

MVP Southgate Project

Docket No. CP19-14-000

Attachment 20-1

Virginia Wetland and Waters Delineation Report Addendum 1

March 2019



MVP Southgate Project

Docket No. CP19-14-000

Virginia Wetland and Waters Delineation Report – Addendum #1



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LIST OF ACRONYMS AND ABBREVIATIONS

MVP Mountain Valley Pipeline, LLC.

Project MVP Southgate Project

USACE U.S. Army Corps of Engineers



1.0 INTRODUCTION

Mountain Valley Pipeline, LLC has prepared this addendum to the November 2018 Wetland Delineation Report to summarize changes to the limits of delineated resources within the Virginia portion of the MVP Southgate Project ("Southgate Project" or "Project") through January 2019. Wetland and waterbody delineations are being conducted for the Southgate Project area to support state and federal permitting. A preliminary jurisdictional determination is on-going with the U.S. Army Corps of Engineers ("USACE") Norfolk District.

The Project has not conducted new delineations in Virginia since the November 2018 report was submitted. Field surveys for the properties not surveyed to date are planned to begin in April 2019. Results of those surveys will be submitted in a second addendum to this report.

2.0 REVISIONS

The USACE Norfolk District staff reviewed delineated wetlands and waters in the field on October 31, 2018 through November 2, 2018. During the field evaluation, changes were made to several delineated resources. The types of changes included removal of non-jurisdictional resources (e.g. ephemeral drainages), extension of wetlands, or reclassification of flow type. In addition to changes made by the USACE, the Project has extended the limits of several wetlands or streams to account for route modifications. The boundaries of extended resources are based on desktop data but will be field-delineated when surveys begin again in April. All of the current changes are summarized in Table 1 and are depicted on revised Wetland and Waterbody Delineation Maps provided as Appendix A.

Table 1								
Modifications to the Wetlands and Waterbodies Delineated in the Virginia Portion of the Project								
Mile post	Resource ID	Resource Type	Latitude	Longitude	Change			
1.1	S-E18-18	Perennial trib to Cherrystone Creek	36.814962	-79.355541	Reclassification of stream from intermittent to perennial			
6	S-D18-15	Ephemeral trib to White Oak Creek	36.763459	-79.412617	Determined non-jurisdictional by USACE			
6.2	S-D18-16	Ephemeral trib to White Oak Creek	36.761554	-79.414379	Determined non-jurisdictional by USACE			
11.4	AW-F18-27	Forested wetland	36.703863	-79.470384	W-F18-27 was extended to connect to S-F18-20			
19.7	W-F18-51	Forested wetland	36.613869	-79.562375	W-F18-51 was extended to connect to S-F18-50			
22.6	S-E18-39	Perennial trib to Trotters Creek	36.58471	-79.598883	Reclassification of stream from intermittent to perennial			
23.9	W-E18-33	Forested wetland	36.565794	-79.607323	Jurisdictional limits reduced by USACE			
23.9	S-E18-34	Intermittent trib to Dan River	36.565853	-79.607781	Reclassification of stream from perennial to intermittent			
24.4	S-F18-34	Ephemeral trib to Dan River	36.560867	-79.612899	Reclassification of stream from perennial to ephemeral			
13.6	AS-D18-26	Perennial tributary to Sandy Creek	36.676555	-79.490876	Extended the resource due to shift in corridor			

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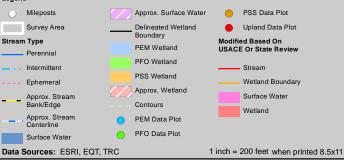


Appendix A

Revised Wetland and Waterbody Delineation Maps
(Revised Figure 4 from November 2018 Wetland Delineation Report)

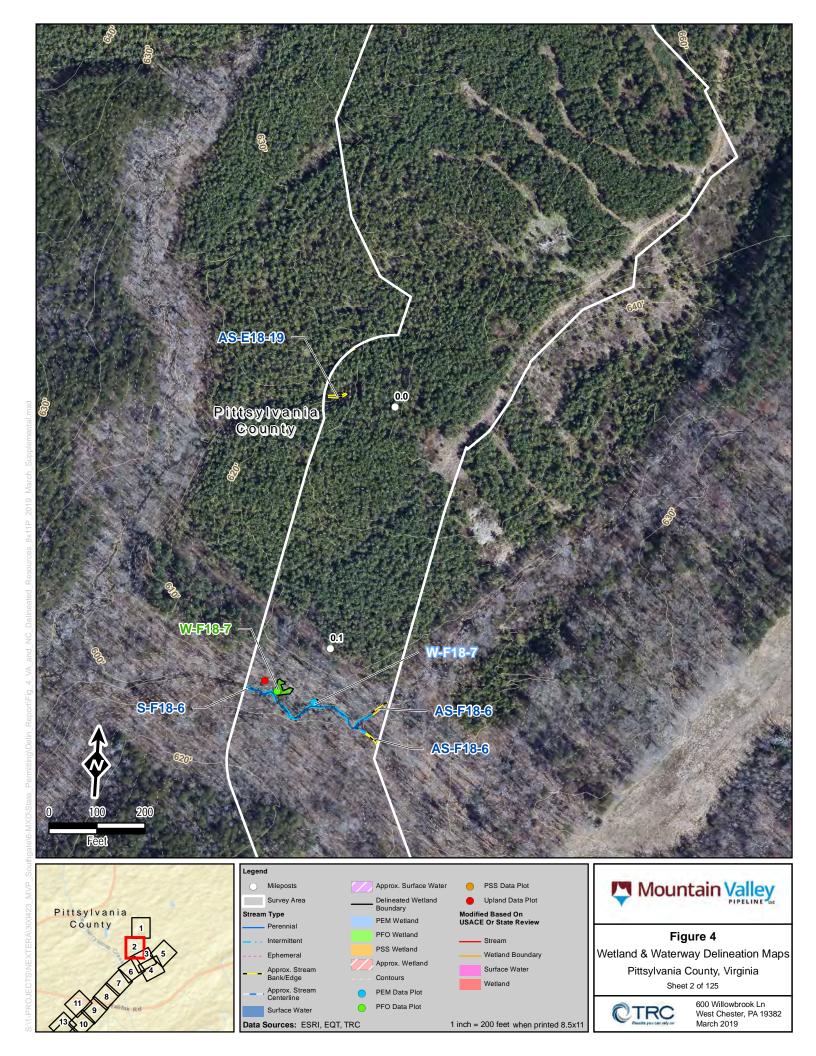


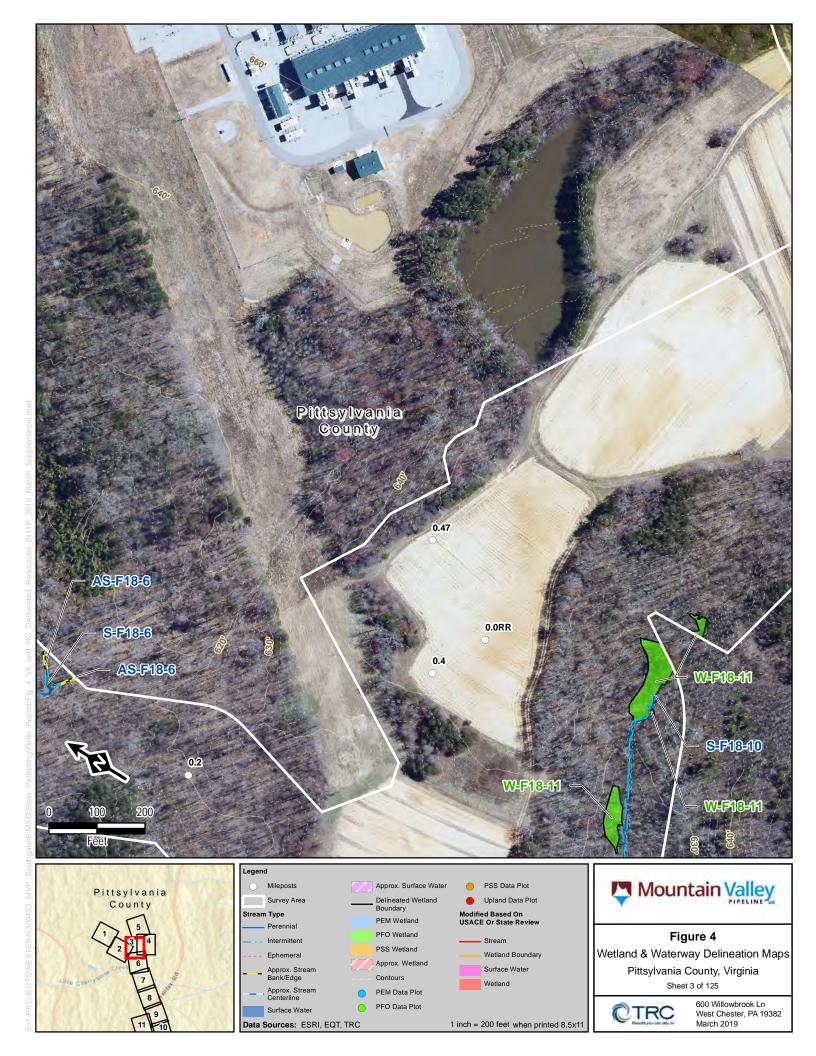




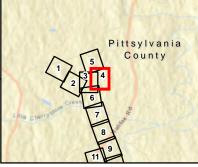
Wetland & Waterway Delineation Maps
Pittsylvania County, Virginia
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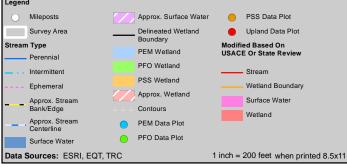










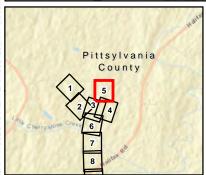


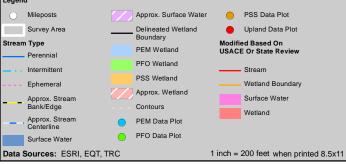


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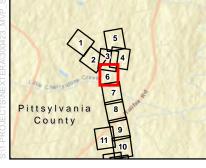


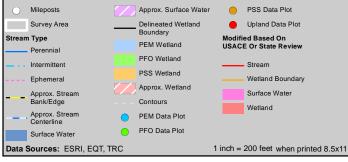


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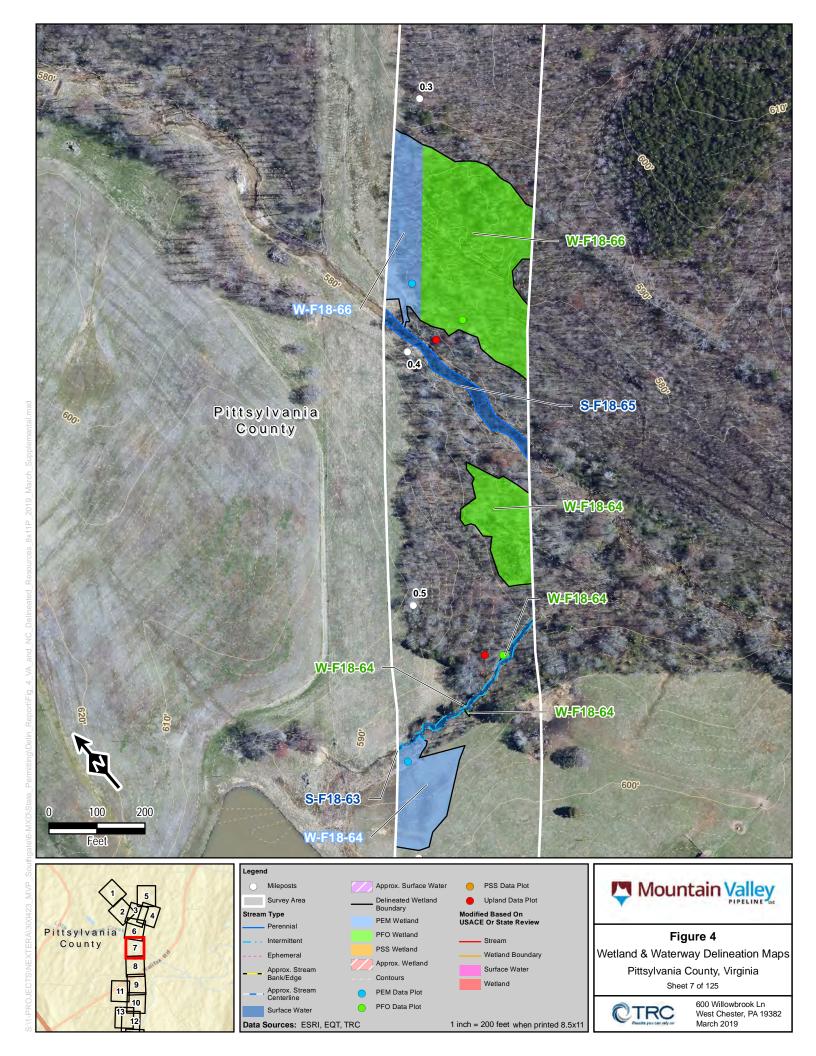


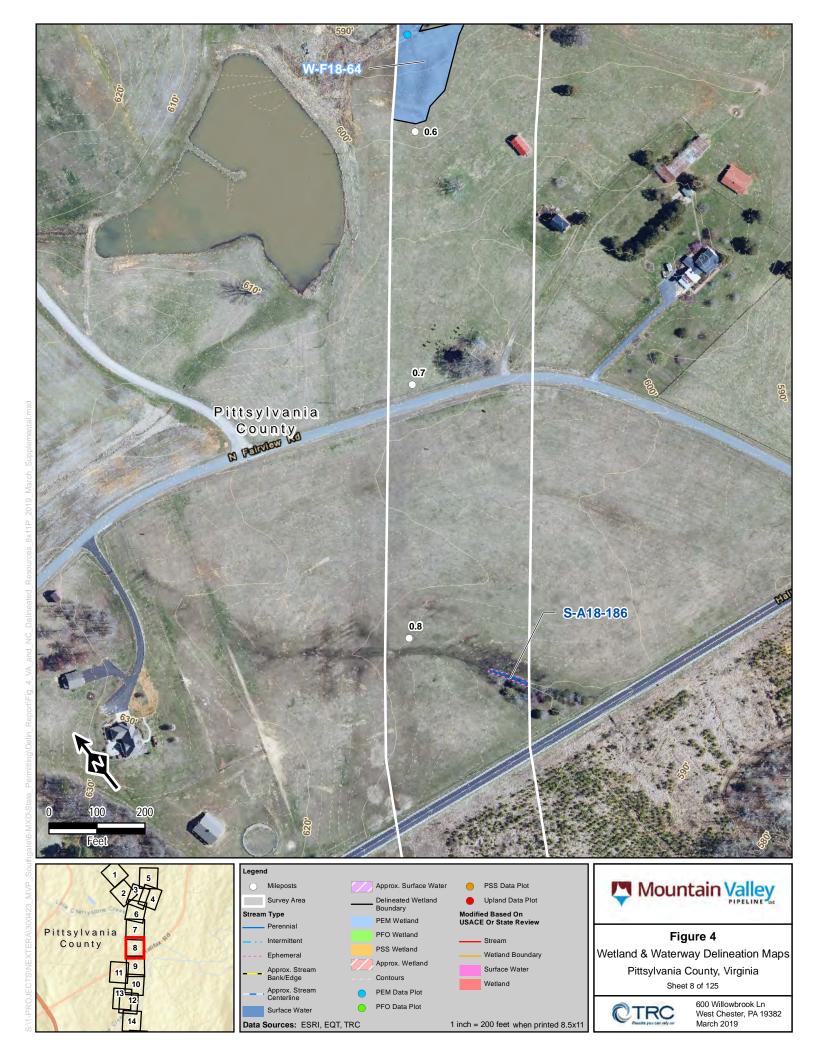


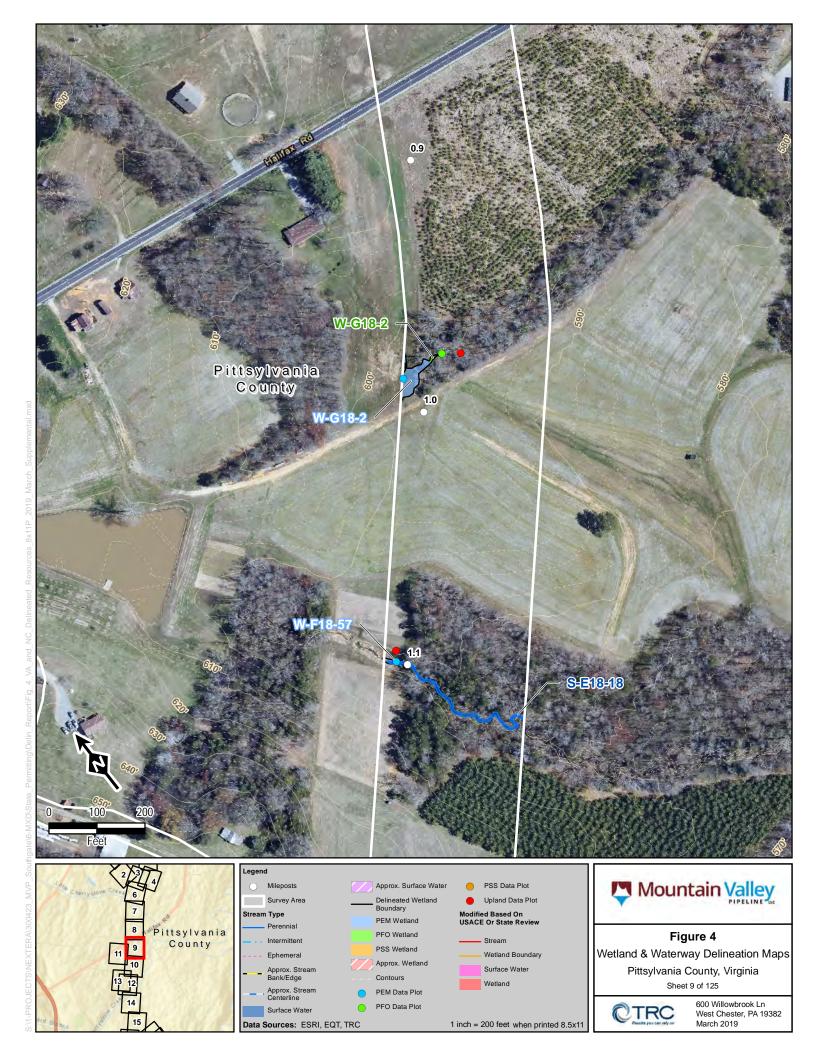


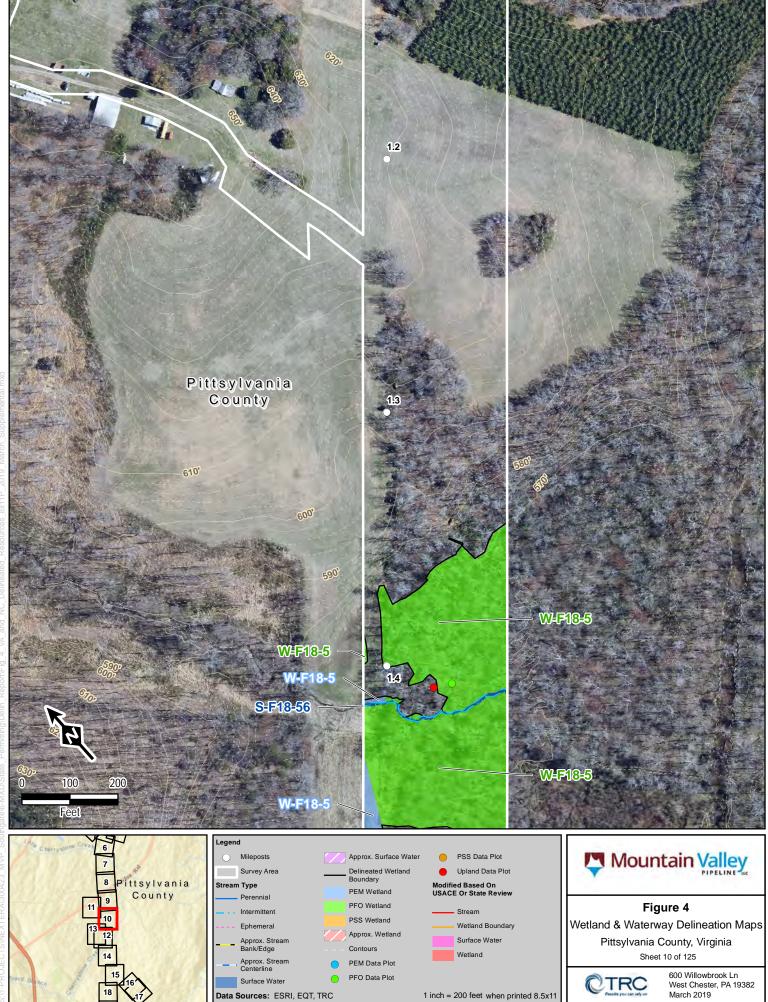
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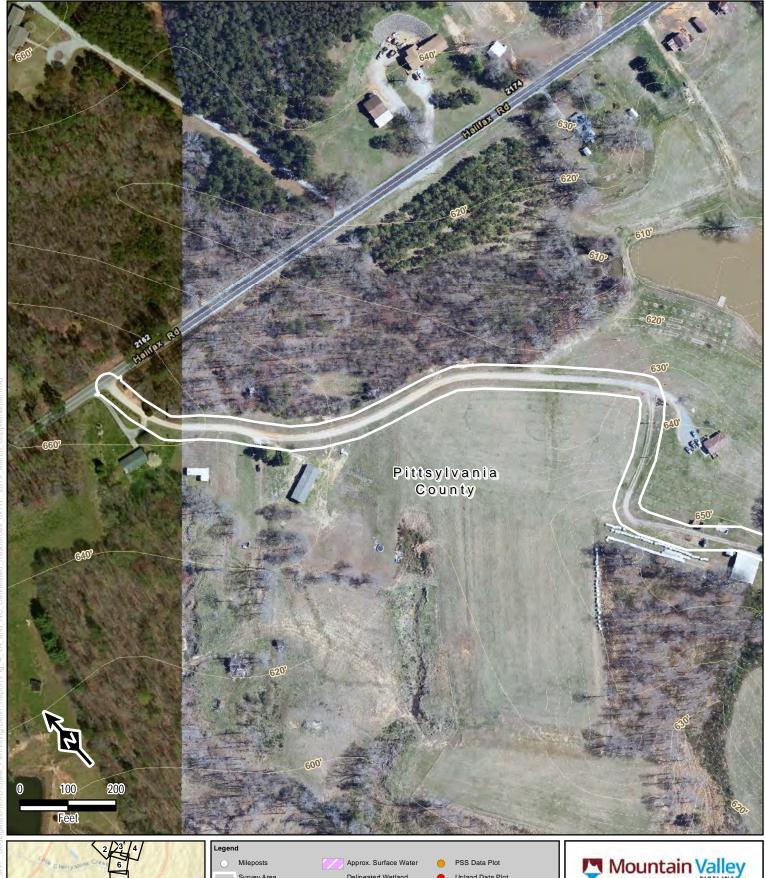




