT DISCOUNTS NET AMOUNT INV # INV DATE DESCRIPTION 500.00 0.00 500.00 02/27/18 FLOODPLAIN PERMIT MIDDLE PIPELINE SR022720148

COPY

MAR 8 18 12:00PM

COPY

TOTAL INVOICES PAID ====>

500.00

DETACH AND RETAIN FOR TAX PURPOSES

ANTERO MIDSTREAM LLC

Wells Fargo

Check No. 109533

11-24 412

800 - AP ACCT WELLS FARGO

Void After 90 Days

CHECK NUMBER DATE PAY EXACTLY 109533 Feb-28-2018 \$500.00

EXACTIVE 500dols 00cts

Five Hundred Dollars and Zero Cents

TO THE ORDER DODDRIDGE COUNTY COMMISSION 118 E COURT ST STE 1~ WEST UNION, WV 26456

#109533# #O41203824#

9657481710#

ANTERO MIDSTREAM LLC 1615 WYNKOOP STREET DENVER, COLORADO 80202

Vendor Name	Vendor No.	Date	Check Number	Check Total
DODDRIDGE COUNTY COMMISSION	43312	Feb-28-2018	109533	\$500.00

INV #	INV DATE	DESCRIPTION	AMOUNT	DISCOUNTS	NET AMOUNT
		FLOODPLAIN PERMIT MIDDLE PIPELINE	500.00	0.00	500.00

># 18-503

Doddridge County, West Virginia

RECEIPT NO:

390

DATE: 2018/03/19

FROM: ANTERO MIDSTREAM

AMOUNT: \$

500.00

FIVE HUNDRED DOLLARS AND 00 CENTS

FOR: #18-503 PERMIT MIDDLE PIPELINE

00000109533 FP-BUILDING PERMITS

020-318

TOTAL:

\$500.00

MICHAEL HEADLEY

SHERIFF &TREASURER

MEC

CLERK

Customer Copy

500.00

0.00

500.00

FLOODPLAIN PERMIT #18-503

Antero Resources/Middle Pipeline Crystal Lake

TASK	COMPLETE (DATE)	NOTES
CHECK RECEIVED	3/8/18	
US ARMY CORP. ENGINEERS		
(USACE)		
US FISH & WILDLIFE	2/2//0	
SERVICES (USFWS)	2/26/18	
WV DEPT. NATURAL	, i	
RESOURCES (WVDNR)		
WV DEPT. ENVIROMENTAL	2/2/10	
PROTECTION (WVDEP)	2/26/18	
STATE HISTORIC &	·	
PRESERVATION OFFICE		
(SHPO)		
OFFICE of LAND & STREAM		
(OLS)		
DATE OF COMMISSION		
READING	2/6/2018	
DATE AVAILABLE TO BE		
GRANTED	2/26/2018	
GIVAIAIED	2,20,2010	
PERMIT GRANTED	3/8/2018	
COMPLETE	,	

7017 1450 0001 5871 7499 7017 1450 0001 5871 7505 7017 1450 0001 5869 6220



Doddridge County Floodplain Permits

(Week of January 29, 2018)

Please take notice that on the 24th day of January, 2018, Antero Resources filed an application for a Floodplain Permit (#18-503) to develop land located at or about Crystal Lake; Coordinates 39.323731 N, 80.805153 W to 39.327781 N, 80.802003 W. The Application is on file with the Clerk of the County Court and may be inspected or copied during regular business hours. Any interested persons who desire to comment shall present the same in writing by February 26, 2018 (20 calendar days after the announcement at the regularly scheduled Doddridge County Commission Meeting) delivered to the Clerk of the County Court at 108 Court Street Ste. 1, West Union, WV 26456. This project is Middle Pipeline

Midstream Partners LP
Antero Midstream, LLC
535 White Oaks Blvd
Bridgeport, WV 26330
Office 304.842.4100
Fax 304.842.4102

January 3, 2018

Doddridge County Commission Attn: George Eidel, Doddridge County Floodplain Manager 118 East Court Street, Room 102 West Union, WV 26456

Mr. Eidel:

Antero Midstream LLC would like to submit a Doddridge County Floodplain permit application for our *Middle Pipeline* project. Our project is located in Doddridge County beginning at coordinates 39.323731N, 80.805153W, and continues to coordinates 39.327781N, 80.802003W. Per the FIRM Map #54017C0110C, this location is <u>in</u> the floodplain.

Attached you will find the following:

- ▶ Doddridge County Floodplain Permit Application
- ➤ No-Rise Certificate
- WV Flood Tool Map
- ➤ FIRM Map
- > Project Location Map
- Design Plans

If you have any questions please feel free to contact me at (304) 842-4008.

Thank you in advance for your consideration.

Sincerely, Hach King

Rachel McKinney

Environmental Specialist II Antero Resources Corporation

Enclosures



Permit# 18-503

Project Name: Middle Pipeline Permittees Name: Awtero

Doddridge County, WV

Floodplain Development **Permit Application**

This document is to be used for projects that impact/potentially impact the FEMA---designated floodplain and/or floodway of Doddridge County, WV pursuant to the rules and regulations established by all applicable Federal, State and local laws and ordinances, including the Doddridge County Floodplain Ordinance.