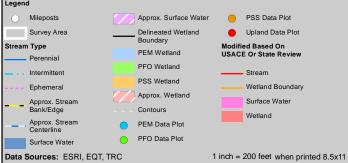
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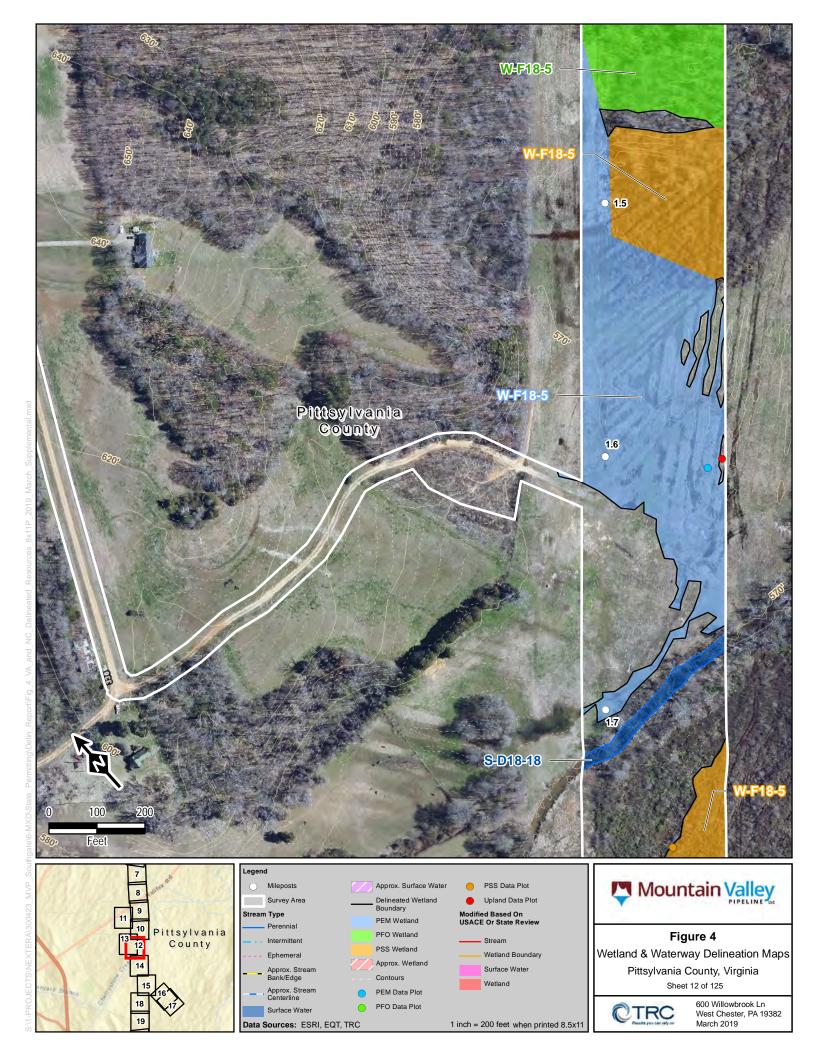






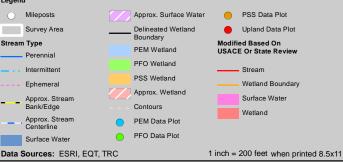
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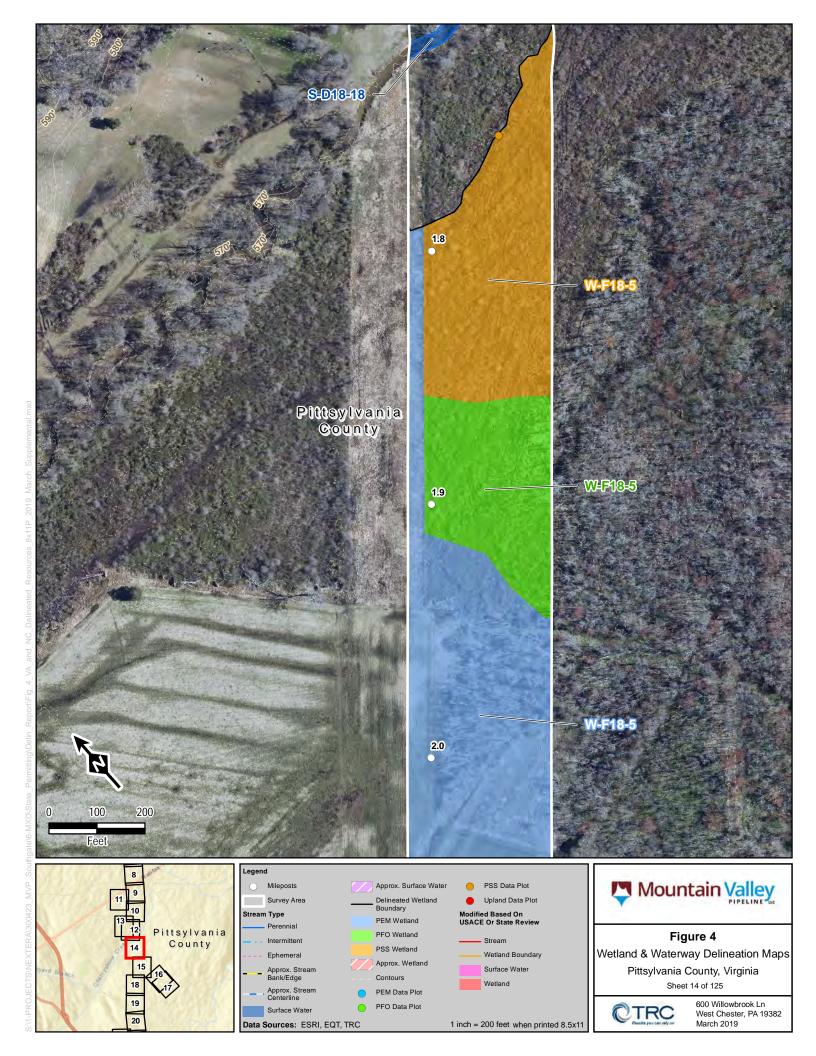


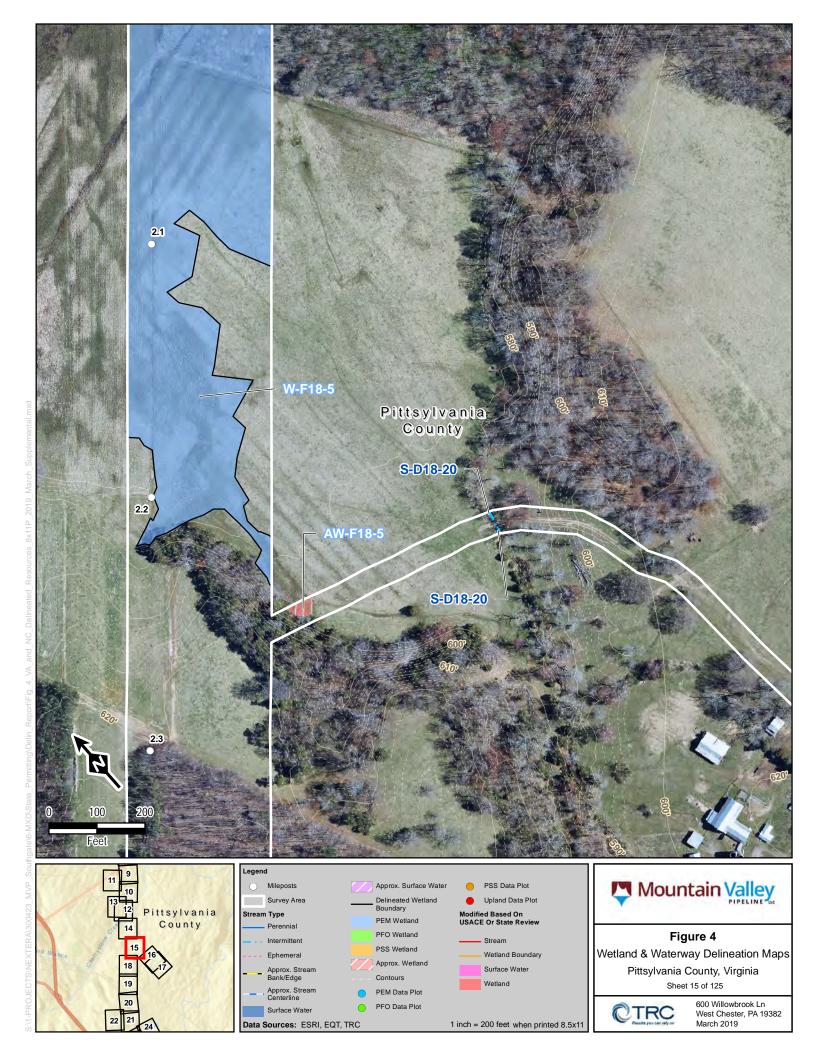


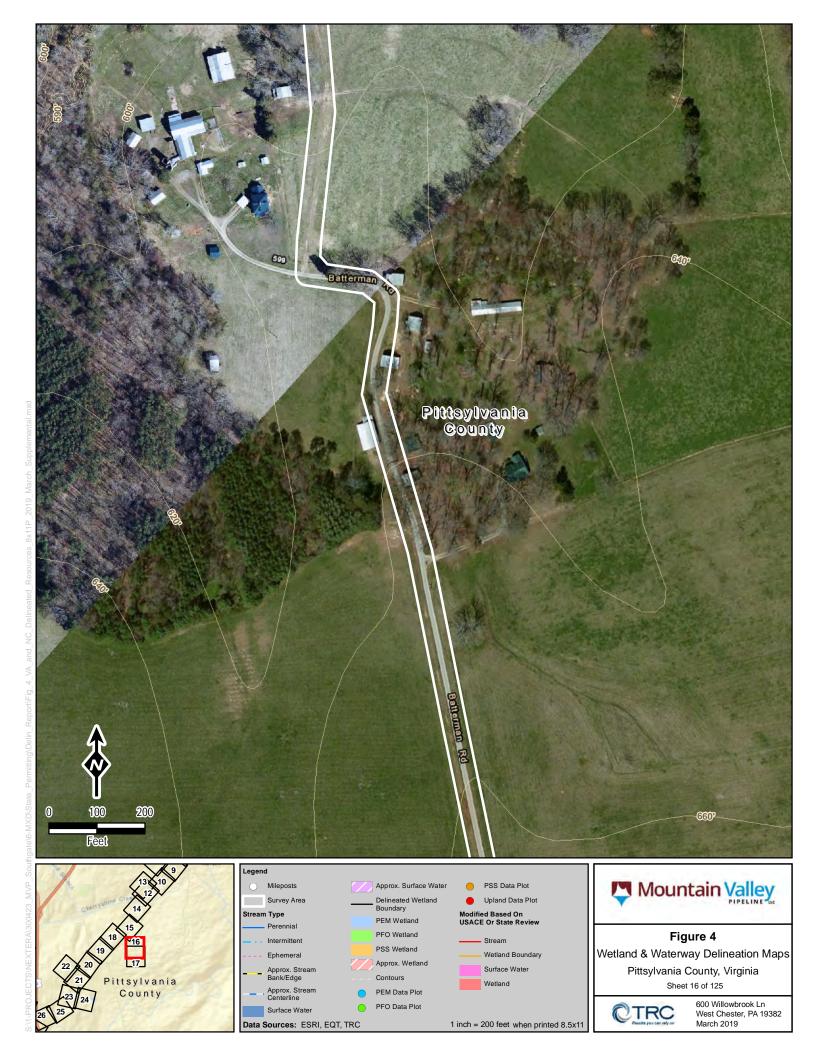


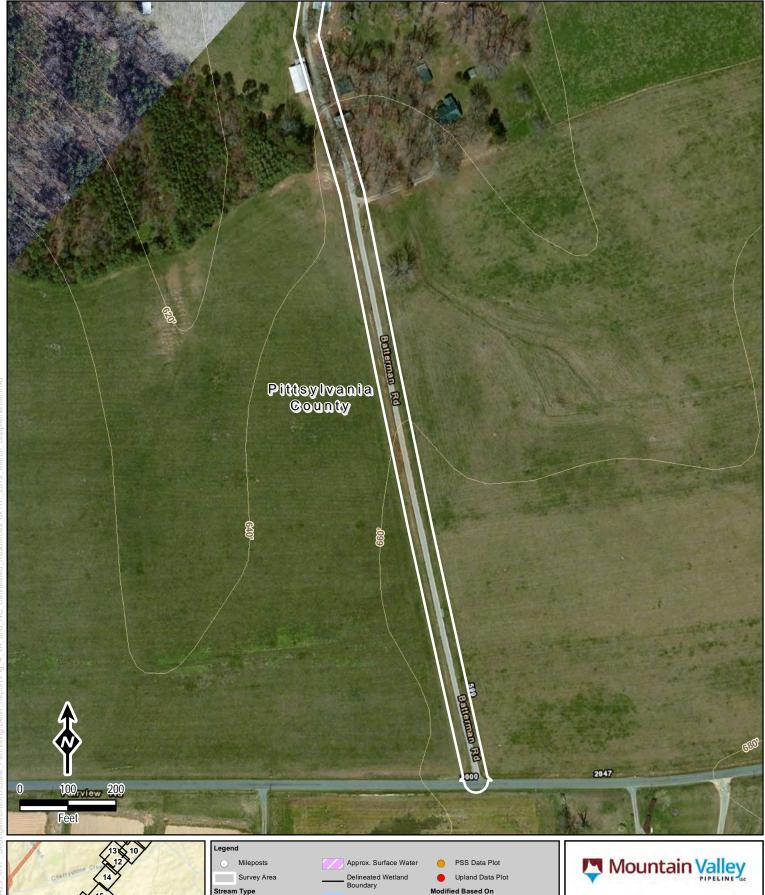
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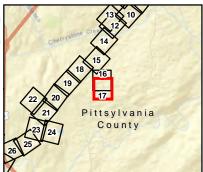


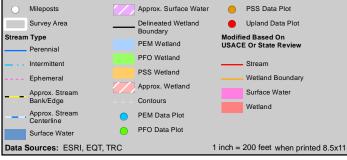






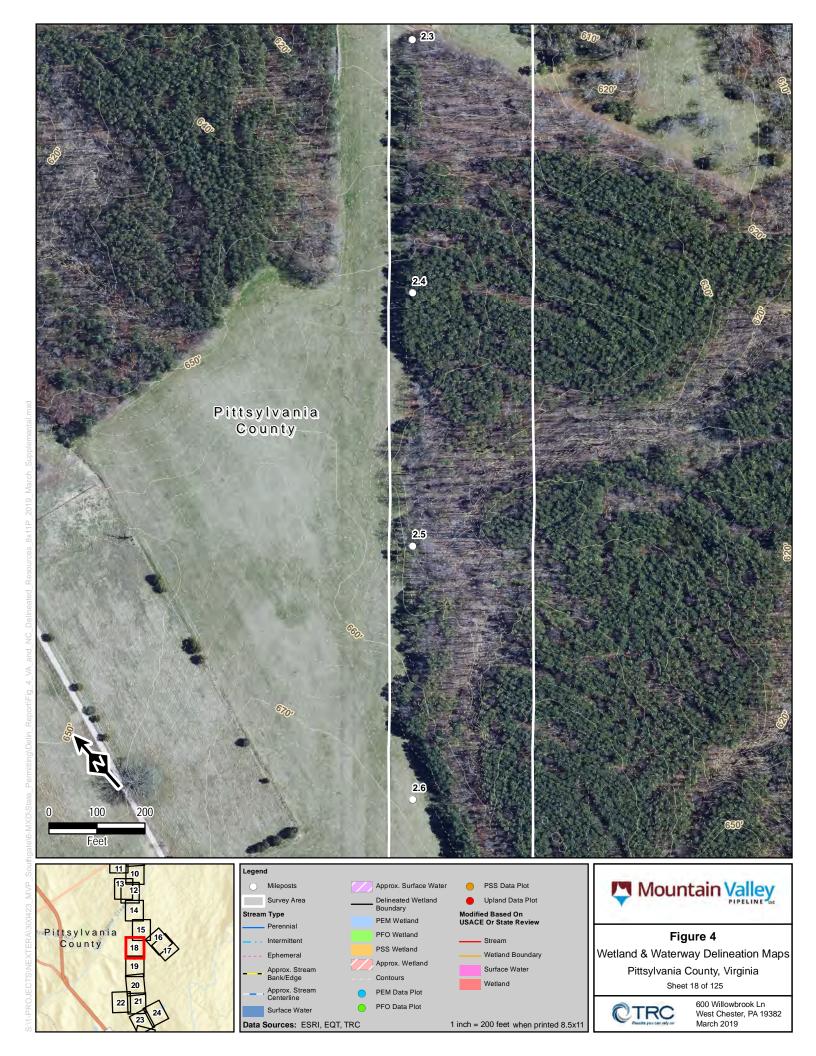


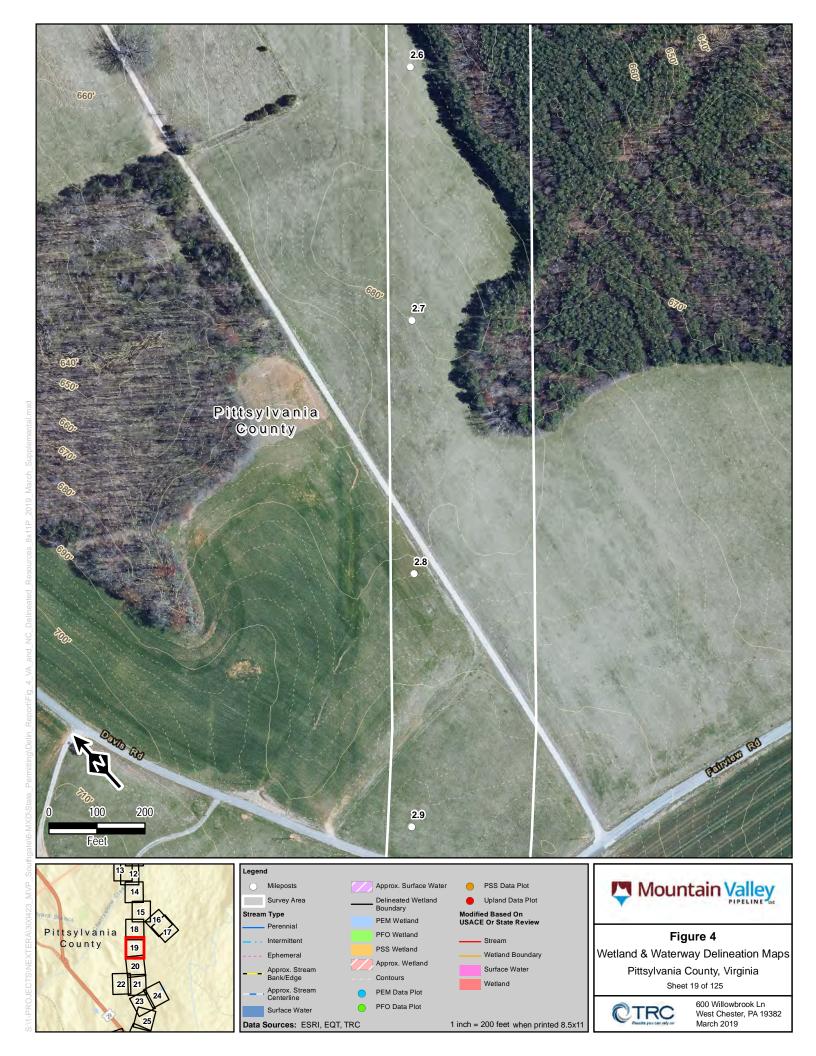


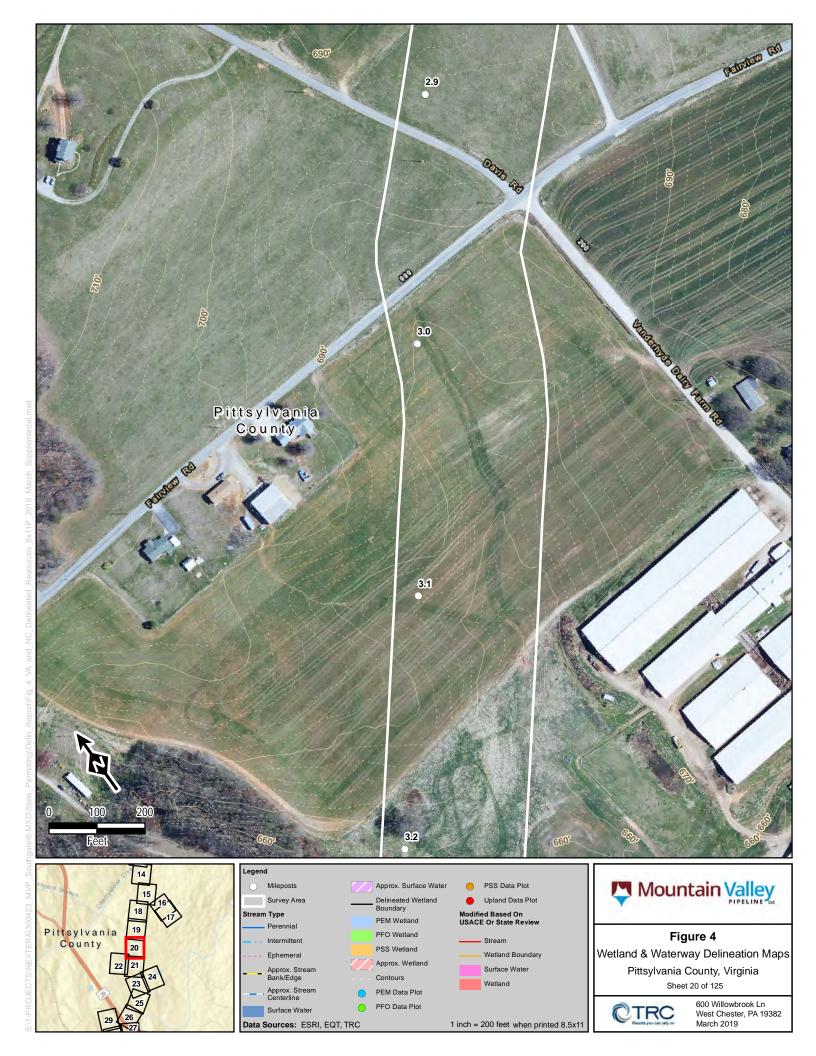


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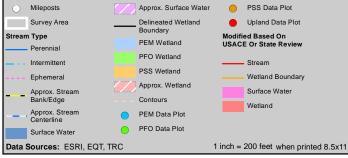






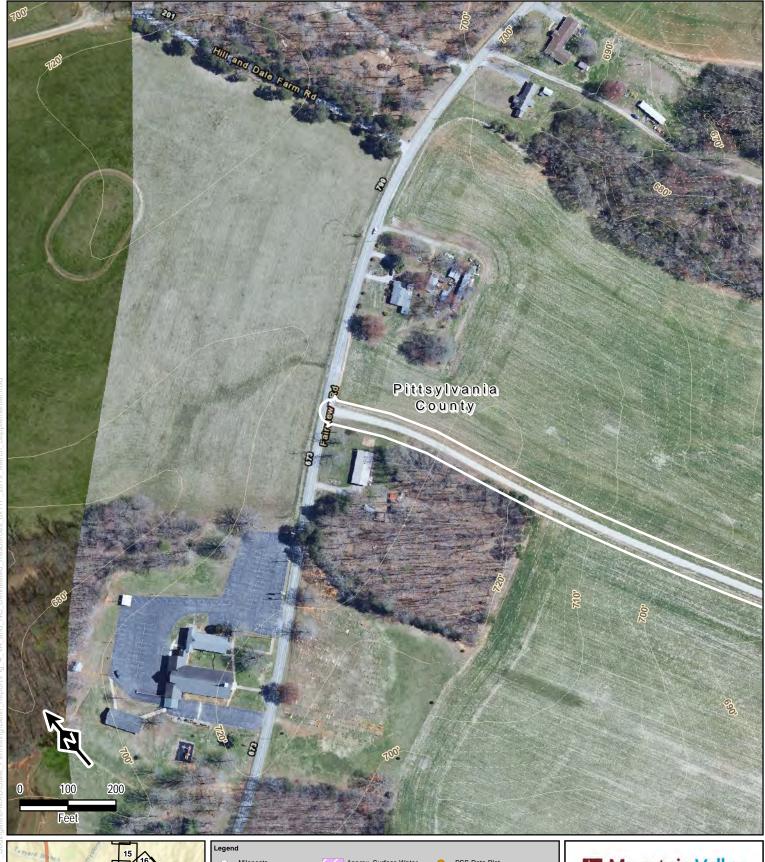


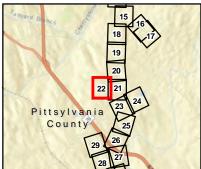


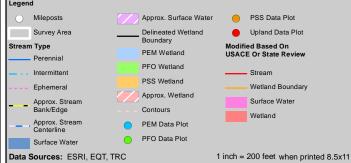


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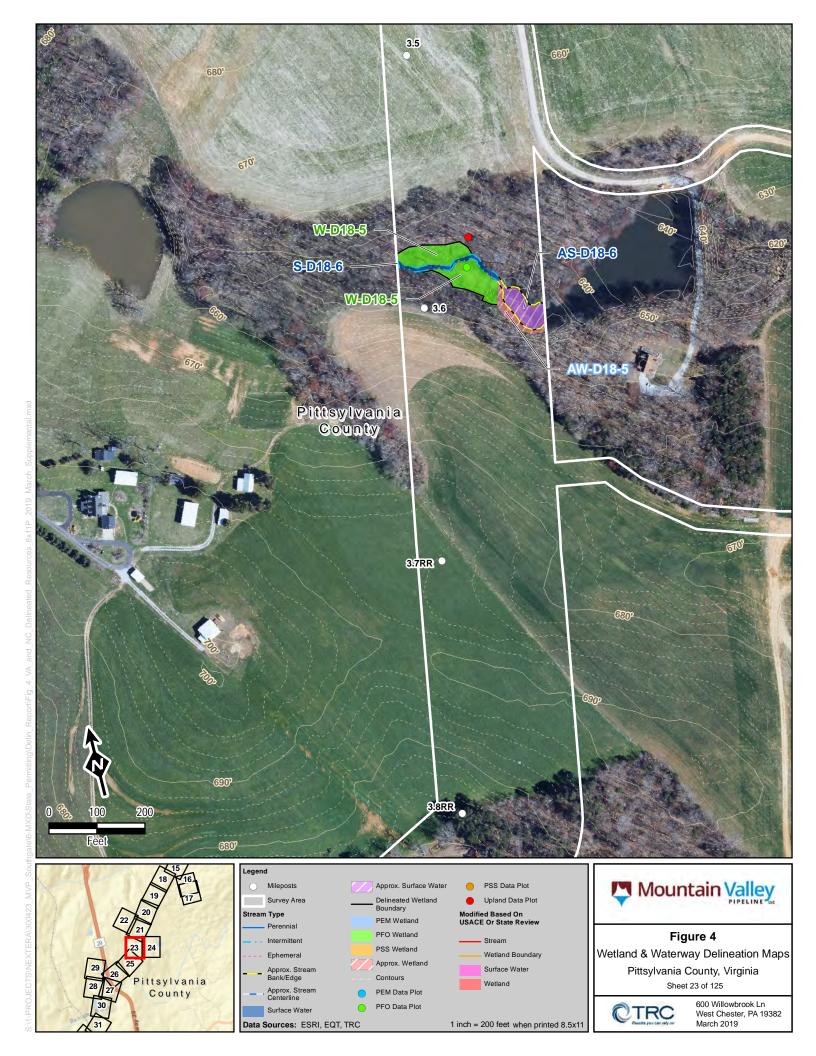






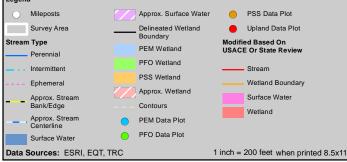
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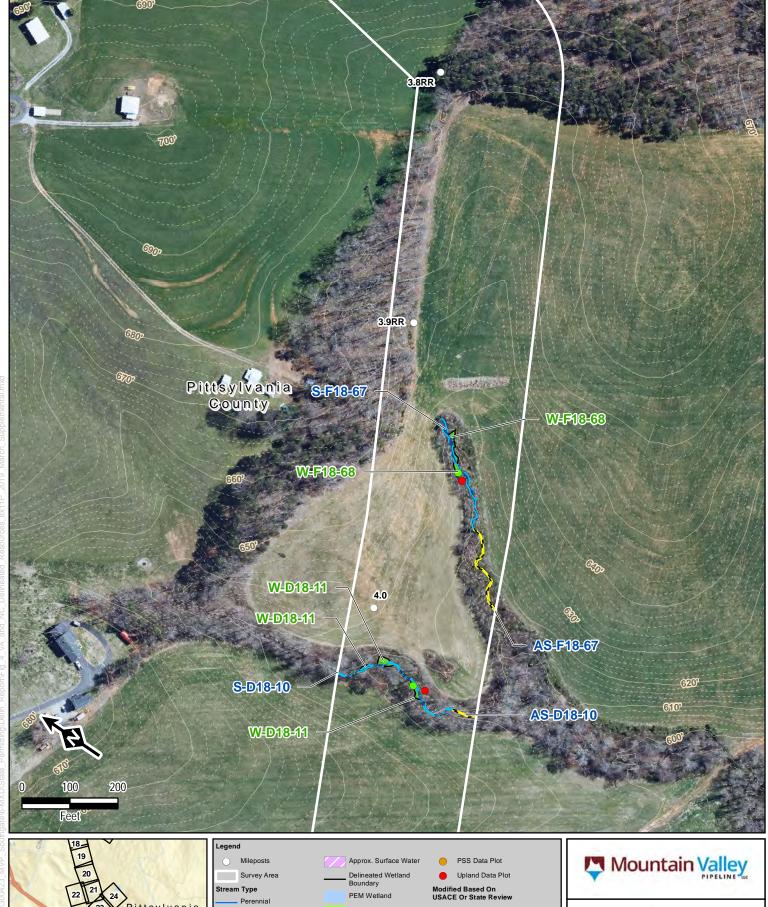






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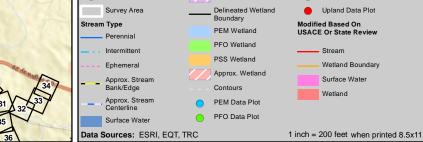




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County

Figure 4

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PEM Data Plot

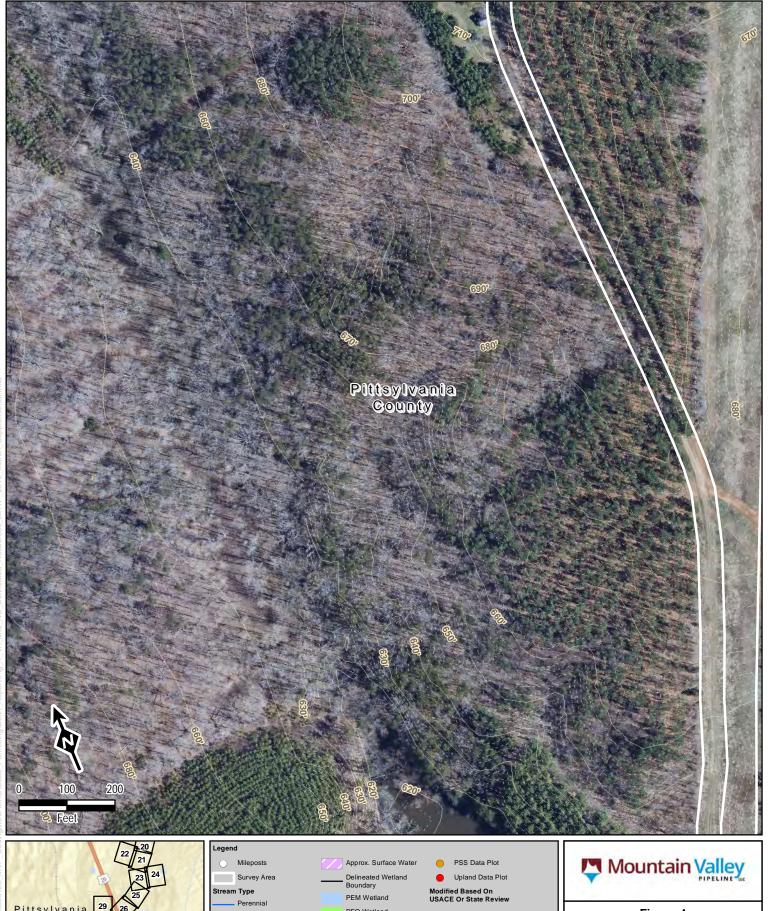
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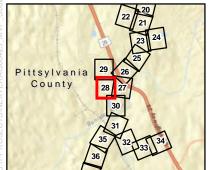
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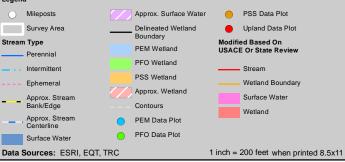
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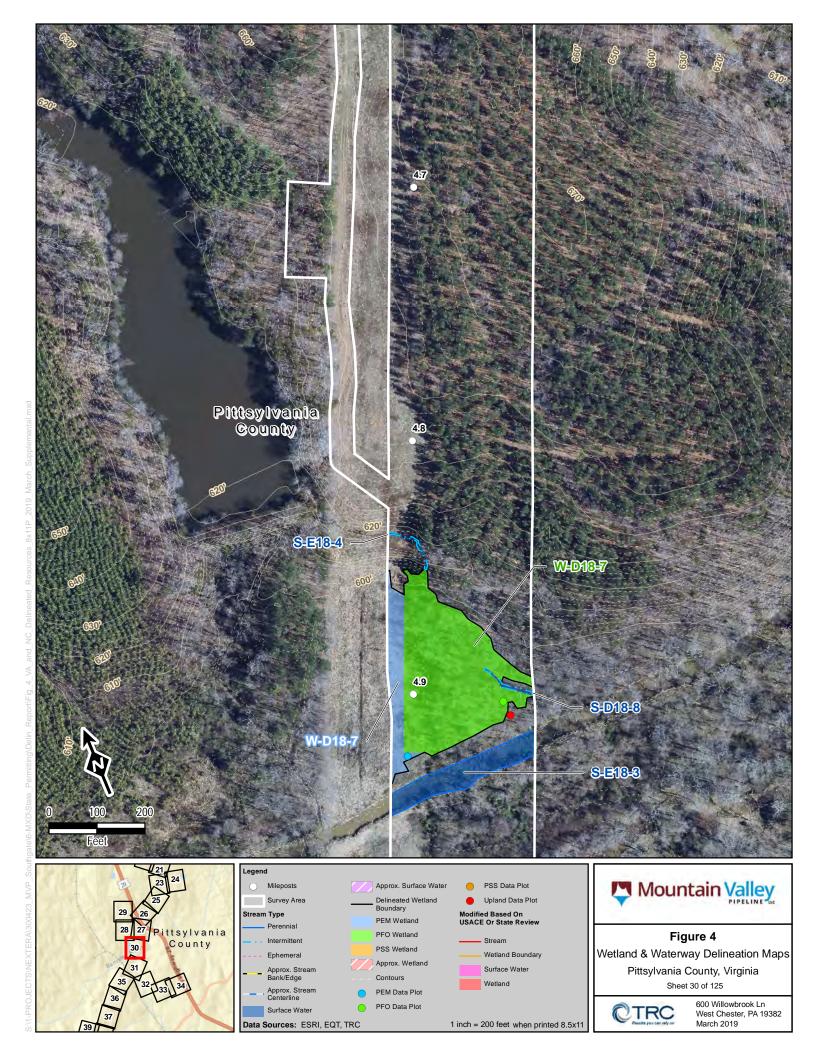


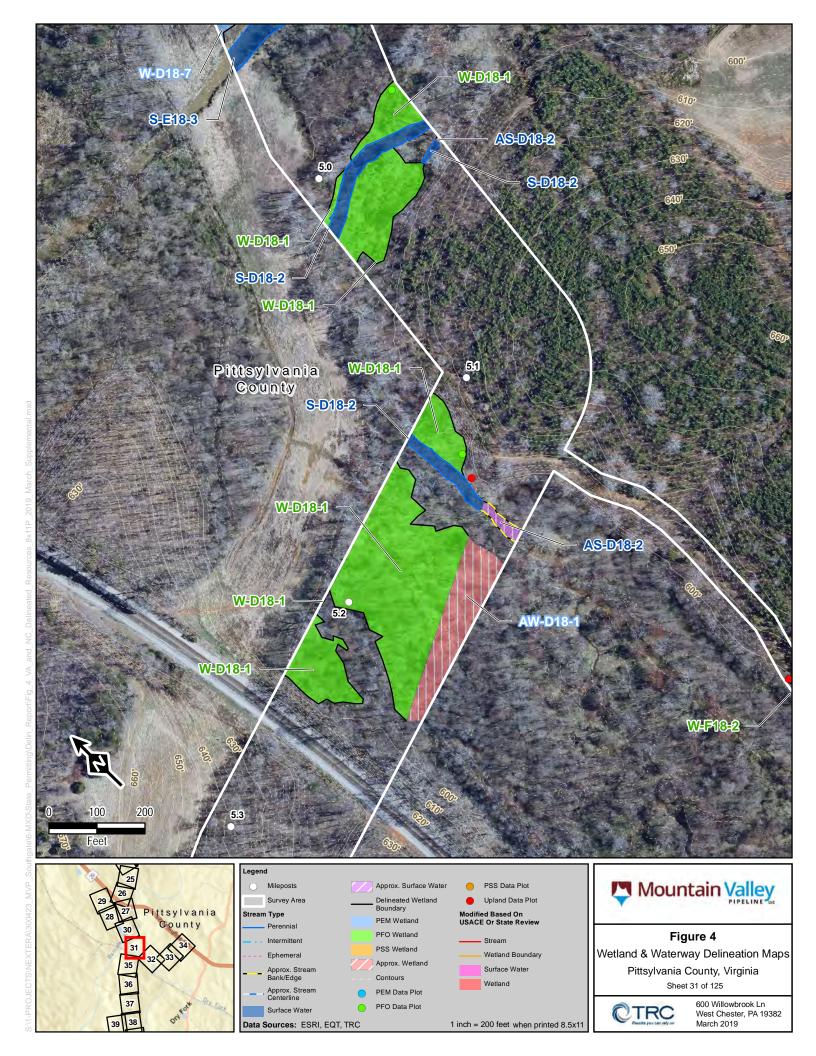


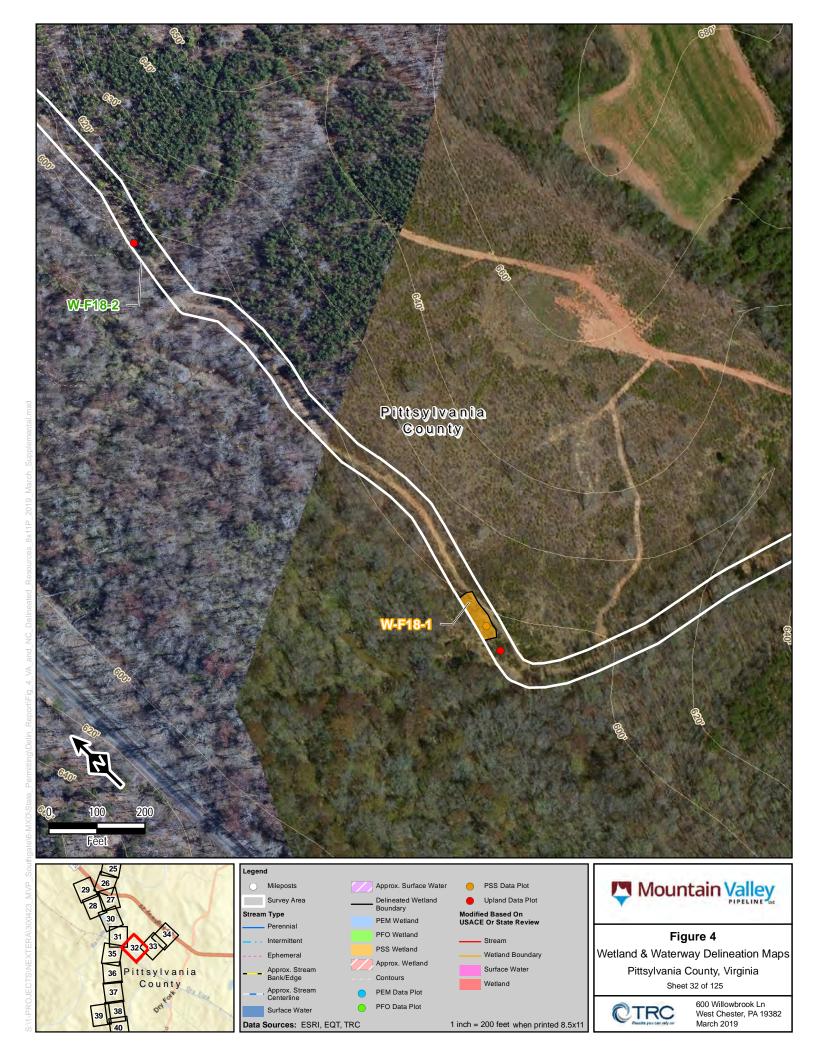


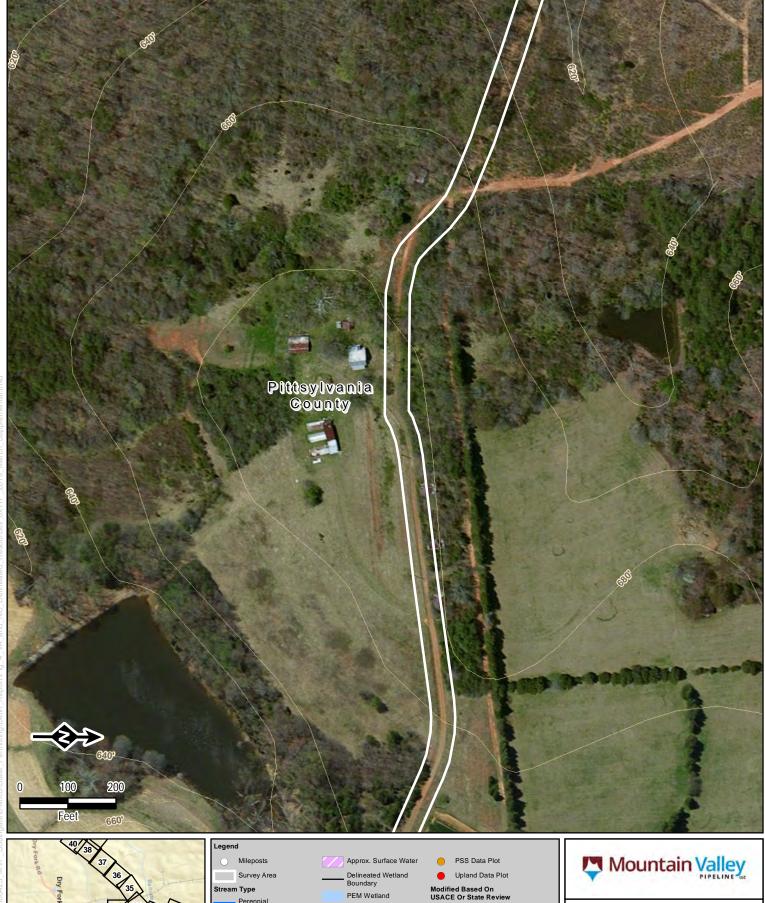
Wetland & Waterway Delineation Maps
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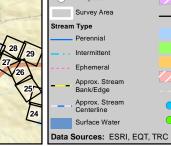