SECTION 1: GENERAL PROVISIONS (APPLICANT TO READ AND SIGN)

- 1. No work may start until a permit is issued.
- 2. The permit may be revoked if any false statements are made herein.
- 3. If revoked, all work must cease until permit is re-issued.
- Development shall not be used or occupied until a Certificate of Compliance is 4. issued.
- The permit will expire if no work is commenced within six months of issuance. 5.
- Applicant is hereby informed that other permits may be required to fulfill local, state, and federal requirements.
- Applicant hereby gives consent to the Floodplain Administrator/Manager or 7. his/her representative to make inspections to verify compliance.
- I THE APPLICANT CERTIFY THAT ALL STATEMENTS HEREIN AND IN ATTACHMENTS TO THIS APPLICATION ARE, TO THE BEST OF MY KNOWLEDGE, TRUE AND ACCURATE.

APPLICANT'S SIGNATURE	Bruin Juan
DATE	1-15-18

Applicant Information:

Please provide all pertinent data.

Applicant Information							
Responsible Company Name: Antero Midstream LLC							
Corporate Mailing Address: 1615 Wynkoop Street							
City: Denver	State: CO	Zip: 80202					
Corporate Point of Contact (POC):							
Corporate POC Title:							
Corporate POC Primary Phone:							
Corporate POC Primary Email:							
Corporate FEIN:	Corporate DU	NS:					
Corporate Website: www.anteroresources.com	n						
Local Mailing Address: 535 White Oaks Blvd							
City: Bridgeport	State: WV	Zip: 26330					
Local Project Manager (PM):							
Local PM Primary Phone:							
Local PM Secondary Phone:							
Local PM Primary Email:							
Person Filing Application: Rachel McKinney	· · · · · · · · · · · · · · · · · · ·						
Applicant Title: Environmental Specialist II							
Applicant Primary Phone: (304) 842-4008							
Applicant Secondary Phone: (304) 641-2396							
Applicant Primary Email: rmckinney@anteror	resources.com						

Project Narrative:

Describe in detail the proposed development including project name/title, type of development, estimated start and completion timeline, and its potential impact on the floodplain. Use additional copies of this page as needed.

Project Narrative:
The Middle Gas Line project is located east of WV 18 in the Crystal Lake area.
The proposed work includes the construction of a 20" Steel Gas Line and associated access roads.
A portion of the proposed project is located within the Middle Island Creek Zone A Flood Hazard
Area, according to the Flood Insurance Rate Map (FIRM) for Doddridge County, Map Panel
54017C0110C with a map revised date of October 4, 2011. The work that will take place in the
floodplain will consist of the installation of the pipeline and maintenance of an existing access
road. All disturbed areas will be returned to existing conditions at the conclusion of the work.
As a result, this project will not result in a decrease of the available floodplain storage area and
will not adversely affect the existing base flood elevation of Middle Island Creek.

Proposed Development:

Please check all elements of the proposed project that apply.

DESCRIPTION OF WORK (CHECK ALL APPLICABLE BOXES)

A. STRUCTURAL DEVELOPMENT

	<u>AC</u>	<u>TIVITY</u>				STRUCTUF	RAL TYPE	
[]	New Struct	ture			[]	Residential	(1 – 4 Family)	
[]	Addition				[]	Residential	(more than 4 Family)	
[]	Alteration				[]	Non-resider	ntial (floodproofing)	
[]	Relocation				[]	Combined Use (res. & com.)		
[]	Demolition	1			[]	Replacement		
[]	Manufacti	ured/Mo	bil Home					
В.	OTHER DE	VELOPI	MENT ACT	IVITIES:				
[]	Fill	[]	Mining	[]	Drilling	g [X]	Pipelining	
[]	Grading							
[]	Excavation	(except	for STRUCTUR	RAL DEVE	ELOPMEN	T checked ab	ove)	
[]	Watercour	se Altera	ation (includin	g dredgii	ng and cha	annel modifi	cation)	
[]	Drainage II	mproven	nents (includir	ng culver	t work)			
[]	Road, Stre	et, or Bri	dge Construct	ion				
[]	Subdivision	n (includi	ing new expar	nsion)				
[]	Individual '	Water or	Sewer Syster	n				
[]	Other (plea	ase speci	fy)					
					· <u> </u>			

Development Site/Property Information:

Please provide physical description of the site/property, along with pertinent ownership (surface and mineral rights) data as applicable. Attach appropriate maps from the WV Flood Tool showing location of proposed development. Use additional copies of this page if development spans multiple property boundaries. Designate each property by number (i.e. Property 1 of 1, Property 2 of 7, etc.)

Site/Property Informa	ation:	
Legal Description: M	I CREEK 32.19 AC	
Physical Address/911	Address: STAR RT W	/EST RT 18 UN STAR
Decimal Latitude/Lon	gitude: 39.323655, -	80.805145
DMS Latitude/Longitu	ıde: 39°19'25.16"N, 8	0°48′18.52″W
District: 08	Мар: 6	Parcel: 2
Land Book Descriptio	n:	
Deed Book Reference	: Deed Book 214, Pag	ge 279
Tax Map Reference: 0	99 08 0006 0002 0000)
Existing Buildings/Use	of Property: Wooded	
Eloodulain Location I	Data: (to be completed	by Floodplain Manager ör designee)
Community:	Number:	Panel: Suffix:
Location (Lat/Long):		Approximate Elevation:
		Estimated BFE:
		Is the development in the floodplain?
Is the development in		
Is the development in Yes Notes:		Yes O _{No} Zone:

Development Site/Property Information:

Please provide physical description of the site/property, along with pertinent ownership (surface and mineral rights) data as applicable. Attach appropriate maps from the WV Flood Tool showing location of proposed development. Use additional copies of this page if development spans multiple property boundaries. Designate each property by number (i.e. Property 1 of 1, Property 2 of 7, etc.)