Pittsylvania

County

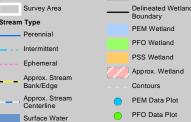


Figure 4

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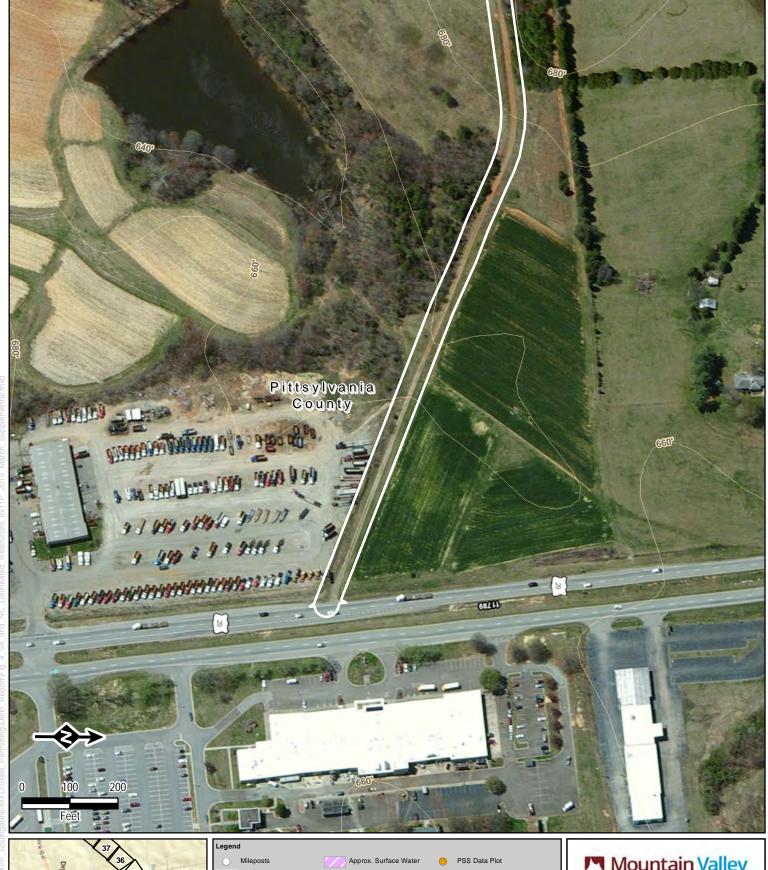


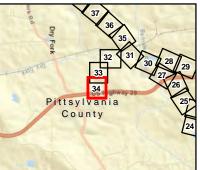
Wetland Boundary

1 inch = 200 feet when printed 8.5x11

Surface Water

Wetland









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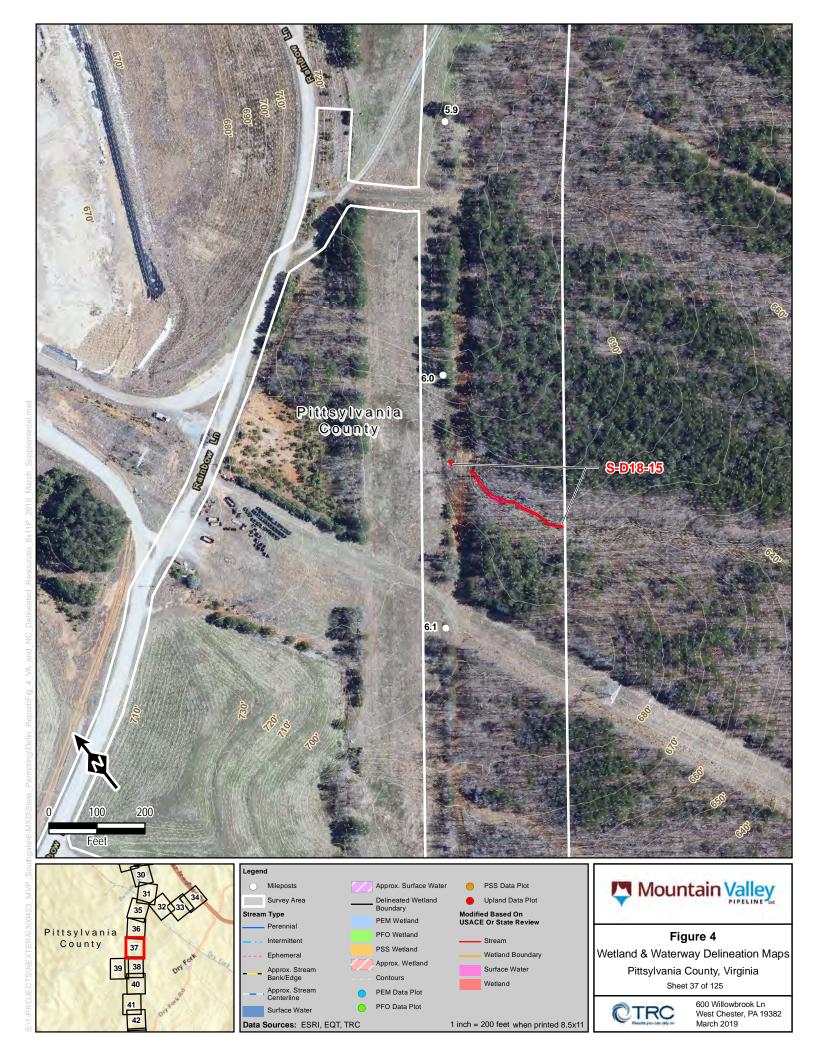


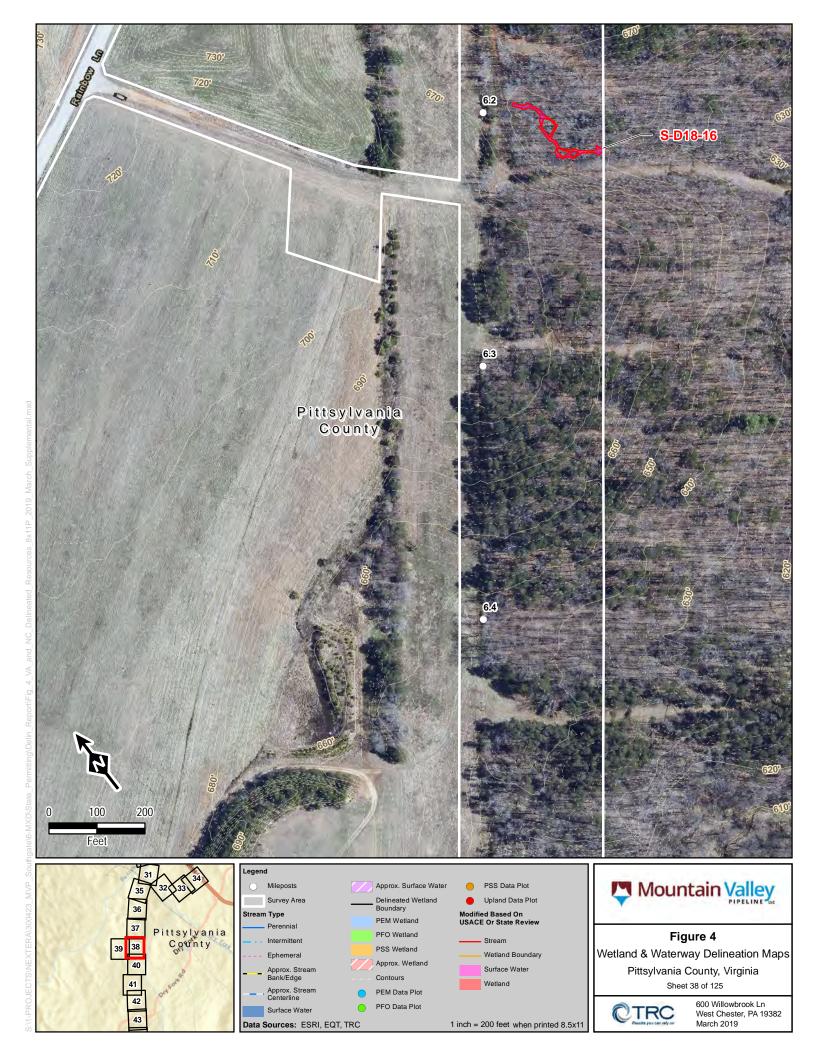
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Figure 4

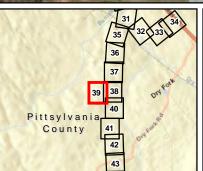
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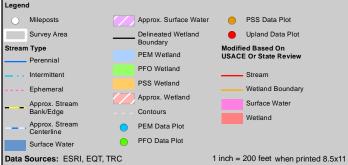






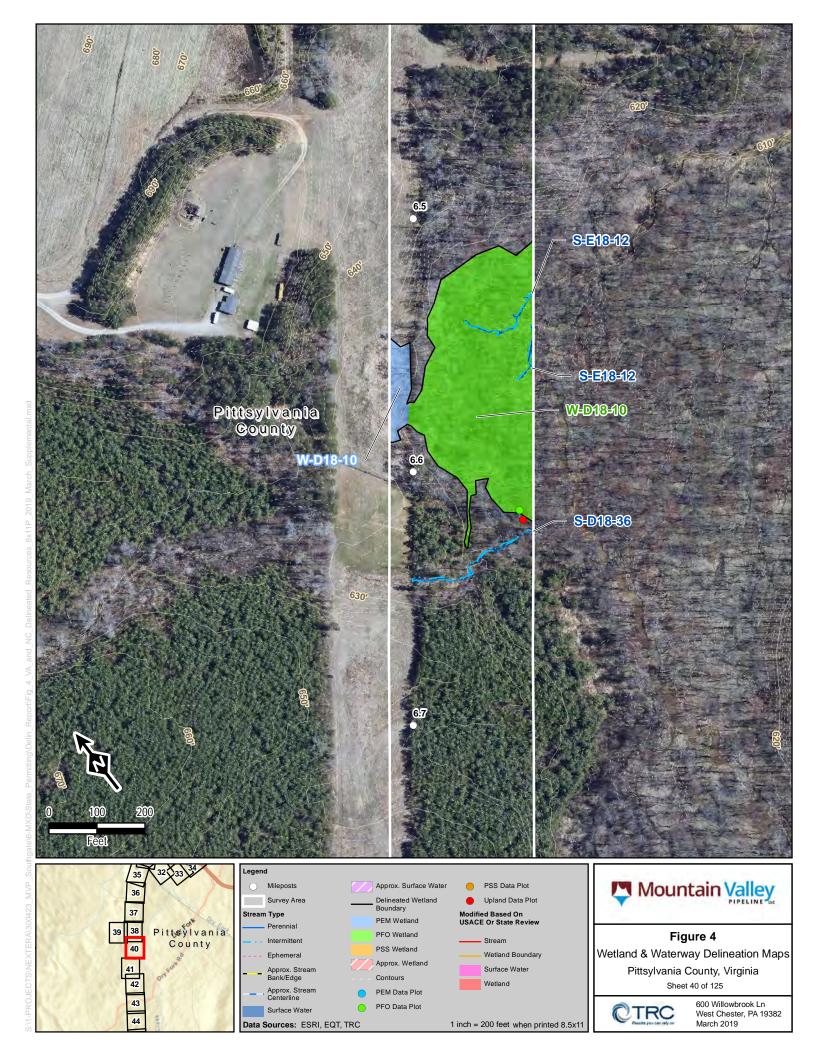


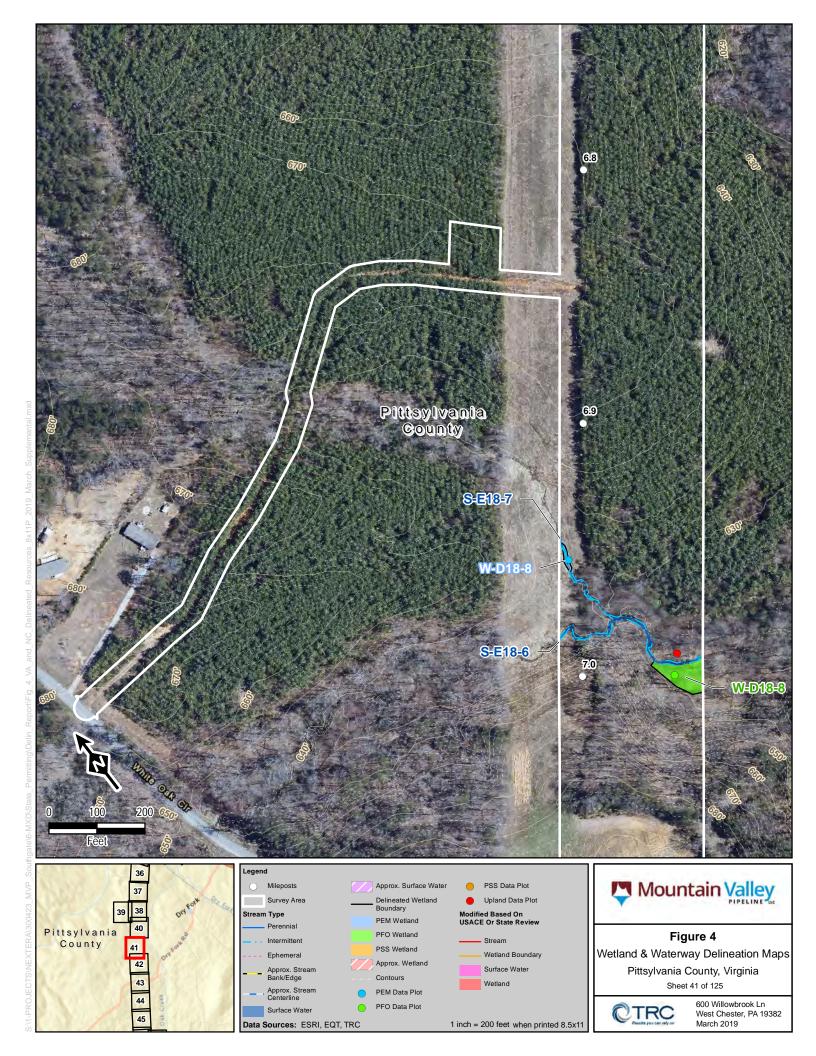




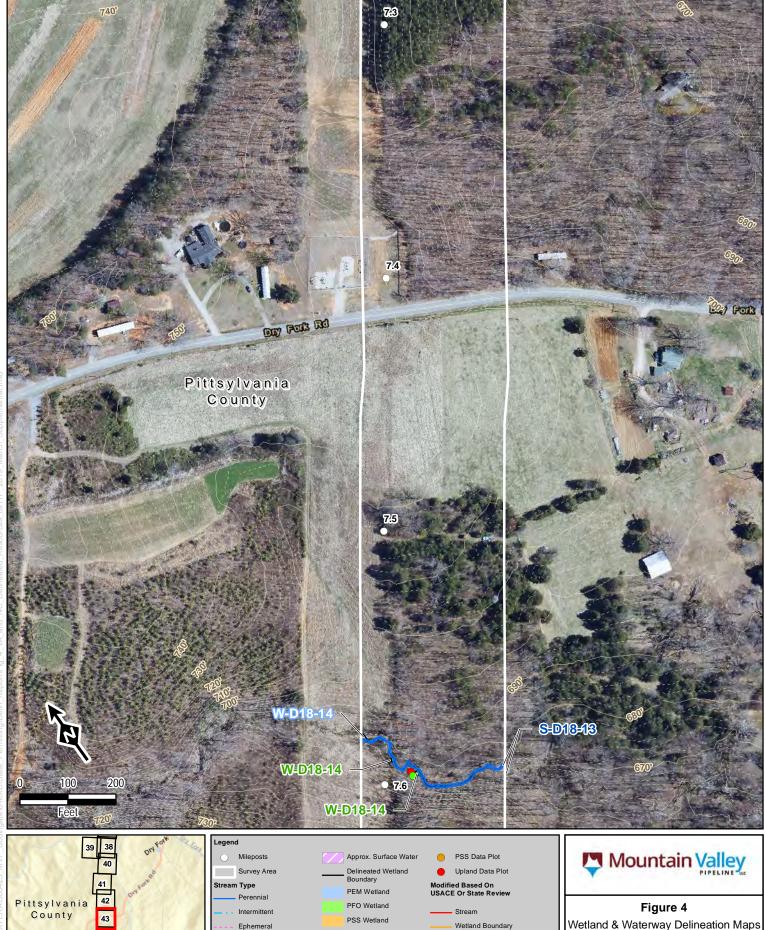
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Pittsylvania County, Virginia
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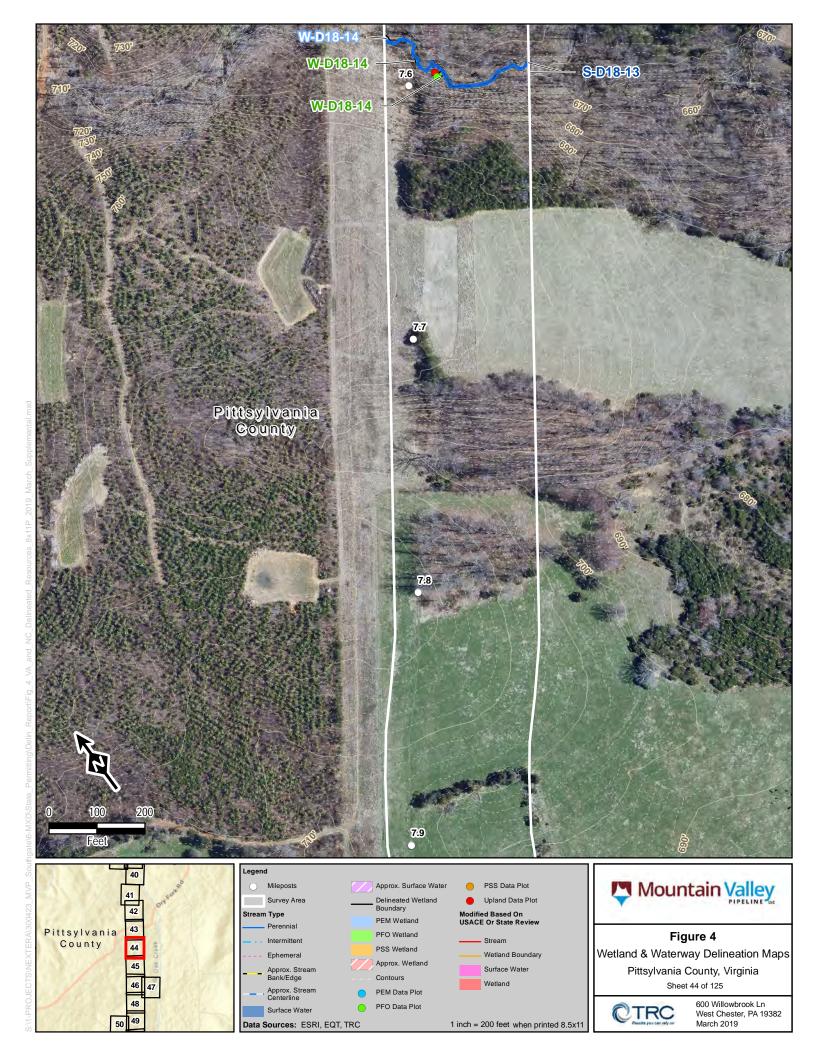
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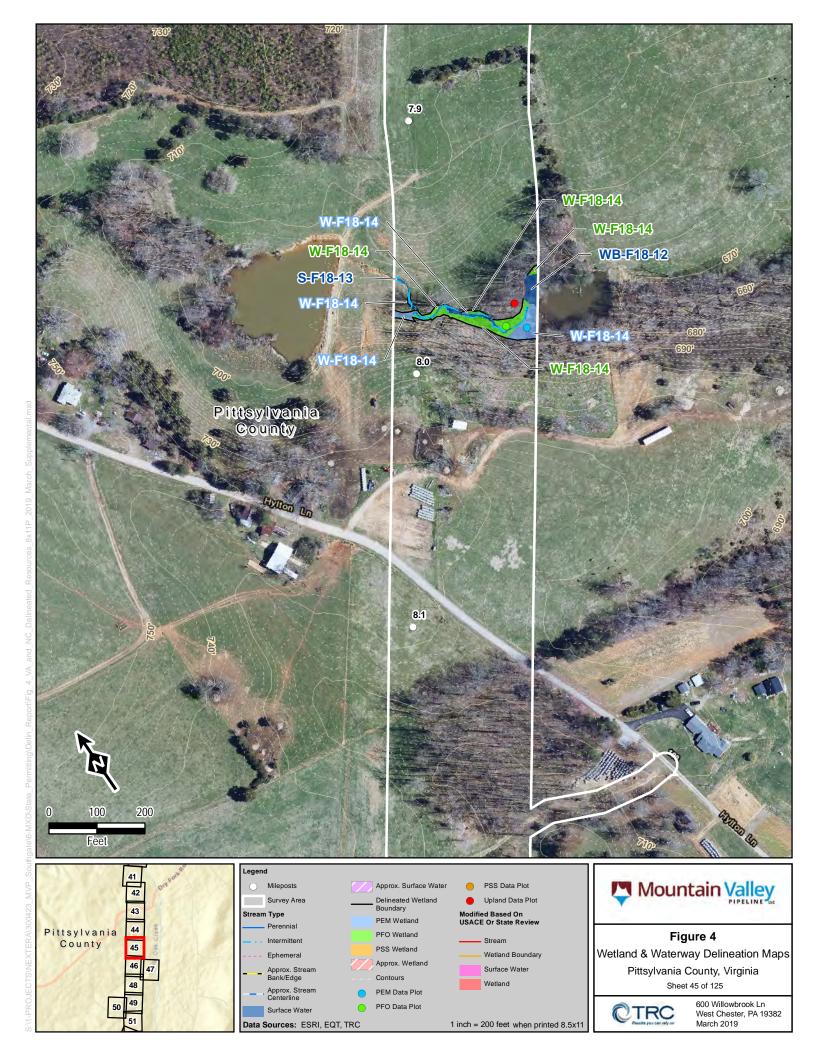
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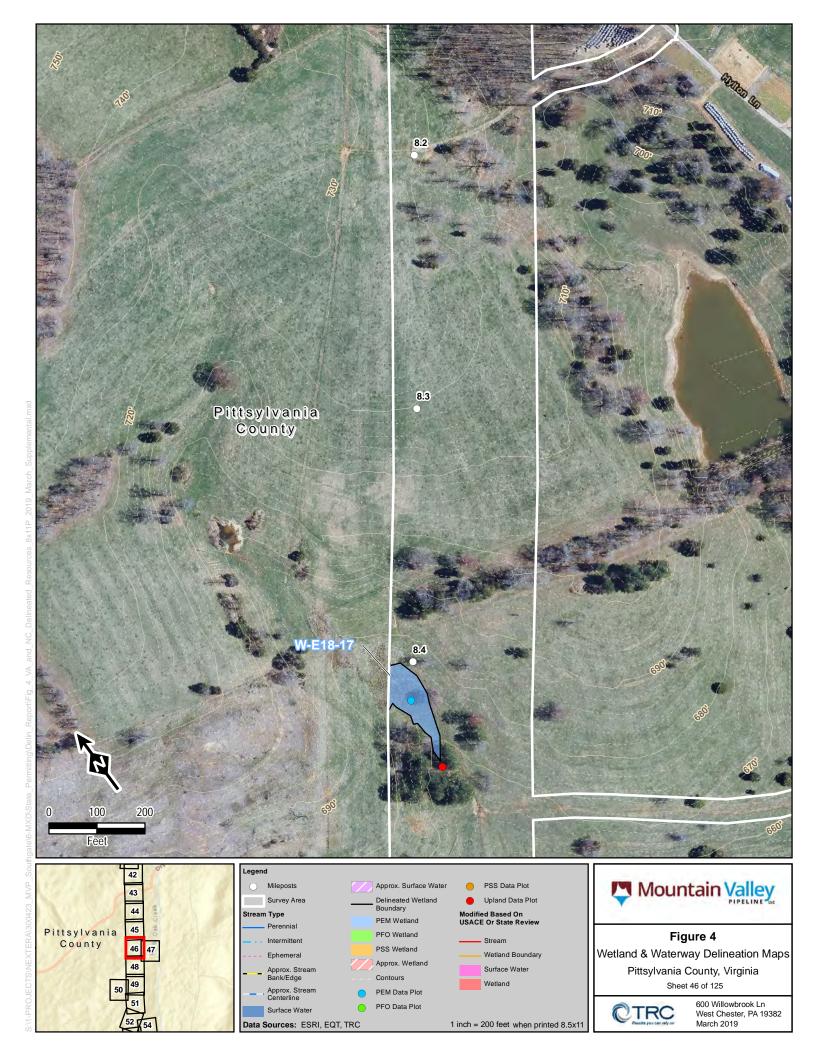
PFO Data Plot