Property Designation: <u>2</u>	of3_				
The straight will be a given and a given by the straight and the straight will be a given by the straight and the straight an	and the second s		mangang ngapagan na magamatan na		
Site/Property Information			disagn to the second se		
Legal Description: TWO	rrs m i cree	EK 75.72	AC		·
Physical Address/911 Add	ress: STAR	RT WEST	RT 18 UN STAR		
Decimal Latitude/Longitud	le: 39.3267	89, -80.80	06025		
DMS Latitude/Longitude:	39°19′36.44′	'N, 80°48	'21.69"W		
District: 08	Мар:	6		Parcel:	1
Land Book Description:	•				
Deed Book Reference: Dee	ed Book 258	, Page 54	6		
Tax Map Reference: 09 08	0006 0001 (0000			
Existing Buildings/Use of Pr	operty: Farn	n, House, l	Buildings, Wood	ed	
From the Control of t		TOTAL ALLEGA			
Floodplain Location Data:	(to be comple	eted by Fl	oodplain Manag	er or des	ignee)
Community:	Number:		Panel:		Suffix:
Location (Lat/Long):			Approximate I	Elevation	l:
			Estimated BFE	l:	
Is the development in the floodway? Is the development in the floodway?					
□ _{Yes} □ _{No} □ _{Yes} □ _{No} Zone:					
Notes:	, , , , , , , , , , , , , , , , , , , ,				
			.,		

Development Site/Property Information:

Please provide physical description of the site/property, along with pertinent ownership (surface and mineral rights) data as applicable. Attach appropriate maps from the WV Flood Tool showing location of proposed development. Use additional copies of this page if development spans multiple property boundaries. Designate each property by number (i.e. Property 1 of 1, Property 2 of 7, etc.)

Site/Proberty in	formation:	and the second	a the same	2 2 2 2 2	
Legal Descriptio			n de Reise des Marie de la Company	<u> </u>	and the same of th
negar Description					
a,a,					
Physical Address	s/911 Address:	STAR RT W I	RT 28 UN STAR RT		
Decimal Latitudo	e/Longitude: 3	9.327544, -80	.802836		
DMS Latitude/Lo	ongitude: 39°19	2'39.16"N, 80°4	48′10.21"W		
District: 08		Map: 04		Parcel:	28
Land Book Desci	ription:				
Deed Book Refe	ence: Deed Bo	ok WB 28, Pag	ge 314		
Tax Map Referen	rce: 09 08 0004	0028 0000			
Existing Building	s/Use of Propert	y: Farm, Wood	led, House		
Floodplain Loca	tion Data: <i>(to be</i>	completed by	Floodplain Manag	jer or des	ignee)
Floodplain Loca Community:		completed by	Floodplain Manag	ger or des	ignee) Suffix:
7-10-10 1 - 10-10-	Nun	<u> </u>	7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7		Suffix:
Community:	Nun	<u> </u>	Panel: Approximate	Elevation	Suffix:
Community:	ong):	nber:	Panel: Approximate Estimated BFF	Elevation	Suffix:
Community: Location (Lat/Lo	Nun	nber:	Panel: Approximate Estimated BFF Is the develop	Elevation	Suffix: 1: the floodplain?
Community: Location (Lat/Lo	ong):	nber:	Panel: Approximate Estimated BFF	Elevation	Suffix: 1: the floodplain?

Property Owner Data:

Please provide data on current site/property landowner(s), both surface and mineral rights (as applicable). Use additional copies of this page as needed. Designate each page in relation to each property listed above.

Property Owner Data:	en a la companya da l	
Name of Primary Owner (PO): Willia	m Randall Lynch & Dixie	Janet Craig (SURV)
PO Address: HC 69 Box 35 553	34 wy Rt. 18 N	
City: West Union	State: WV	Zip: 26456
PO Primary Phone:	<u>\</u>	
PO Secondary Phone:	<u> </u>	
PO Primary Email:		
etter transporter for the second	e 3 b 7 4 8 78 3	
Surface Rights Owner Data:	A Secretary	The state of the s
Name of Primary Owner (PO):		
PO Address:		
City:	State:	Zip:
PO Primary Phone:		
PO Secondary Phone:		
PO Primary Email:		
Mineral Rights Owner Data: (As Appl	icable)	manga in and the state of the s
Name of Primary Owner (PO):		
PO Address:		
City:	State:	Zip:
	<u> </u>	
PO Primary Phone:		
PO Primary Phone: PO Secondary Phone:		

Property Owner Data:

Please provide data on current site/property landowner(s), both surface and mineral rights (as applicable). Use additional copies of this page as needed. Designate each page in relation to each property listed above.