Data Sources: ESRI, EQT, TRC

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Pittsylvania County, Virginia
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Wetland

PEM Data Plot

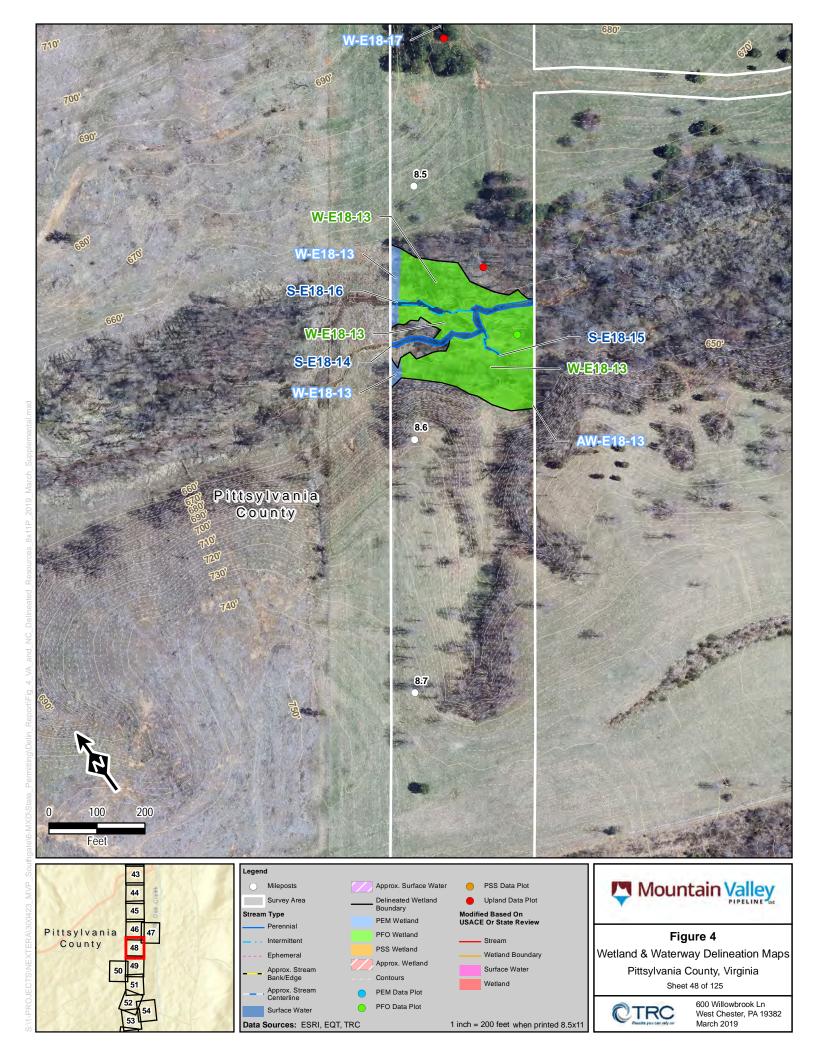
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Data Sources: ESRI, EQT, TRC

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Pittsylvania County, Virginia





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Wetland

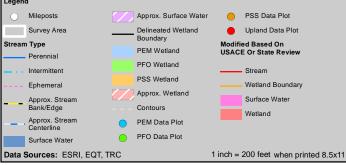
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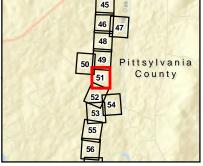


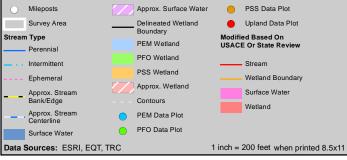


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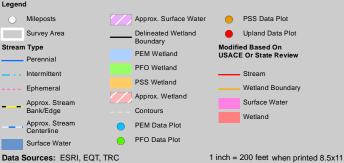


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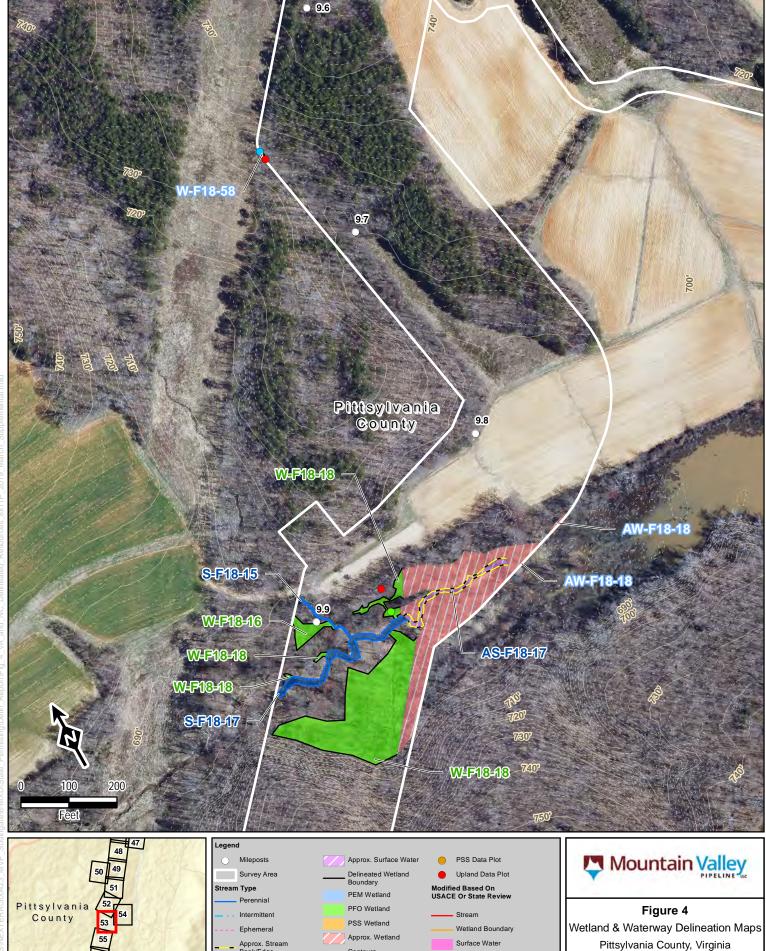






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Wetland

1 inch = 200 feet when printed 8.5x11

PFO Data Plot

Data Sources: ESRI, EQT, TRC

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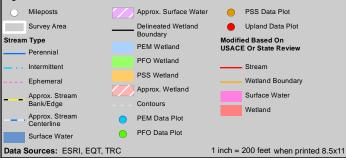
CTRC

600 Willowbrook Ln West Chester, PA 19382

March 2019

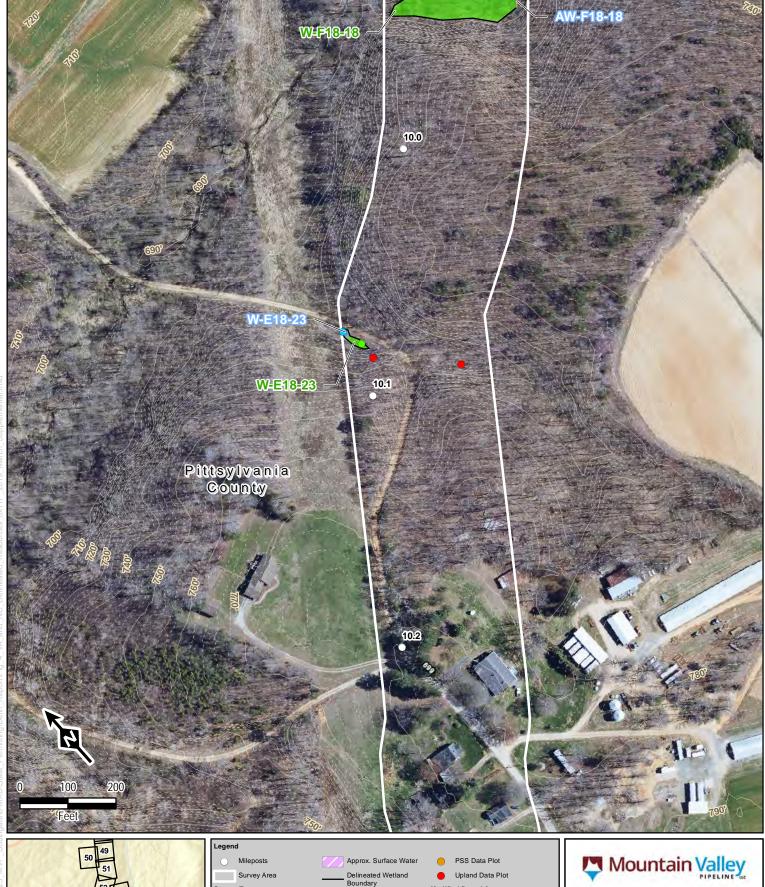


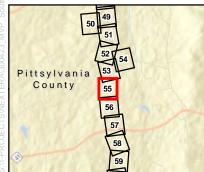


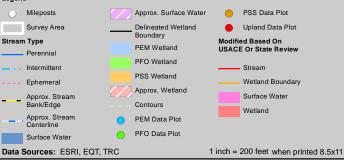


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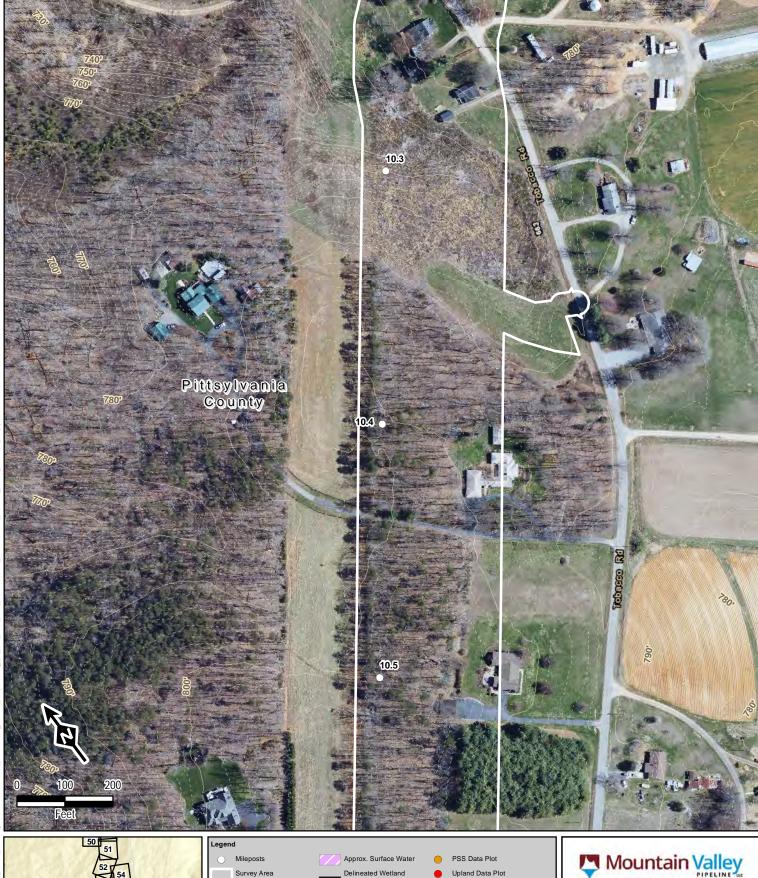






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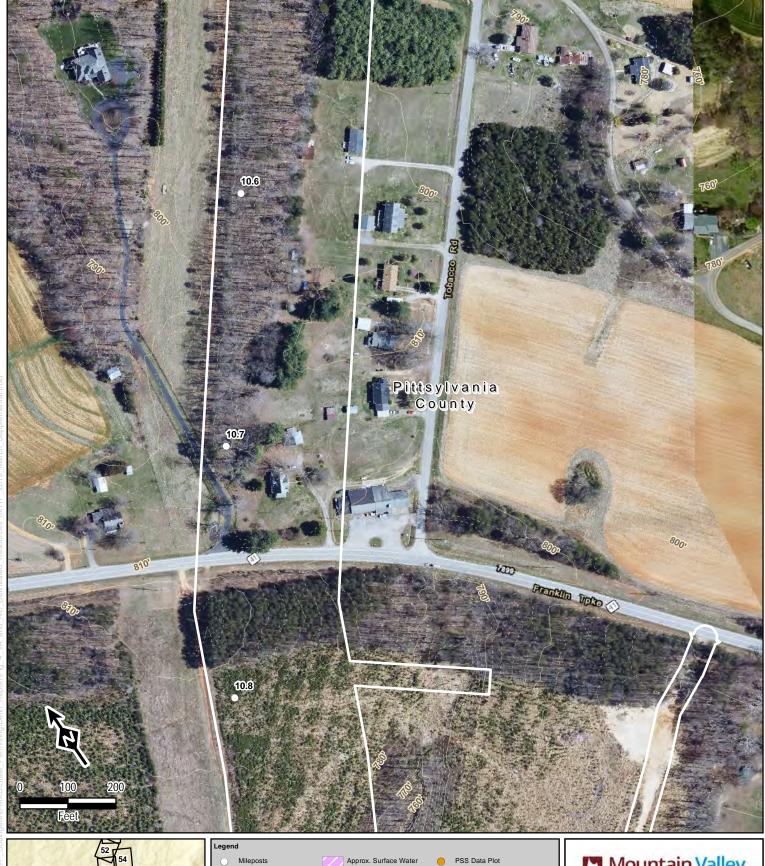


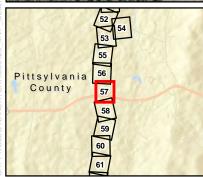


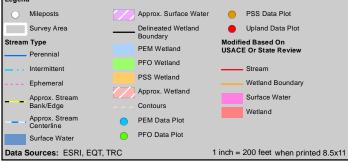


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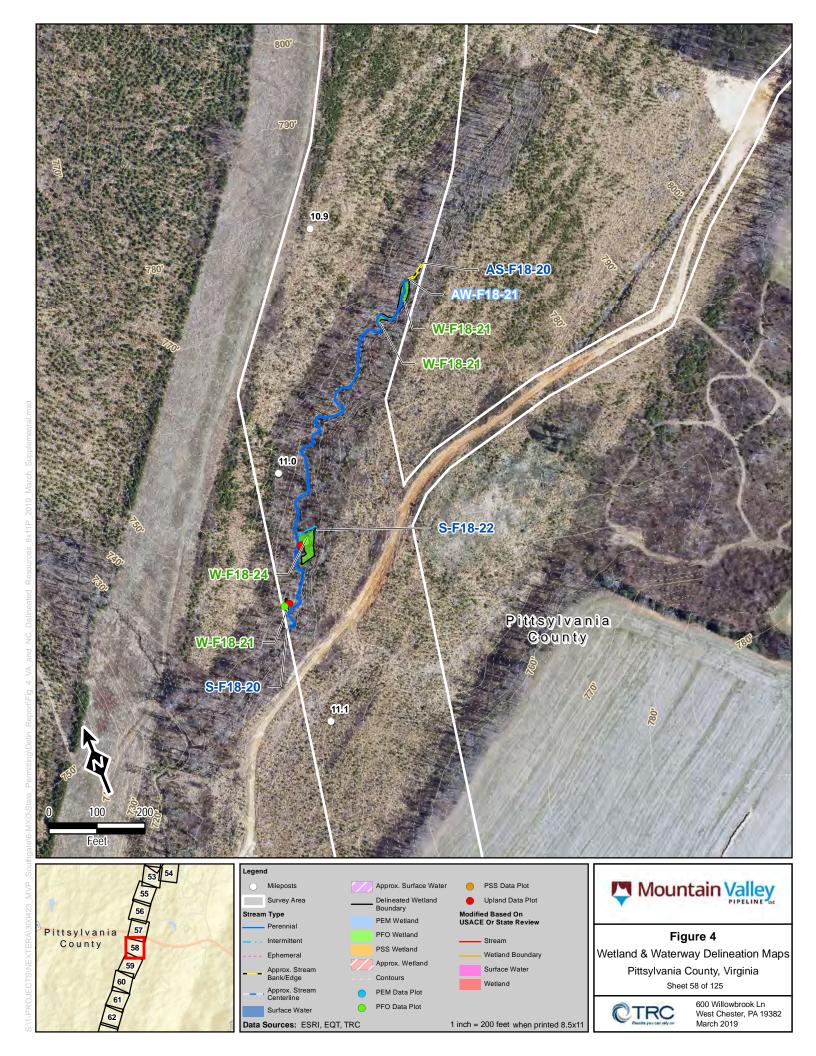