Property Owner Data:		
Name of Primary Owner (PO): Jo	ohn Paul Strickling ETAL	
PO Address: 756 Strickling Farm	n Ln	
City: West Union	State: WV	Zip: 26456
PO Primary Phone:		
PO Secondary Phone:		
PO Primary Email:		
Surface Rights Owner Data:		78 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Name of Primary Owner (PO):		· · · · · · · · · · · · · · · · · · ·
PO Address:		
City:	State:	Zip:
PO Primary Phone:		
PO Primary Phone: PO Secondary Phone:		
	<u> </u>	
PO Secondary Phone:		
PO Secondary Phone:	Applicable)	
PO Secondary Phone: PO Primary Email:	Applicable)	
PO Secondary Phone: PO Primary Email: Mineral Rights Owner Data: (As	Applicable)	
PO Secondary Phone: PO Primary Email: Mineral Rights Owner Data: (As. Name of Primary Owner (PO):	Applicable) State:	Zip:
PO Secondary Phone: PO Primary Email: Mineral Rights Owner Data: (As a Name of Primary Owner (PO): PO Address:		
PO Secondary Phone: PO Primary Email: Mineral Rights Owner Data: (As A Name of Primary Owner (PO): PO Address: City:		

Contractor Data:

Property Designation:

of.

Please provide all pertinent data for contractors and sub---contractors that may be participating in this project. Use additional copies of this page as needed. Designate each page in relation to each property listed above.

Contractor/Sub-Contractor (C/SC) In	formation:	
C/SC Company Name:		
C/SC WV License Number:		
C/SC FEIN:	C/SC DUNS	
Local C/SC Point of Contact (POC):		
Local C/SC POC Title:		
C/SC Mailing Address:		
City:	State:	Zip-Code:
Local C/SC Office Phone:		
Local C/SC POC Phone:		
Local C/SC POC E-Mail:		
Local C/SC POC E-Mail: Engineer Firm Information:		
Engineer Firm Information:		
Engineer Firm Information: ¿	Engineer F	
Engineer Firm Information: Engineer Firm Name: Engineer WV License Number:	Engineer F	
Engineer Firm Information: Engineer Firm Name: Engineer WV License Number: Engineer Firm FEIN:	Engineer F	
Engineer Firm Information: Engineer Firm Name: Engineer WV License Number: Engineer Firm FEIN: Engineer Firm Primary Point of Cont	Engineer F	
Engineer Firm Information: Engineer Firm Name: Engineer WV License Number: Engineer Firm FEIN: Engineer Firm Primary Point of Cont	Engineer F	
Engineer Firm Information: Engineer Firm Name: Engineer WV License Number: Engineer Firm FEIN: Engineer Firm Primary Point of Cont Engineer Firm Primary POC Title: Engineer Firm Mailing Address:	Engineer F	irm DUNS:
Engineer Firm Information: Engineer Firm Name: Engineer WV License Number: Engineer Firm FEIN: Engineer Firm Primary Point of Cont Engineer Firm Primary POC Title: Engineer Firm Mailing Address: City:	Engineer F	irm DUNS:

Adjacent and/or Affected Landowners Data

Please provide data for all adjacent and/or affected surface owners (both up and down stream) whose property may be impacted by proposed development as demonstrated by a floodplain study or survey. Use additional copies of this page as needed.

Adjacent Property Owner Data: Up Name of Primary Owner (PO): Cry	C. S. C.	
Physical Address: 561 Crystal Lak		
City: West Union	State: WV	Zip: 26456
PO Primary Phone:	_____	
PO Secondary Phone:		
PO Primary Email:		
Adjacent Property Owner Data: Uj	ostream	
Name of Primary Owner (PO):		and the second
Physical Address:	- teach	<u></u>
City:	State:	Zip:
PO Primary Phone:	· · · · · · · · · · · · · · · · · · ·	
PO Secondary Phone:		Alab 19 Province
PO Primary Email:		
Adjacent Property Owner Data: Do Name of Primary Owner (PO): Wi	lliam Randall Lynch & Dix	ie Janet Craig (SURV)
Physical Address: HC 69 Box 35	5534 WV Rt. 18	BN
City: West Union	State: WV	Zip: 26456
PO Primary Phone:		
PO Secondary Phone:		
PO Primary Email:		
Adjacent Property Owner Data: D	ownstream	and a company of the property of the contract
Name of Primary Owner (PO):		
Physical Address:		
City:	State:	Zip:
PO Primary Phone:	J.,	1
PO Secondary Phone:		
PO Primary Email:		

Site Plan

A Site Plan is an accurate and detailed map of the proposed development for this project. It shows the size, shape, location and special features of the project property, and the size and location of any development planned to the property, especially as that development will impact the floodplain and/or floodway. Site plans show what currently exists on the project property, and any changes or improvements you are proposing to make. A certified and licensed engineering firm should complete site plans.