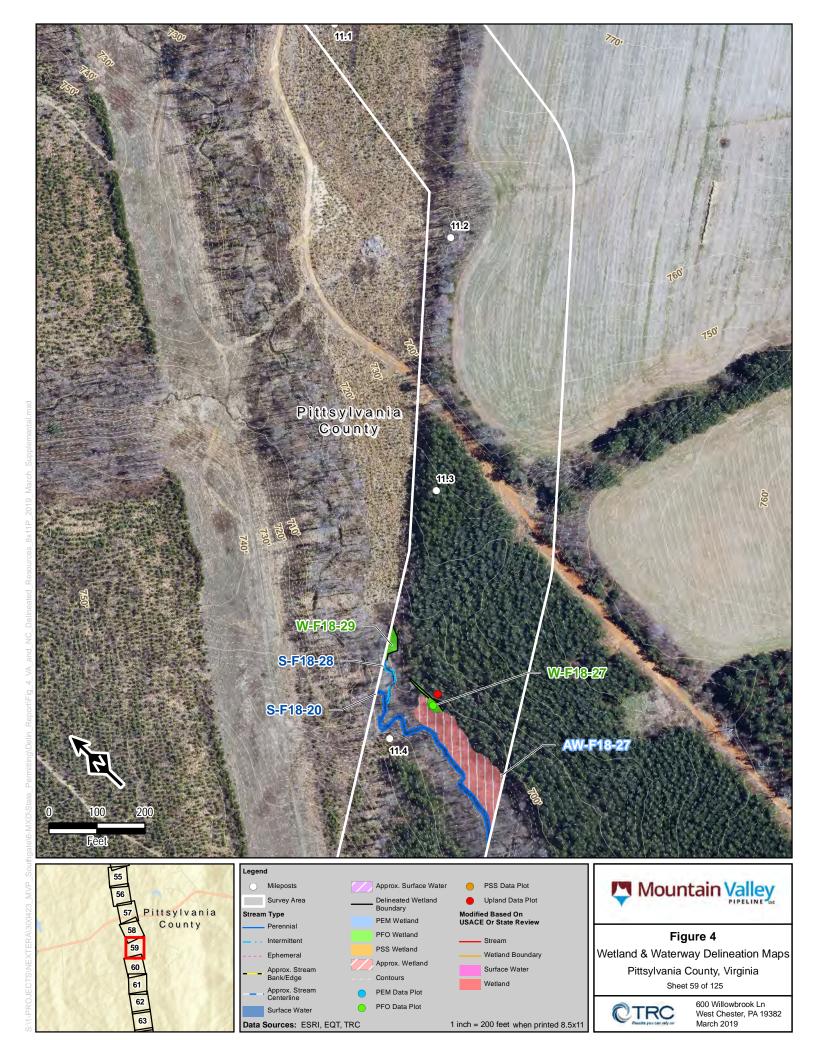


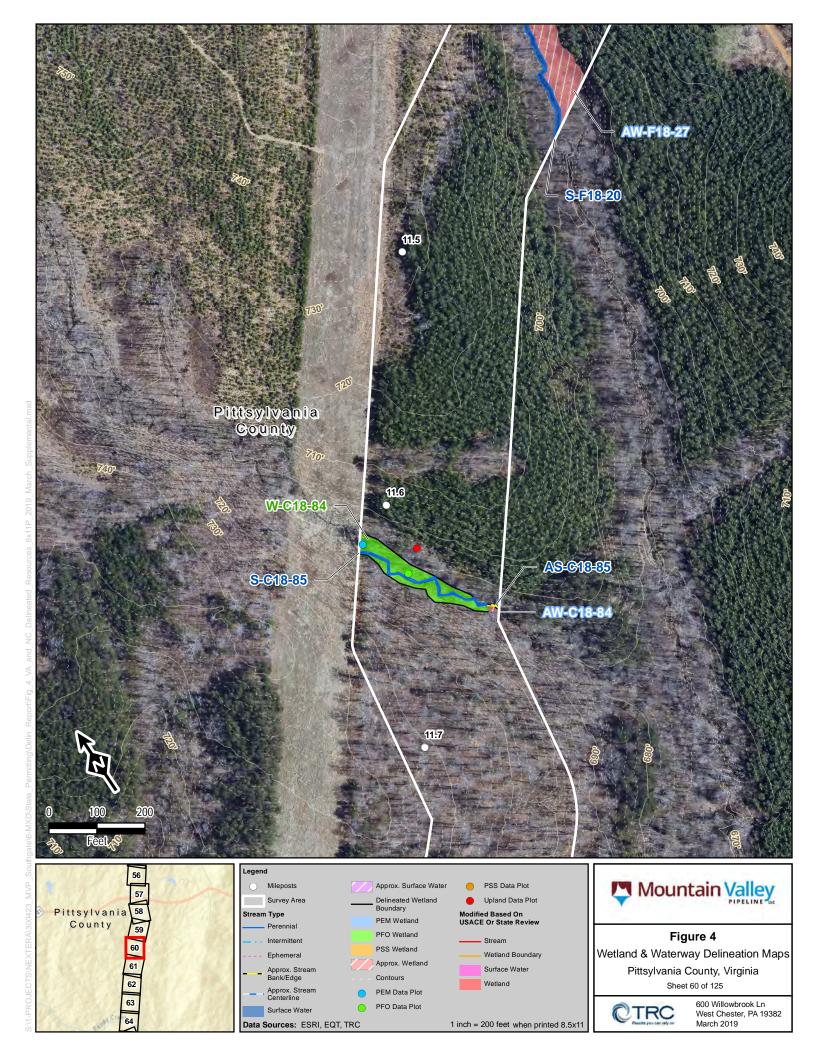


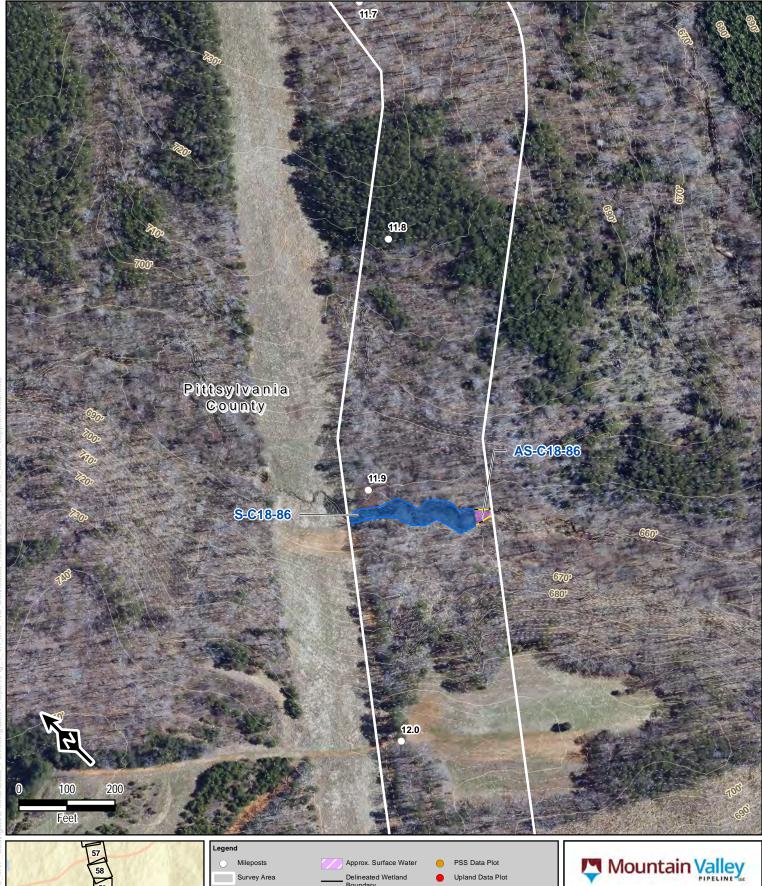
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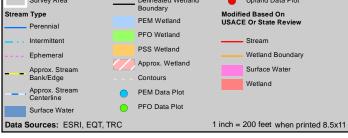




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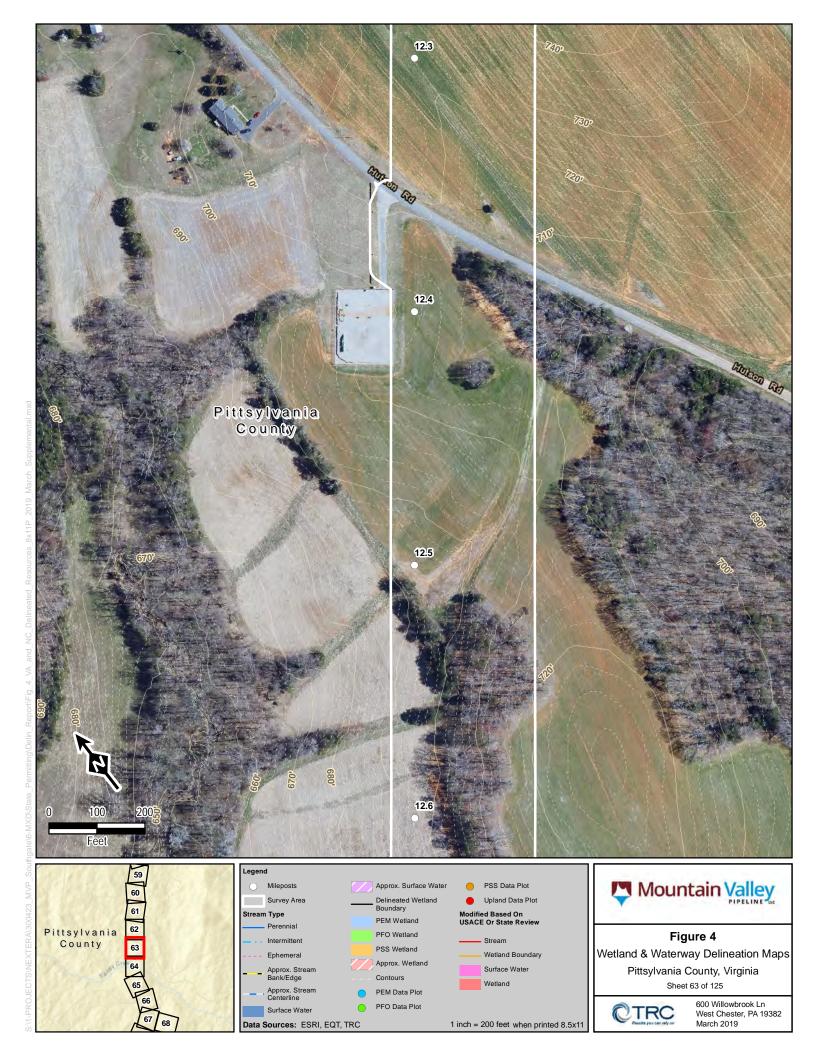
County

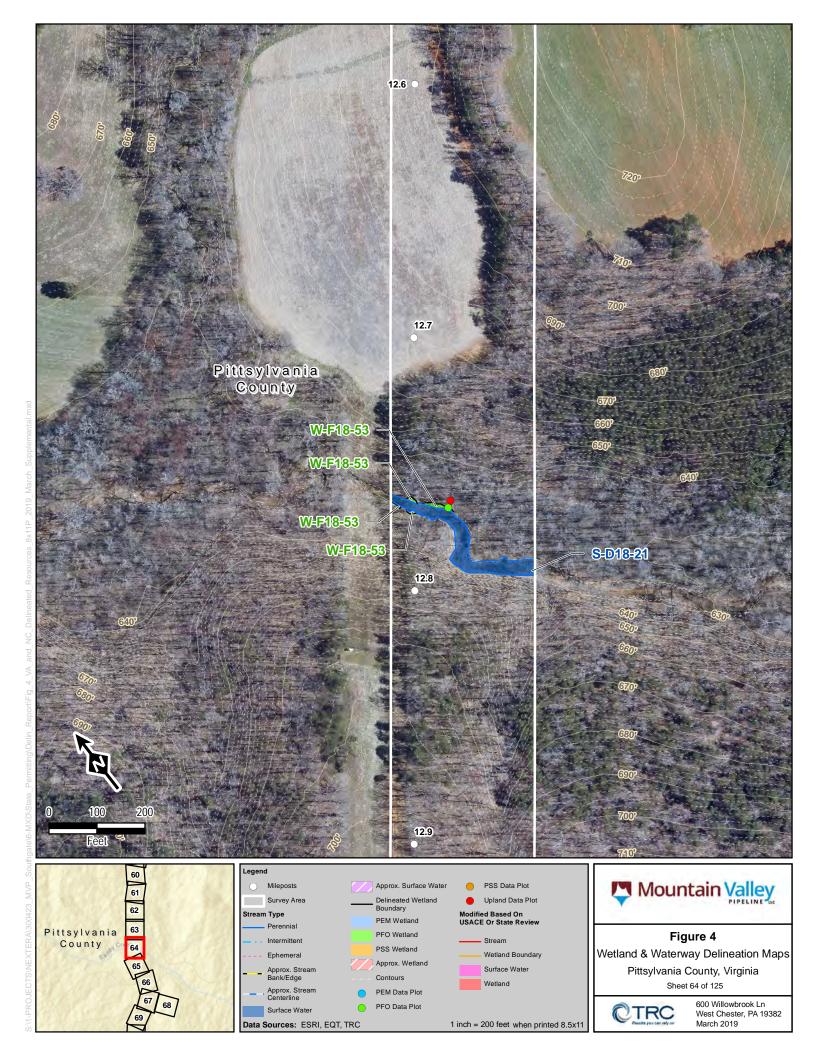
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Figure 4

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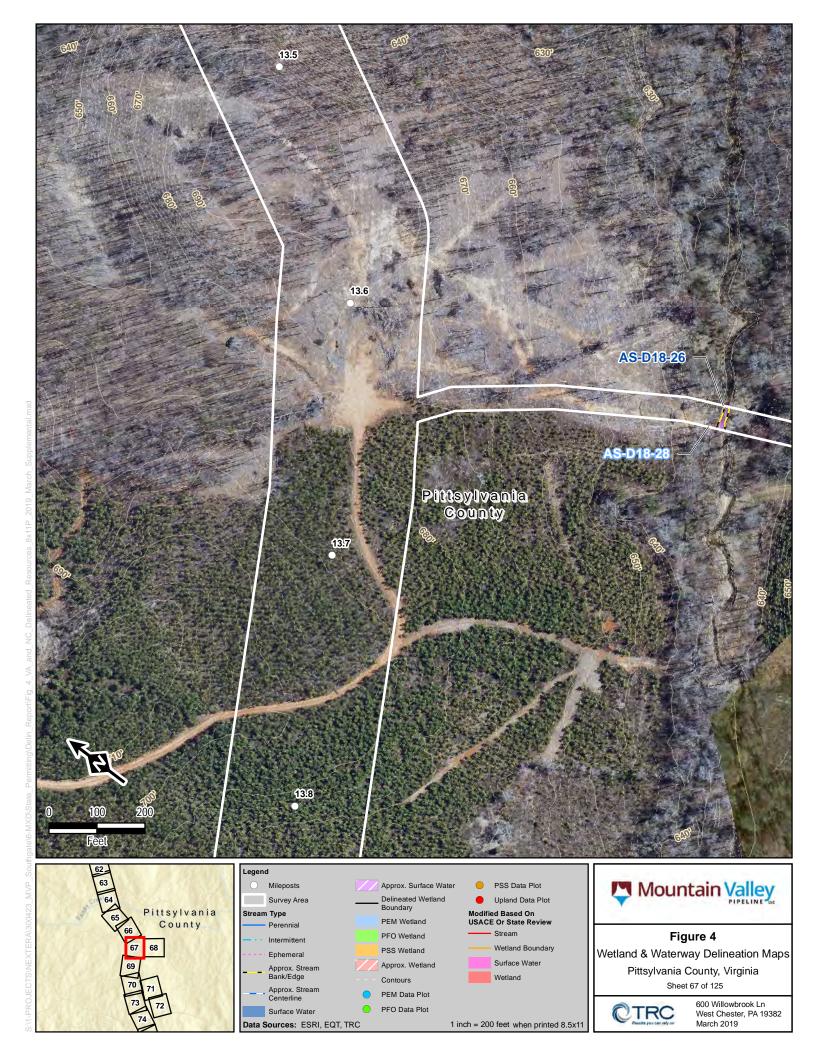






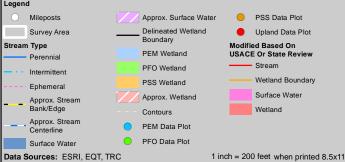
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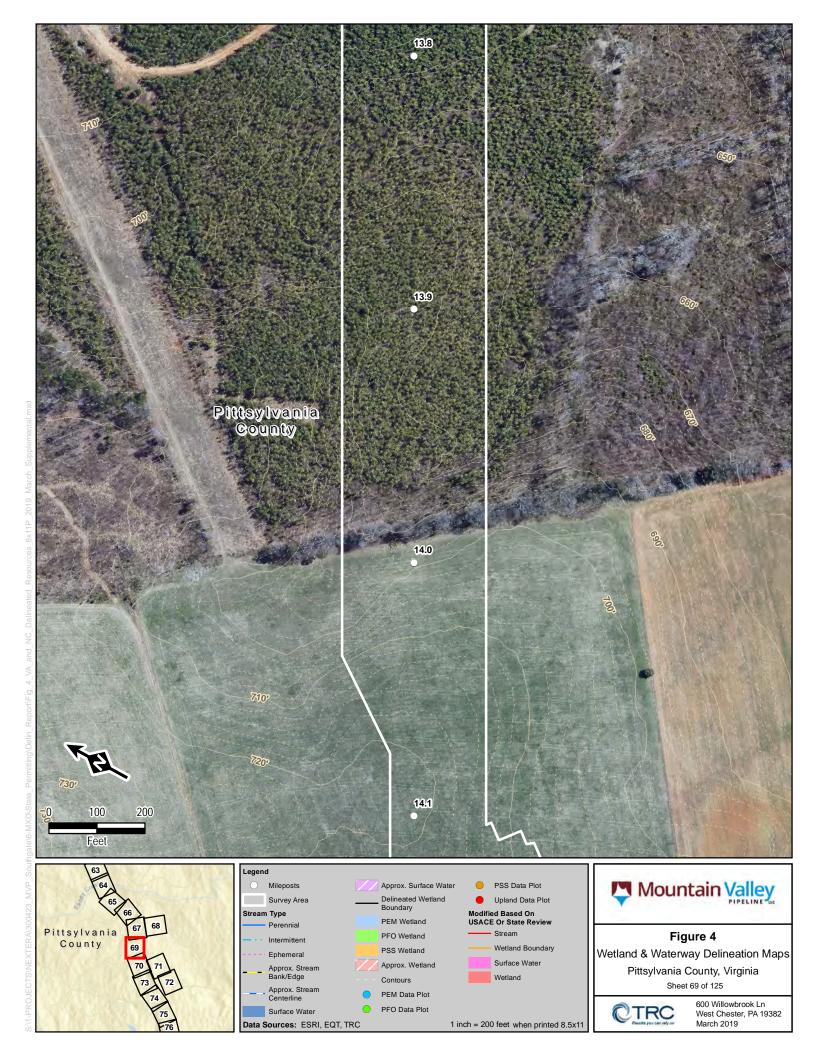






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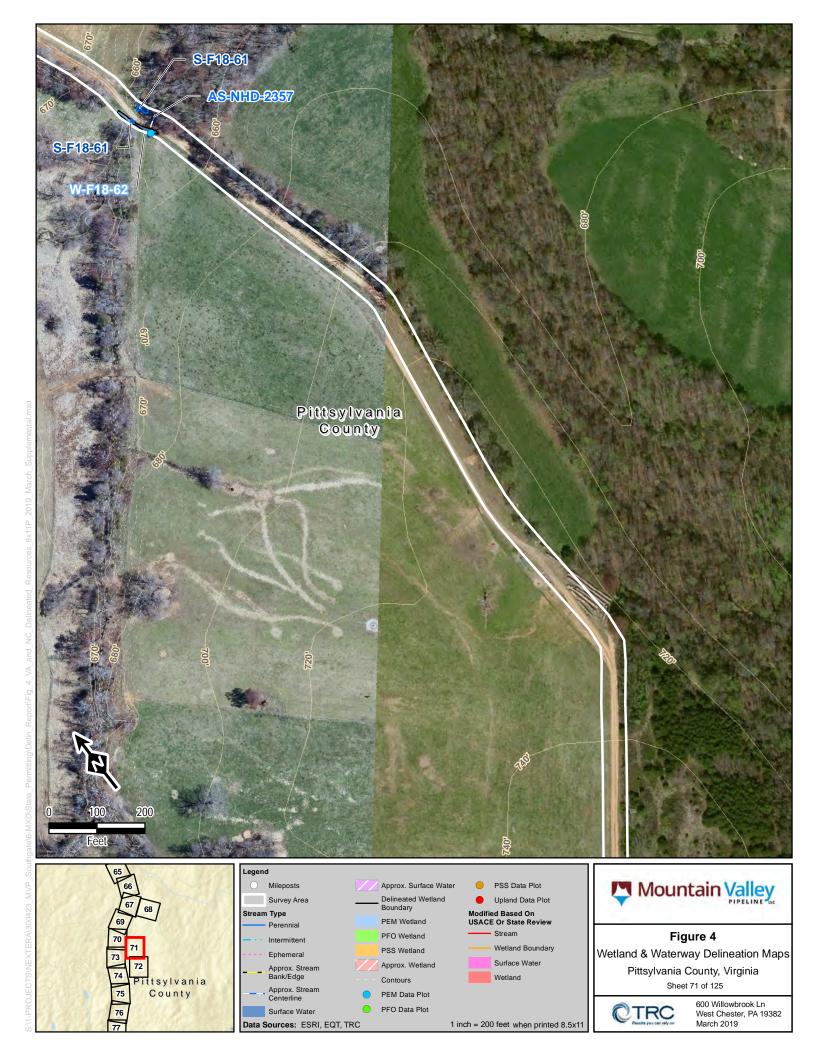


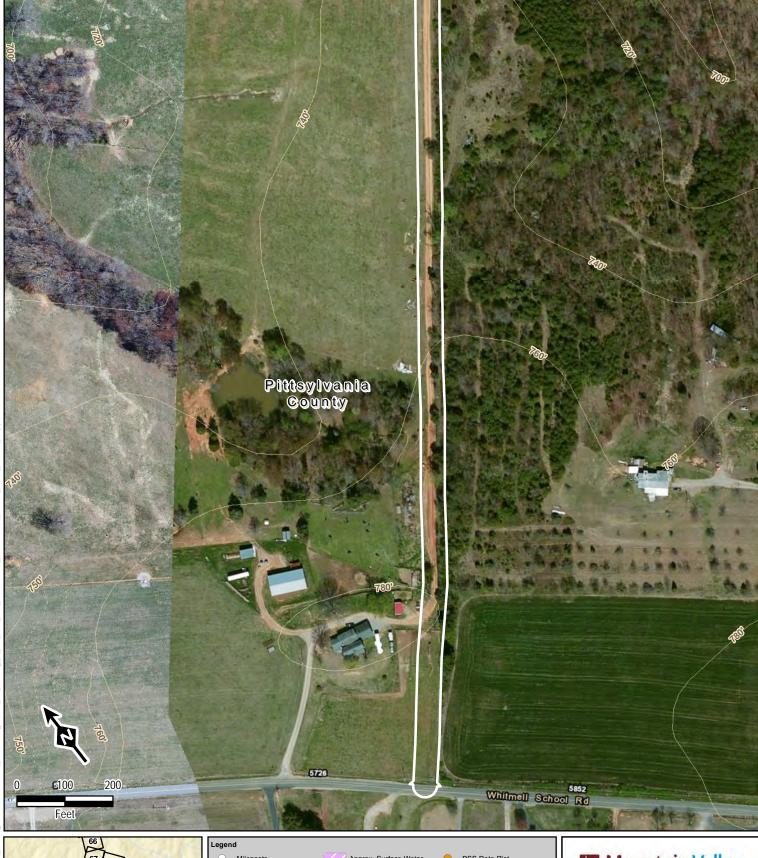


Stream Type
Perennial
Perennial
Perennial
Pere Wetland
Surface Water
Pere Wetland
P