A SITE PLAN MUST CONTAIN THE FOLLOWING INFORMATION:

- 1. Legal description of the parcel, north arrow and scale
- 2. All property lines and their dimensions
- 3. Names of adjacent roads, location of driveways
- 4. Location of sloughs, tributaries, streams, rivers, wetlands, ponds, and lakes, with setbacks indicated, and including FEMA floodplain data based on most updated FIRM.
- 5. Location, size, shape of all buildings, existing and proposed, with elevation of lowest floor indicated.
- 6. Location and dimensions of existing or proposed on-site sewage systems.
- 7. Location of all propane tanks, fuel tanks or other liquid storage tanks whether above ground or below ground level.
- 8. Location and dimensions of any proposed pipeline placement(s) into floodplain/floodway.
- 9. Location and dimensions of any roadway development into floodplain/floodway. (Includes initial development access roads)
- 10. Location and dimensions of any bridge and/or culvert development into floodplain/floodway.
- 11. Location and dimensions of any storage yard or facility into the floodplain/floodway.
- 12. Location of any existing utilities and/or proposed utility placement and/or displacement.
- 13. Location, dimensions and depth of any existing or proposed fill on site.
- 14. A survey showing the **existing ground elevations** of at least location on the building site. **ELEVATION NOTE**: All vertical datum will reference either NGVD 29 or NAVD 88. Assumed datum will not be acceptable unless the property is located in an area where vertical datum has not been published. For those areas where vertical datum has not been established, a site plan with contours, elevations using assumed datum, high water marks and existing water levels of sloughs, rivers, lakes or streams and proposed lowest floor elevation.

Applicant

Please read print name, sign and date below:

- I certify that I am authorized to submit this application for the primary project developer.
- I certify that the information included in this application is to the best of my knowledge true and complete.
- I certify that all required Federal, State, and local permits required by law and/or ordinance for the above described development of this project have been properly attained, are current and valid, and must be presented with this application before a Doddridge County Floodplain Permit may be issued.
- I understand that if in the course of the development project additional permits become
 required that were not needed during the initial proposal, the primary developer must notify the
 Doddridge County Floodplain Manager within 48 hours of such need, and that a "Stop Work"
 order may be issued for all project work directly impacting the floodplain or floodway, until such
 time the required additional permits are acquired.
- I understand that once the floodplain permit is submitted, the application will be entered into official public record at the next regularly scheduled Doddridge County Commission meeting after the date of submittal.
- I understand that from the date of submittal of the fully completed permit application, the
 Doddridge County Floodplain Manager has ninety (90) days to make a determination to either
 grant or deny said permit application. During this approval period, the Doddridge County
 Floodplain Manager may, at his or her discretion, conduct a review and/or additional study of
 provided documentation by means of an independent engineering firm. All costs associated with
 said review and/or study must be reimbursed to the County before issuance of approved permit.
- I understand that during the approval period, the Doddridge County Floodplain Manager of designee may at his or her discretion conduct site visits and document conditions of proposed development pursuant to the permit application.
- I understand that once the Floodplain Permit is granted, the permit will be entered into official public record at the next scheduled Doddridge County Commission meeting after the date of issuance. Appeals to the permit may be made no later than twenty (20) days after said issuance. If a valid appeal is submitted, as determined by the Doddridge County Floodplain Manager, a "Stop Work" order will be issued for all project development directly involving the floodplain or floodway. A public hearing by the Doddridge County Appeals Board will be scheduled no less than ten (10) days after the next regularly scheduled Doddridge County Commission meeting.
- I understand that all decisions of the Doddridge County Appeals Board shall be final.
- I understand issuance of a Floodplain Permit authorizes me to proceed with construction as proposed. A Certificate of Compliance is required upon substantial completion of the project.
- In signing this application, the primary developer hereby grants the Doddridge County Floodplain
 Manager or designee the right to enter onto the above—described location to inspect the development work proposed, in progress, and/or completed.
- I understand that if I do not follow exactly the site---plan submitted and approved by this permit that a "Stop Work" order may be issued by the Wirt County Floodplain Manager and that I must stop all construction immediately until discrepancies of actual work vs. proposed work is resolved.

Applicant Signature: Brun Suns Columners

Applicant Printed Name: Brun Columners



January 3, 2018

Doddridge County Commission Attn: George Eidel, Doddridge County Floodplain Manager 118 East Court Street, Room 102 West Union, WV 26456

Subject:

Antero Midstream, LLC.

Middle Gas Line (AFE# A00464)

No-Rise Certificate

Doddridge County, West Virginia

CEC Project 180-008

Civil & Environmental Consultants, Inc. (CEC) is pleased to evaluate the potential floodplain impacts for the above referenced project on behalf of Antero Midstream, LLC., 535 White Oaks Blvd, Bridgeport, WV 26330. Antero Midstream LLC. proposes to construct a 20" Steel Gas Line and associated access roads. A portion of the proposed project is located within the Middle Island Creek Zone A flood hazard area, according to the Flood Insurance Rate Map (FIRM) for Doddridge County, Map Panel 54017C0110C, with a map revised date of October 4, 2011. The work that will take place in the floodplain will consist of the installation of the pipeline and maintenance of an existing access road. All disturbed areas will be returned to existing conditions at the conclusion of the work. As a result, the proposed project will not result in a decrease of the available floodplain storage area and will not adversely affect the existing base flood elevation of Middle Island Creek.

This no-rise certificate is provided in support of the floodplain development permit application. Your time and effort in reviewing this floodplain development permit application is appreciated. Please feel free to contact me at 304-933-3119 or via e-mail at glinder@cecinc.com or contact Mrs. Rachel McKinney at 304-842-4008 or via e-mail at rmckinney@anteroresources.com if you have questions or need additional information.