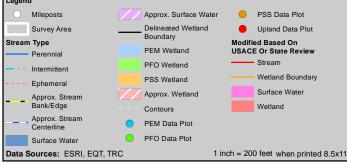
Wetland & Waterway Delineation Maps
Pittsylvania County, Virginia
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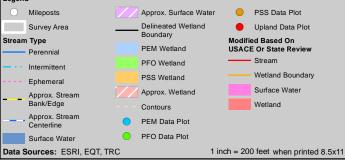


Wetland & Waterway Delineation Maps
Pittsylvania County, Virginia
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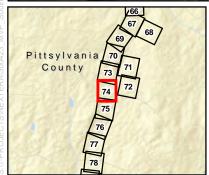


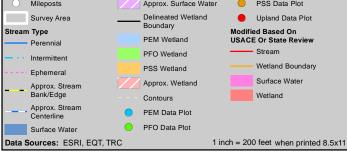


Wetland & Waterway Delineation Maps Pittsylvania County, Virginia Sheet 73 of 125









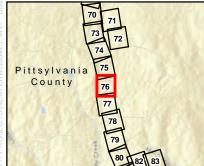


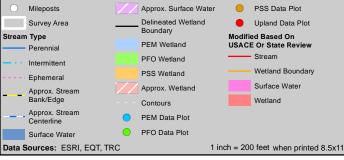
Wetland & Waterway Delineation Maps Pittsylvania County, Virginia Sheet 74 of 125







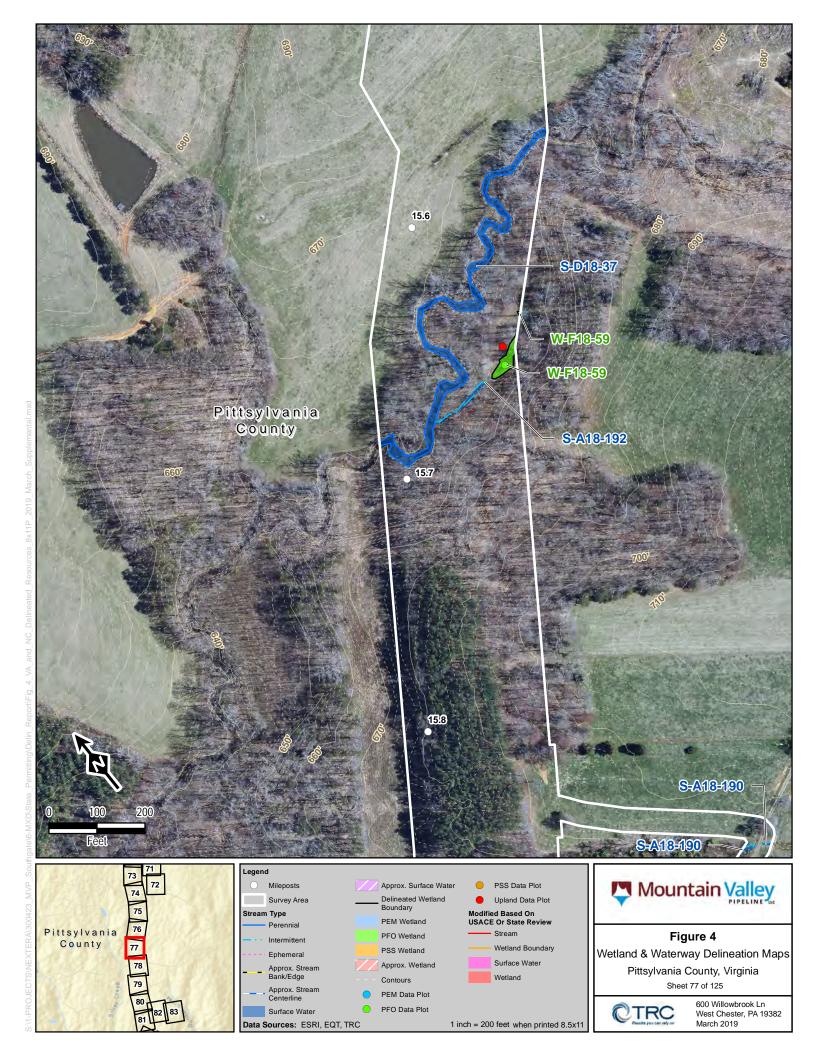


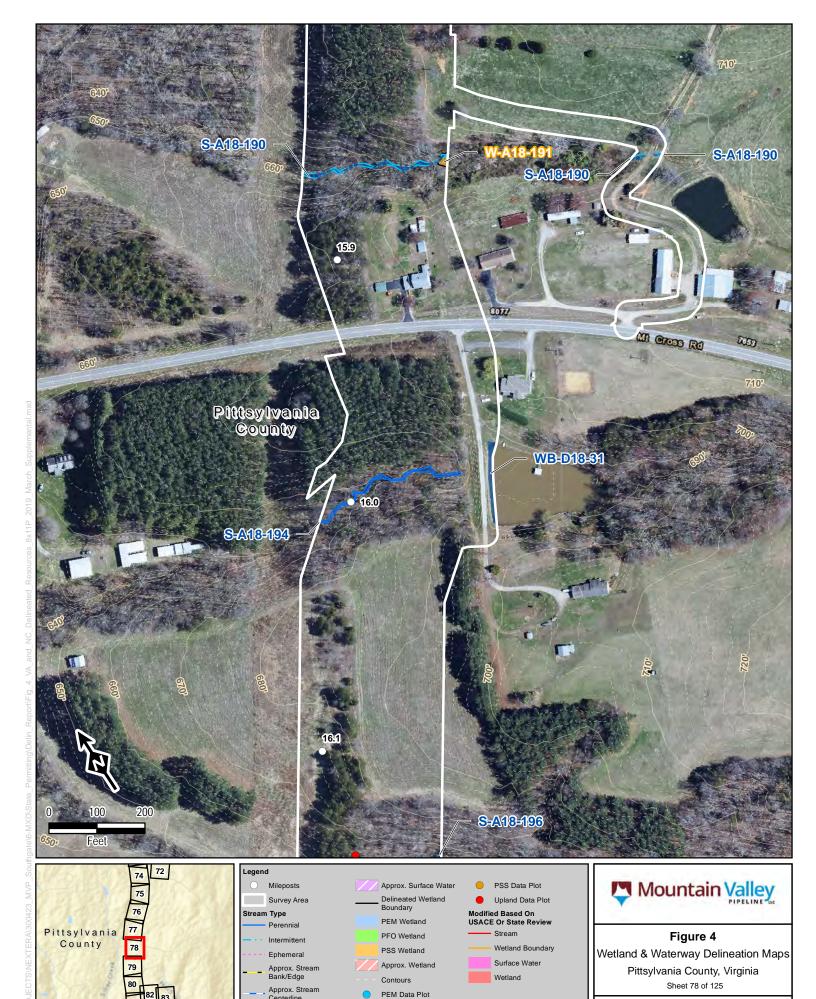




Wetland & Waterway Delineation Maps Pittsylvania County, Virginia Sheet 76 of 125







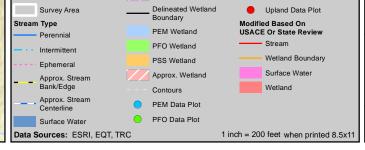
PFO Data Plot

1 inch = 200 feet when printed 8.5x11

Surface Water

Data Sources: ESRI, EQT, TRC





County

Figure 4

Wetland & Waterway Delineation Maps Pittsylvania County, Virginia Sheet 79 of 125



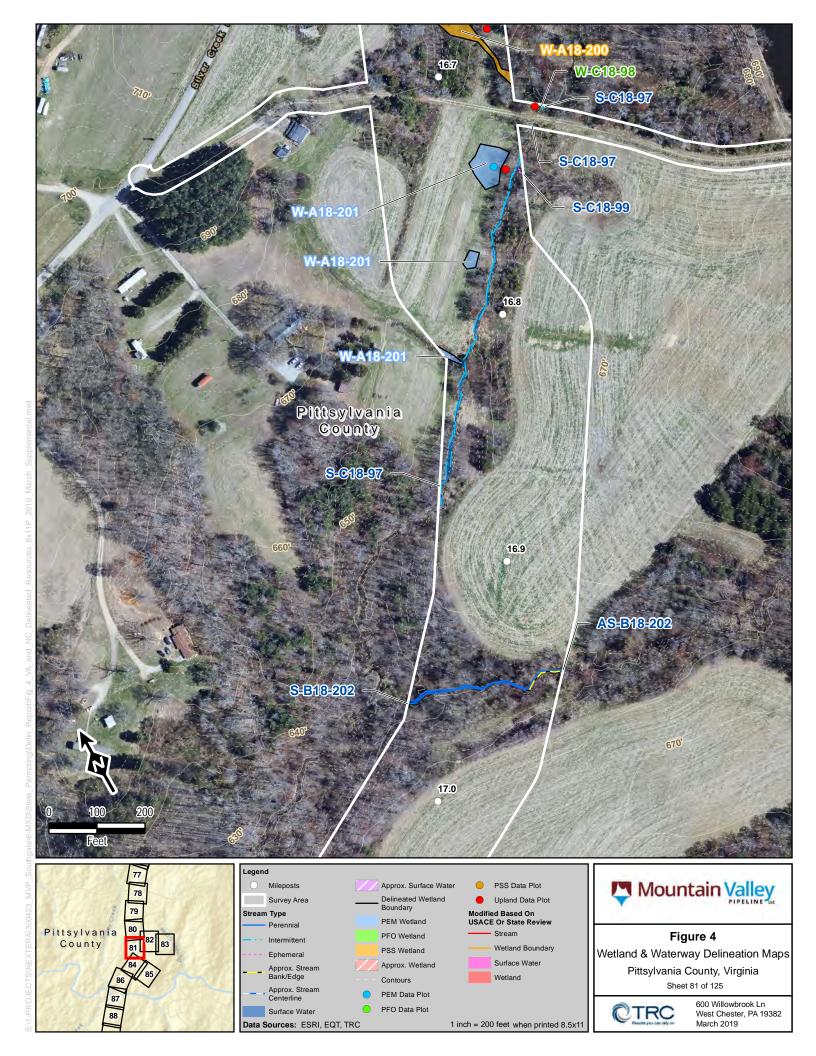


1 inch = 200 feet when printed 8.5x11

March 2019

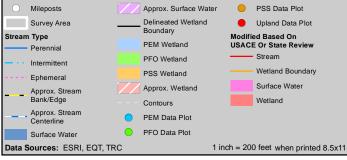
Data Sources: ESRI, EQT, TRC

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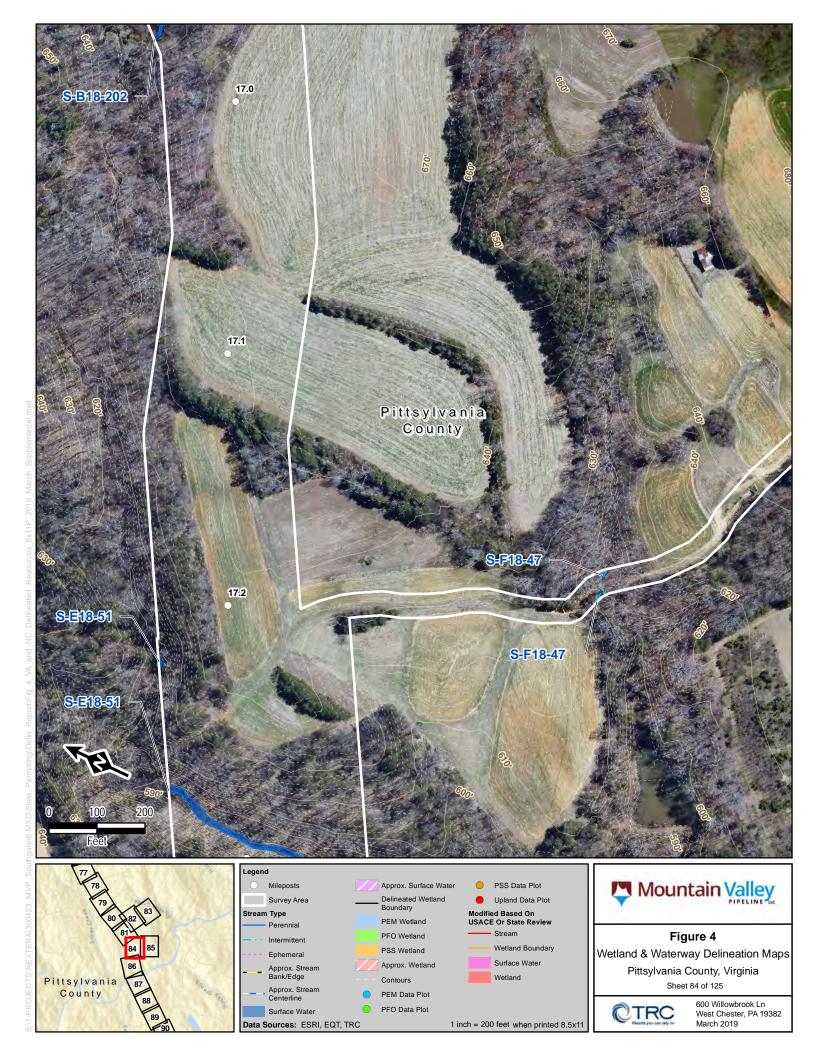


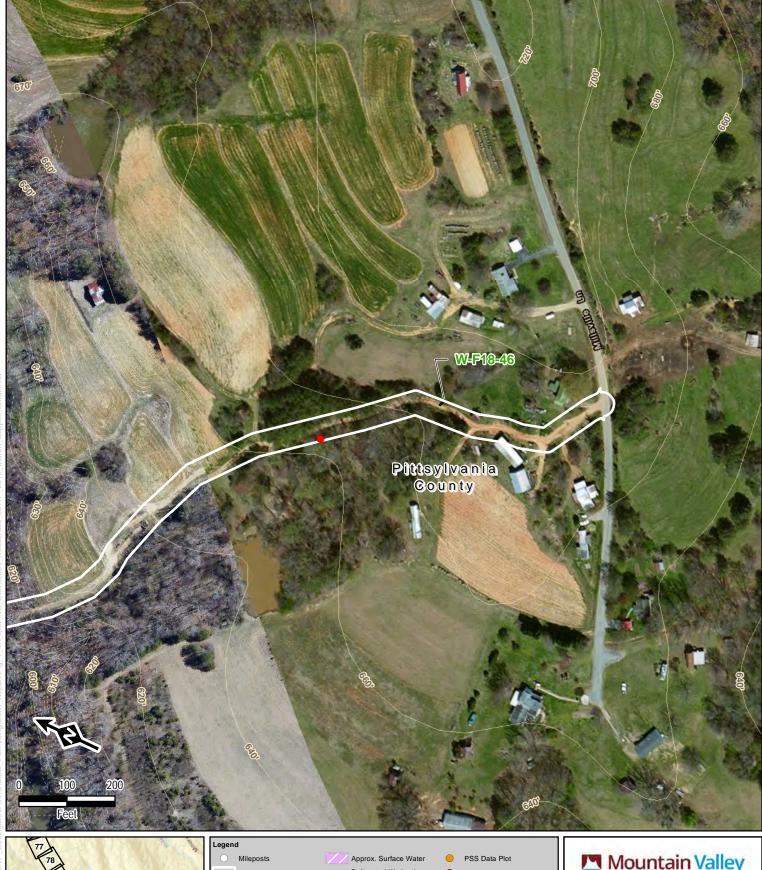


Wetland & Waterway Delineation Maps
Pittsylvania County, Virginia
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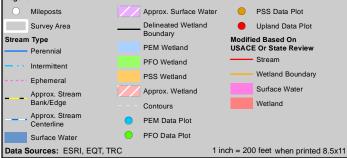








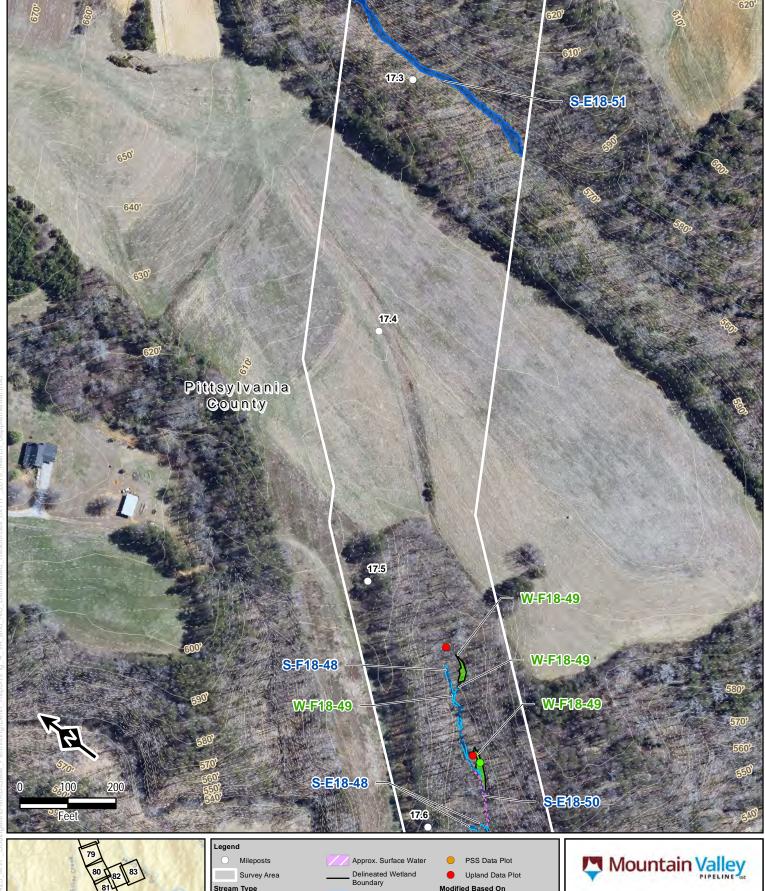




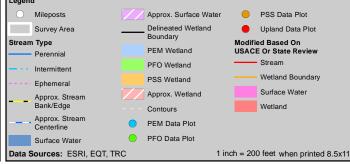


Wetland & Waterway Delineation Maps Pittsylvania County, Virginia Sheet 85 of 125



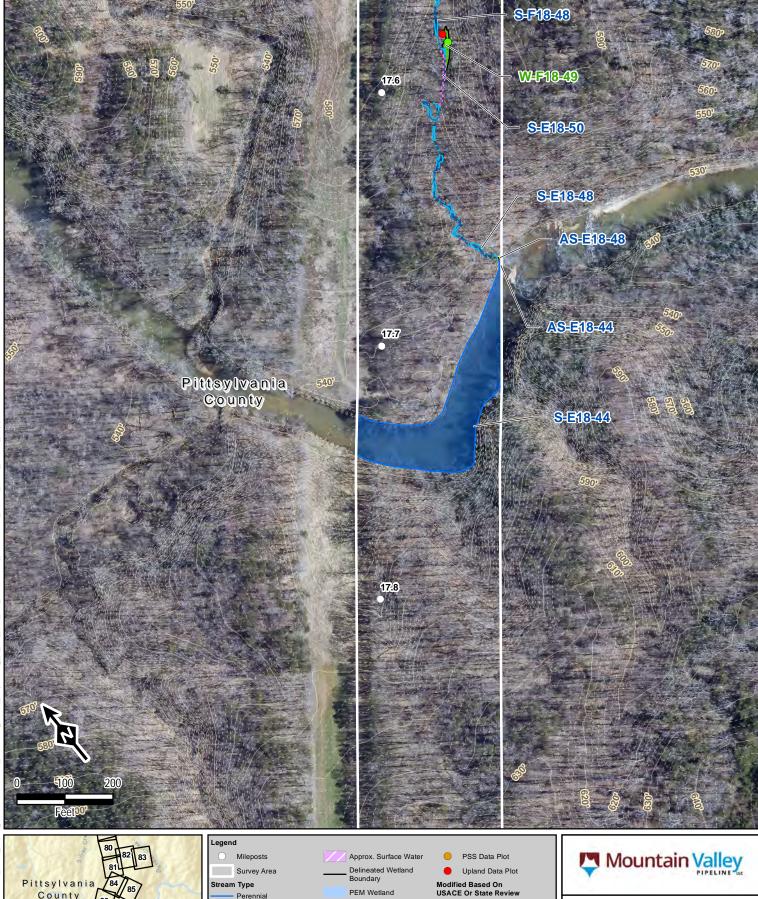


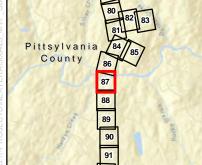


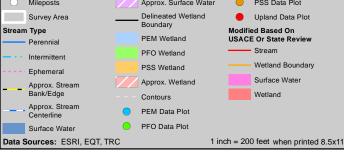


Wetland & Waterway Delineation Maps
Pittsylvania County, Virginia
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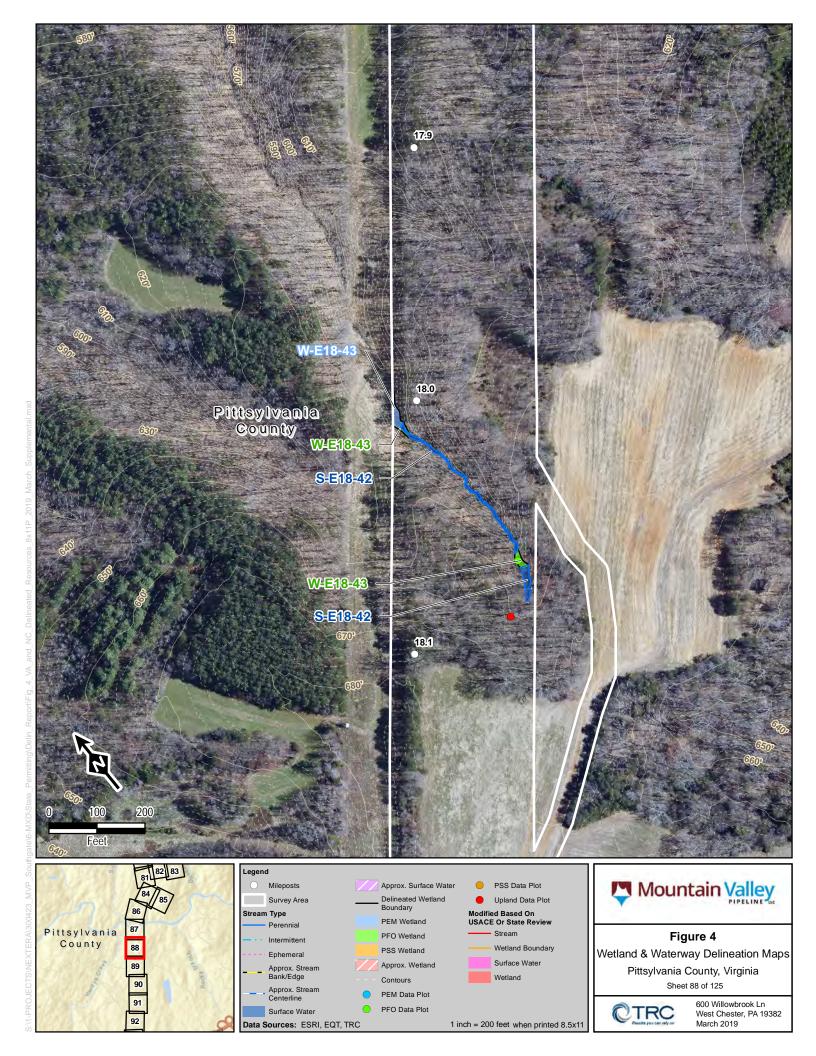