Respectfully submitted,

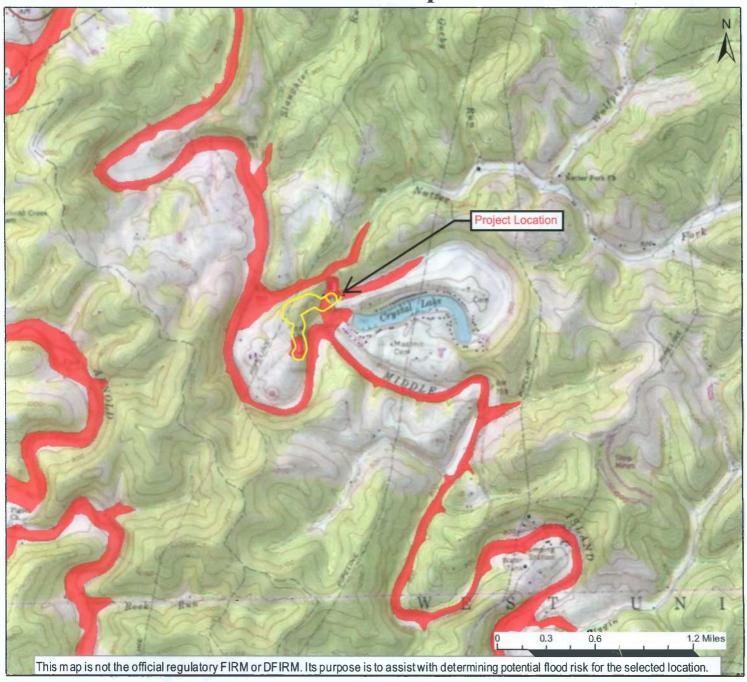
CIVIL & ENVIRONMENTAL CONSULTANTS. INC.

Andrew P Darnell, E.I.T.

Assistant Project Manager

Greg S. Linder, P.E. Senior Project Manager

WV Flood Map



User Notes:

Antero Midstream LLC Middle Pipeline Floodplain Permit AFE# A00464





Disclaimer:

The online map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. To obtain more detailed information in areas where Base Flood Elevations have been determined, users are encouraged to consult the latest Flood Profile data contained in the official flood insurance study. These studies are available online at www.msc.fema.gov. WV Flood Tool (http://www.MapWV.gov/flood) is supported by FEMA, WV NFIP Office, and WV GIS Technical Center.

Map created on January 2, 2018

Flood Hazard Area:

Flood Hazard Area: Location is WITHIN the FEMA 100-year floodplain.

FEMA Issued Flood Map: 54017C0110C

Watershed (HUC8): Little Musringum-Middle Island (5

Elevation: About 755 ft

Location (long, lat): (80.802003 W,39.327784 N)

Location (UTM 17N): (517066, 4353170)

Contacts: Doddridge

CRS Information: N/A

Parcel Number: 09-08-0004-0028-0000

From: To:

Luz Slauter

Subject:

Rachel McKinney

FYI: Modification Approval for WVR310451-H, West End Connector Pipeline, Doddridge County, Acres (667.27)

Date:

Monday, February 26, 2018 12:32:01 PM

Luz C. Slauter

Midstream Environmental & Regulatory Manager

Direct: (303) 357-6834 Cell: (720) 519-3806

From: DEP NPDESEP [mailto:DEP.NPDESEP@wv.gov] Sent: Wednesday, February 21, 2018 11:15 AM

To: Luz Slauter; DEP NPDESEP

Cc: Casto, Timothy J; Elliott, Amaris L; Cochran, Joseph W

Subject: Modification Approval for WVR310451-H, West End Connector Pipeline, Doddridge County,

Acres (667.27)

FEB26 18 1:34PN

Luz Slauter, Env. Supvr Antero Midstream LLC 1615 Wynkoop ST Denver, CO 80202

Physical Site Location: West Virginia 18, West Union

Please be advised that this e-mail constitutes approval and serves as Modification No. 8 of your existing General Permit Registration No. WVR310451, dated the 29th day of April. 2015.

After review of your existing General Permit Registration and Permit Modification Application No. WVR310451-H, the subject general permit registration is hereby modified to add the Middle Pipeline Project, a 0.5 mile long 20-inch diameter steel natural gas pipeline. The disturbed acres for the project have decreased from 661.74 to 667.27 acres, an increase of 5.53 acres.

All other terms and conditions of the subject registration shall remain in effect and unchanged.

If you have any questions relative to this approval, please do not hesitate to contact Joseph Cochran at (304) 926-0499 Ext. 1069 or by email at joseph.w.cochran@wv.gov.

Scott G. Mandirola, Director WV DEP-Division of Water & Waste Mgt.

601 57th St. SE Charleston, WV 25304-2345

Phone: (304) 926-0495 Fax: (304) 926-0496



United States Department of the Interior



FISH AND WILDLIFE SERVICE

West Virginia Field Office 694 Beverly Pike Elkins, West Virginia 26241

March 11, 2015

FEB26 18 1:18PM

Mr. Brett Fletcher Antero Midstream, LLC 1615 Wynkoop St. Denver, CO 80202

Re:

Antero Midstream, LLC, Smith Pipeline, Middle Pipeline, Tamela Compressor Station, and West End Connector Pipeline Projects, Doddridge County, West Virginia

Dear Mr. Fletcher:

This responds to your request of January 15, 2015 for information regarding the potential occurrence of federally listed endangered and threatened species and their designated critical habitats. Antero Midstream, LLC (Antero) proposes to develop 233.2 acres for the proposed Smith Pipeline, Tamela Compressor Station, and West End Connector Pipeline projects in Doddridge County, West Virginia. The proposed West End Connector, Middle, and Smith Pipeline projects include the construction of approximately 17.43 miles of pipeline. These pipelines would connect to the Tamela Compressor Station. These comments are provided pursuant to the Endangered Species Act (ESA) (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.).

The U.S. Fish and Wildlife Service (Service) has determined that four federally listed endangered species are known to occur within the proposed project area, and may be affected by the construction and operation of the proposed project. These are the Indiana bat (*Myotis sodalis*), clubshell mussel (*Pleurobema clava*), rayed bean mussel (*Villosa fabilis*), and snuffbox mussel (*Epioblasma triquetra*).

Additionally, on October 2, 2013, in the Federal Register (78 FR 61045-61080) the Service proposed the northern long-eared bat (Myotis septentrionalis) for listing under the ESA. If a decision is made to list this species, potential impacts from this project to this species may need to be addressed if this project is not completed by April 2015. We encourage you to begin incorporating conservation measures to protect this species prior to any potential final listing decisions. Additional information regarding the northern long-eared bat and conference procedures can be found at the following address:

http://www.fws.gov/midwest/endangered/mammals/nlba/pdf/NLEBinterimGuidance6Jan2014.pdf.

Indiana Bat

The Service has received your revised Indiana Bat Conservation Plan dated March 11, 2015. This plan was developed because either: 1) \leq you have chosen to assume the federally endangered Indiana bat is present within your project area; **OR** 2) the Indiana bat is known to occur in the area as a result of ____ summer maternity surveys or ____ winter hibernacula/fall swarming surveys.

Habitat assessments were conducted within the proposed project area from October – December 2014.

The results of the habitat assessment for the proposed project are as follows:

- 1. An estimated 190.6 acres of forest would be cleared for the project, which leaves an estimated 4382.4 acres or 83.7 percent of forested habitat within the ¼-mile buffer area after project clearing has been completed. The total number of acres in the buffer area is 5.234.
- 2. 285 potential Indiana bat roost trees were identified within the project area.
- 3. No portals or caves were observed within the project area.

In the Indiana Bat Conservation Plan, the project proponent stated their commitment to the avoidance, minimization, and conservation measures listed on the attached summary sheet. These measures are designed to address the potential direct and indirect effects that may occur as a result of the project, and will ensure that no Indiana bats will be directly killed by the removal of trees, and that roosting and foraging habitat will remain within the project area after project construction.

Based on the commitment to implement these measures, the Service concurs that these proposed projects are not likely to adversely affect the Indiana bat. The Indiana Bat Conservation Plan should be incorporated as a mandatory condition in any permits issued for this project, and all measures must be implemented as proposed.

Freshwater Mussels

The West End Connector project proposes to cross Middle Island Creek and Buckeye Creek, which provides habitat for clubshell, rayed bean, and snuffbox mussels, which are listed as endangered under the ESA. Freshwater mussels feed by filtering food particles from the water column. Juvenile and adult freshwater mussels have been documented to feed on detritus, diatoms, phytoplankton, and zooplankton. Freshwater mussels rely on fish to complete their life histories. When mussel larvae (glochidia) are released into the water by adult females, they must attach themselves within a few days to an appropriate fish host, which they then parasitize for a short time while developing into juvenile mussels. The current and historic loss of populations is likely due to the impacts of impoundments, navigation projects, water quality degradation from agricultural and industrial wastes, deforestation and other forms of habitat alteration, including gravel and sand dredging. Impacts that directly affected the species also include reduction or elimination of fish hosts.

Freshwater mussels play a key role in the health of aquatic environments by helping to maintain water quality, cycle nutrients, stabilize substrates, remove suspended sediments, and create habitat complexity (Anderson and Kreeger, 2012). Mussels remove suspended particulates from water by filter-feeding, which involves straining water over gills to remove microscopic food particles. Filter-feeding makes mussels very sensitive to excessive sedimentation caused by runoff from streambank and upland activities. Excessive sedimentation into a stream reduces suitable habitat for mussels and can smother them, causing death. Excessive suspended sediments can also impair feeding processes of mussels, leading to acute short-term or chronic long-term stress. Both excessive sedimentation and excessive suspended sediments can lead to reduced populations of mussels and therefore reduced benefits to the ecosystem (Anderson and Kreeger, 2010; Box and Mossa, 1999; Ellis, 1931; Ellis, 1936; Houp, 1993).

Due to the proximity of the project to Middle Island Creek and Buckeye Creek, the project could cause increased sedimentation that could adversely affect mussels. In correspondence dated February 26, 2015, the project proponent stated their commitment to the erosion and sedimentation best management practices listed on the attached summary sheet. These best management practices will help minimize effects of sedimentation and erosion to waterways that provide habitat to federally listed mussels near the action area. In addition, the project proponent will comply with the requirements set forth in the West Virginia Department of Environmental Protection's 2006 Best Management Protection Manual and the 2012 Erosion and Sediment Control Field Oil and Gas Manual. This office should be notified immediately if any deviations from the submitted plans are anticipated during construction of the project.

The project proposes to cross Middle Island Creek and Buckeye Creek by horizontal directional drill (HDD). This method will allow the pipeline to be placed under the stream without direct affects to the waterway. The HDD method uses bentonite clay in its pressurized drilling that, on occasion, can result in an inadvertent release that releases bentonite clay into waterways.

In your January 15, 2015 correspondence, the project proponent committed to the following measures that will be followed in the event of an inadvertent release:

- 1. Agencies will be contacted within 24 hours of the event.
- 2. Clean up of all spills will begin immediately.
- 3. Secondary containment measures including silt fence, sand bags, turbidity curtains, water pumps, and other BMPs will be installed.
- 4. A mussel investigation will promptly begin, as necessary.

In the event of an inadvertent release, the Service believes that implementation of the measures outlined above will minimize, to the extent practicable, potential adverse impacts to Middle Island Creek, Buckeye Creek, and federally listed species. This office should be notified immediately if any deviations from the submitted plans are anticipated, or if an inadvertent release occurs during construction of the project.

As part of the Indiana Bat Conservation Plan, Antero has committed to a combination of onsite and offsite conservation measures to offset potential habitat impacts to Indiana bat. Offsite measures include the purchase of a 60 acre parcel of land on which Antero will enhance potential roosting habitat and place a perpetual conservation easement after which, the land will be

entrusted to a third party for long term monitoring. Onsite measures include the installation of 124 artificial roost structures; structures will vary in type and be distributed at various locations throughout the West End Connector, Middle, and Smith Pipelines, on the Tamela Compressor Station property, and on the proposed offsite conservation parcel. All artificial structures will be monitored for a period of three years during the summer survey season.

As a result of this information, the Service has concluded that the project may affect, but is not likely to adversely affect any federally listed endangered species. No biological assessment or further section 7 consultation under the ESA is required with the Service. Should project plans change or amendments be proposed that we have not considered in your proposed action, or if additional information on listed and proposed species becomes available, or if new species become listed or critical habitat is designated, this determination may be reconsidered. Our determination that this project may affect, but is not likely to adversely affect any federally listed endangered and threatened species does not apply in the event of an inadvertent release. If you have any questions regarding this letter, please contact Tiernan Lennon of my staff at (304) 636-6586, ext. 12, or at the letterhead address.

The process and procedures used for this project were unique and are not our preferred approach; they should not be used on future projects. Please plan to follow Service recommendations from the outset to assure future project coordination proceeds smoothly. The agreed upon conservation measures listed on the attached summary sheet are specific to this project, and may not be reasonable for future projects. We will continue to work with you on a specific suite of conservation measures for future projects.

Sincerely,

John E. Schmidt Field Supervisor

Flan E Schwedt

Literature Cited

- Anderson, R. M. and D. A. Kreeger. 2010. Potential for impairment of freshwater mussel populations in DRBC special protection waters as a consequence of natural gas exploratory well development. Unpublished report prepared for U.S. Fish and Wildlife Service and the Partnership for the Delaware Estuary. State College, Pennsylvania.
- Box, J. M. and J. Mossa. 1999. Sediment, land use, and freshwater mussels: prospects and problems. *Journal of the North American Benthological Society*. 18:99-117.
- Ellis, M. M.. 1931. Some factors affecting the replacement of the commercial fresh-water mussels. U.S. Department of Commerce Bureau of Fisheries. Fishery Circular. 7:1-10.
- Ellis, M. M.. 1936. Erosion silt as a factor in aquatic environments. Ecology. 17:29-42.
- Houp, R. E.. 1993. Observations on long-term effects of sedimentation on freshwater mussels (Molusca: Unionidae) in the North Fork of Red River, Kentucky. Transactions of the Kentucky Academy of Science. 54:93-97.

111956	lance and Minimization Measures to be Applied on Project Seasonal tree clearing (all trees greater than 5" DBH) REQUIRED
777707	Avoid cutting potential roost trees
	Minimize limits of disturbance (narrowed LOD or ROW)
43750	Minimize impacts (clearing) around suitable swarming and summer habitat and
3145.01	etland/riparian zones
	50-foot or greater forested buffer left along both sides of streams
7	Collocate project features with previously disturbed or cleared areas
	Phase tree clearing over multiple years
	Reforest disturbed areas
	Restore or enhanced riparian/wetland areas
	Strong erosion and sedimentation best management practices
	Suitable habitat acreage permanently preserved within or adjacent to the project site
	Pollution control plan in place
	Other:
	Other:
Conso	Girdling trees on a 1:1 ratio for each potential roost tree that is lost during project development
	Erecting bat boxes, artificial bark, or other artificial roosting structures on a 1:1 ratio
	A 3-year monitoring plan of artificial structures
	Preservation of suitable Indiana bat habitat off-site (60 acres)
	Creation of watering areas, wetlands, or ponds
	Other: Installation of 124 artificial roost structures
Z	Other: Development of a site specific Conservation Plan
	Other:
12077220	on and Sedimentation Best Management Practices Triple-stack compost filter sock
	Super silt fence
9668	Corrugated metal fencing
П	Armored outlets
П	Green space buffers
	Other: Orange construction fencing
Marmo	Other: Pan fencing