Wetland & Waterway Delineation Maps
Pittsylvania County, Virginia
Sheet 87 of 125







PFO Wetland Wetland Boundary PSS Wetland Ephemeral Surface Water Approx. Wetland Approx. Stream Bank/Edge Wetland Contours Approx. Stream PEM Data Plot PFO Data Plot Surface Water Data Sources: ESRI, EQT, TRC 1 inch = 200 feet when printed 8.5x11

89

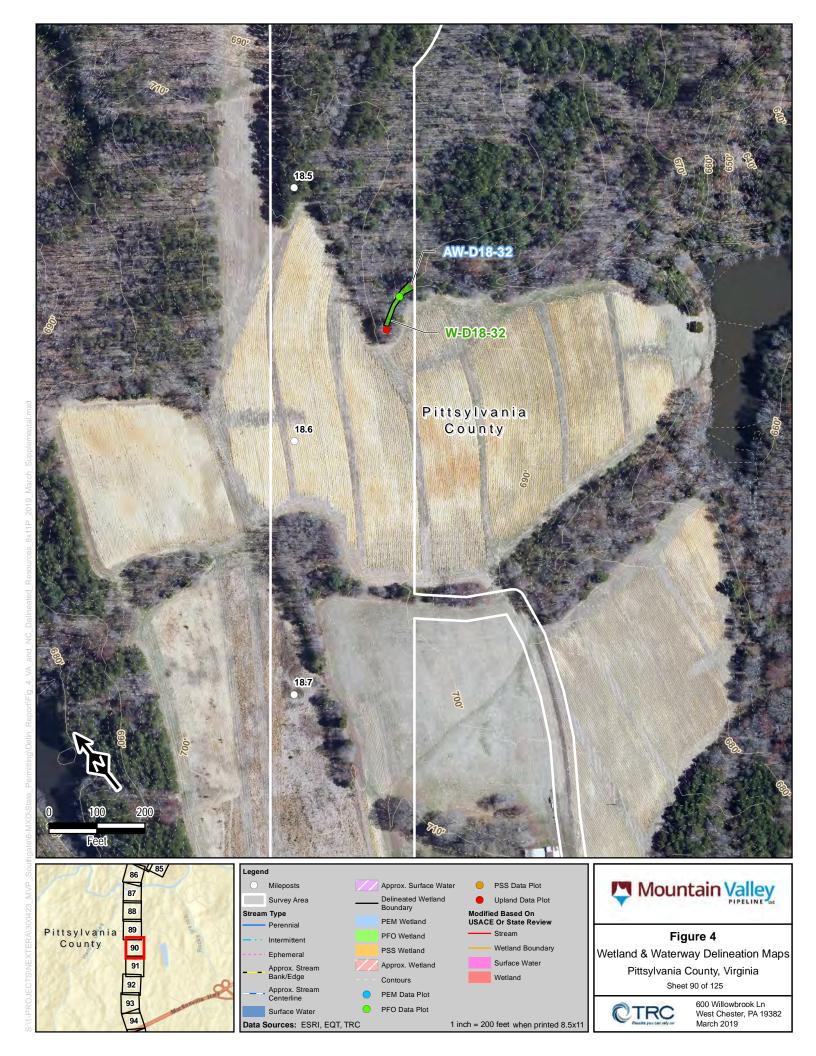
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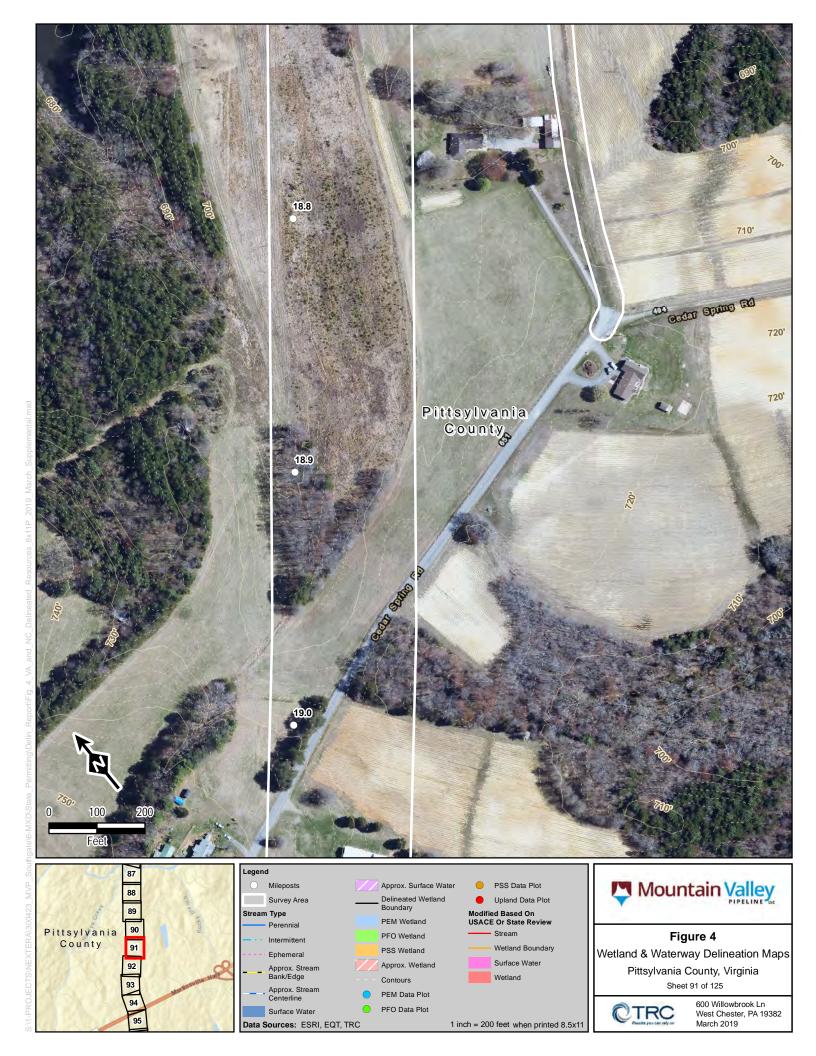
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Figure 4

Wetland & Waterway Delineation Maps Pittsylvania County, Virginia Sheet 89 of 125









CTRC

Wetland

1 inch = 200 feet when printed 8.5x11

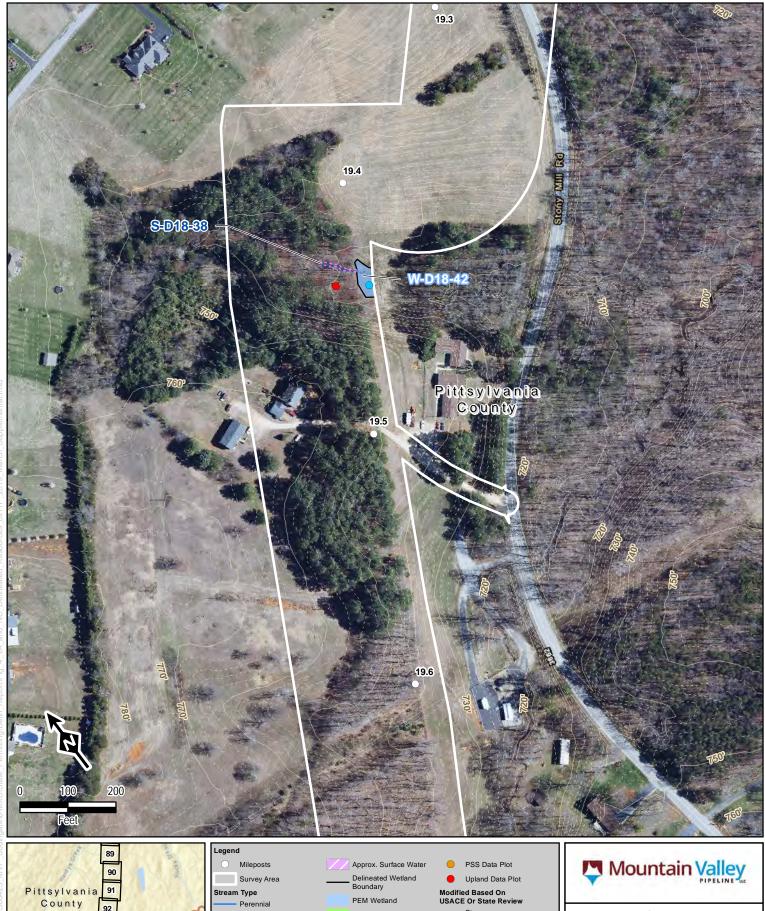
Contours

PEM Data Plot

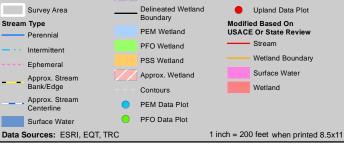
PFO Data Plot

Approx. Stream

Surface Water Data Sources: ESRI, EQT, TRC Pittsylvania County, Virginia Sheet 92 of 125





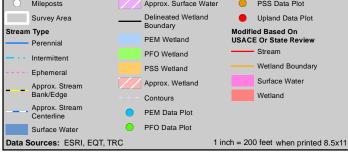


Wetland & Waterway Delineation Maps
Pittsylvania County, Virginia
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Wetland & Waterway Delineation Maps Pittsylvania County, Virginia Sheet 94 of 125





Approx. Wetland

PEM Data Plot

PFO Data Plot

Contours

Wetland

1 inch = 200 feet when printed 8.5x11

Approx. Stream Bank/Edge

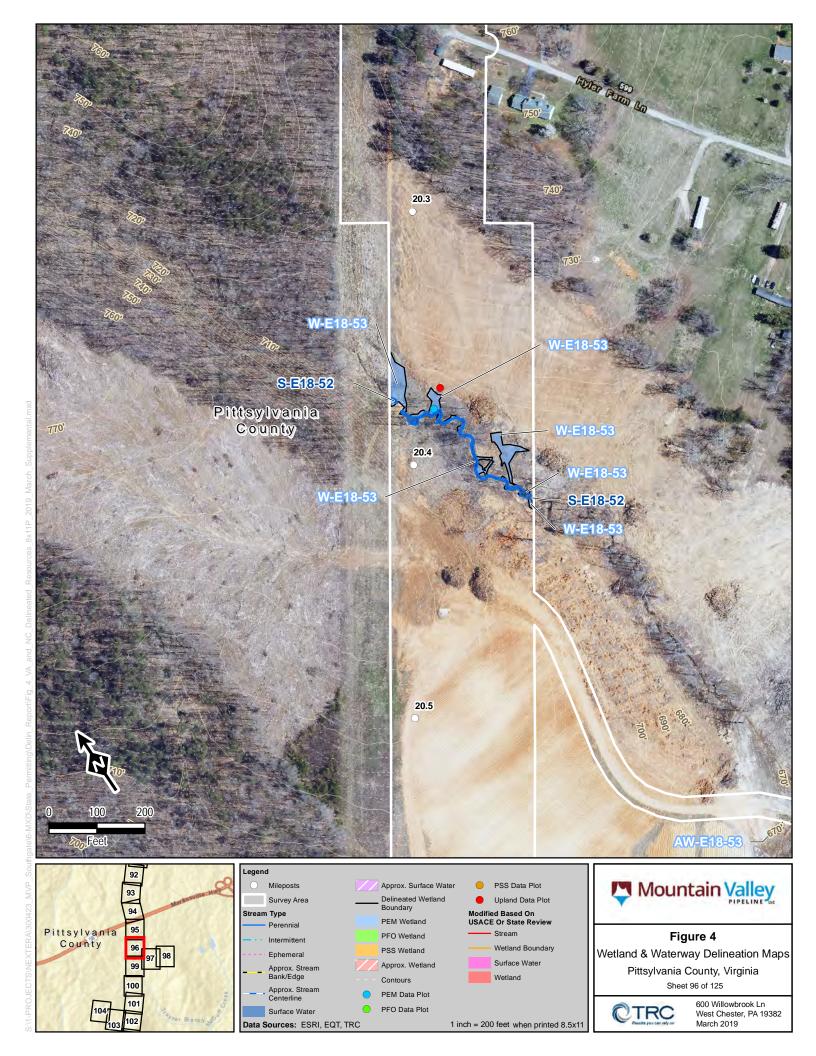
Approx. Stream

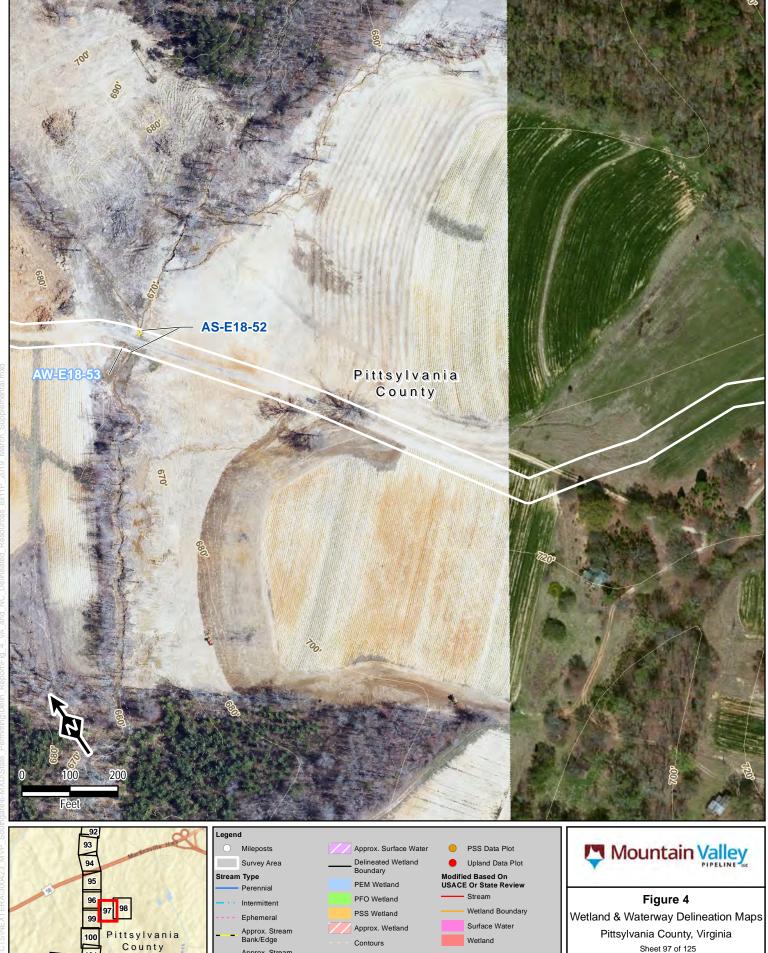
Surface Water Data Sources: ESRI, EQT, TRC

100

Pittsylvania County, Virginia Sheet 95 of 125

CTRC





PEM Data Plot

PFO Data Plot

1 inch = 200 feet when printed 8.5x11

600 Willowbrook Ln West Chester, PA 19382 March 2019

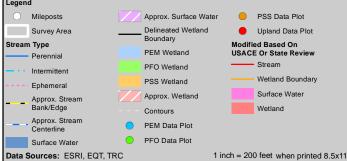
CTRC

Approx. Stream

Surface Water Data Sources: ESRI, EQT, TRC

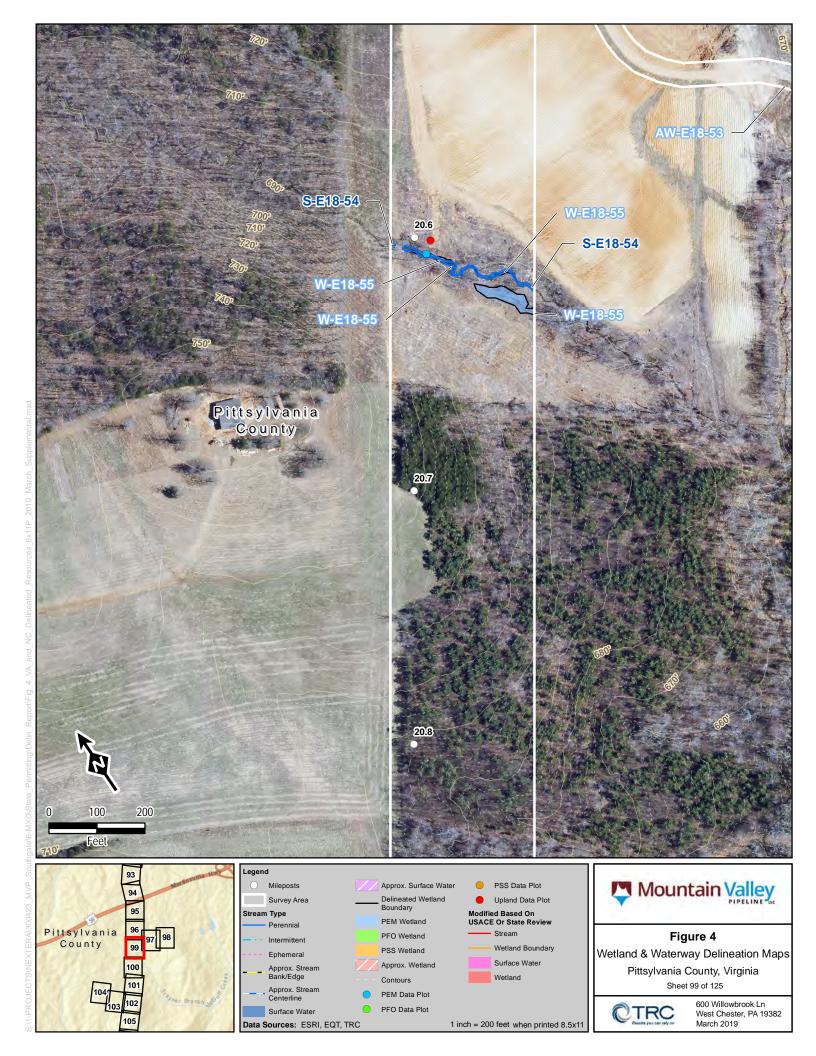


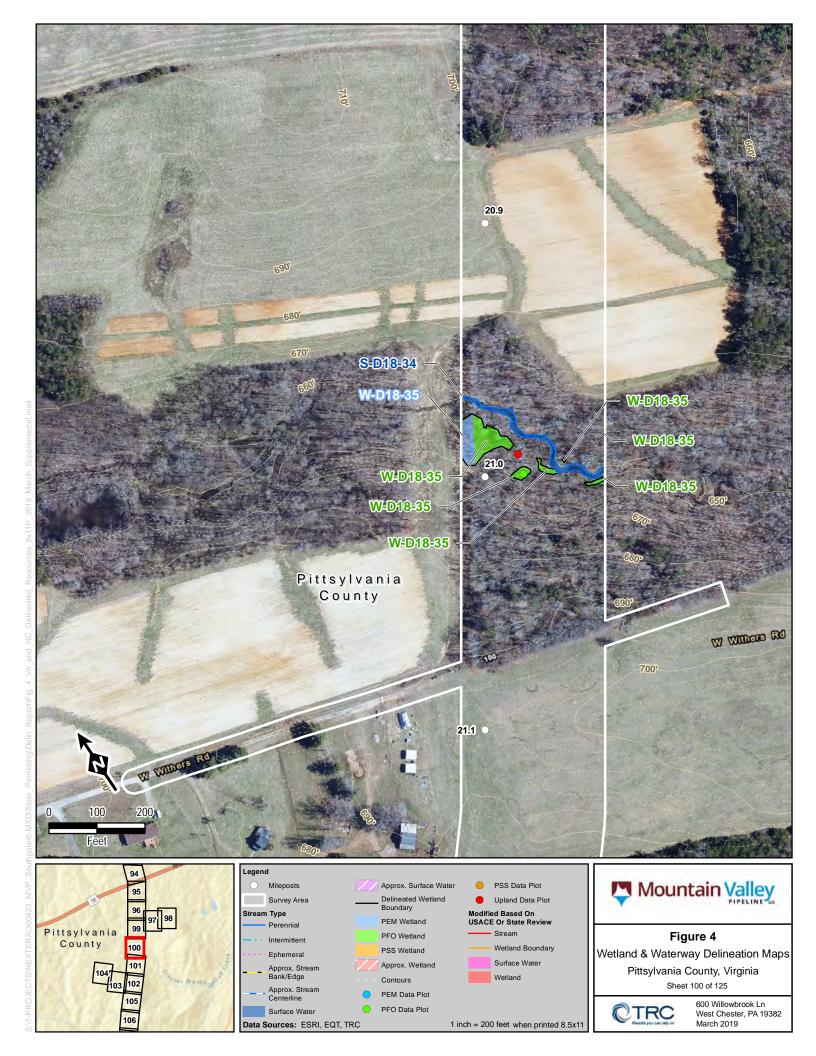


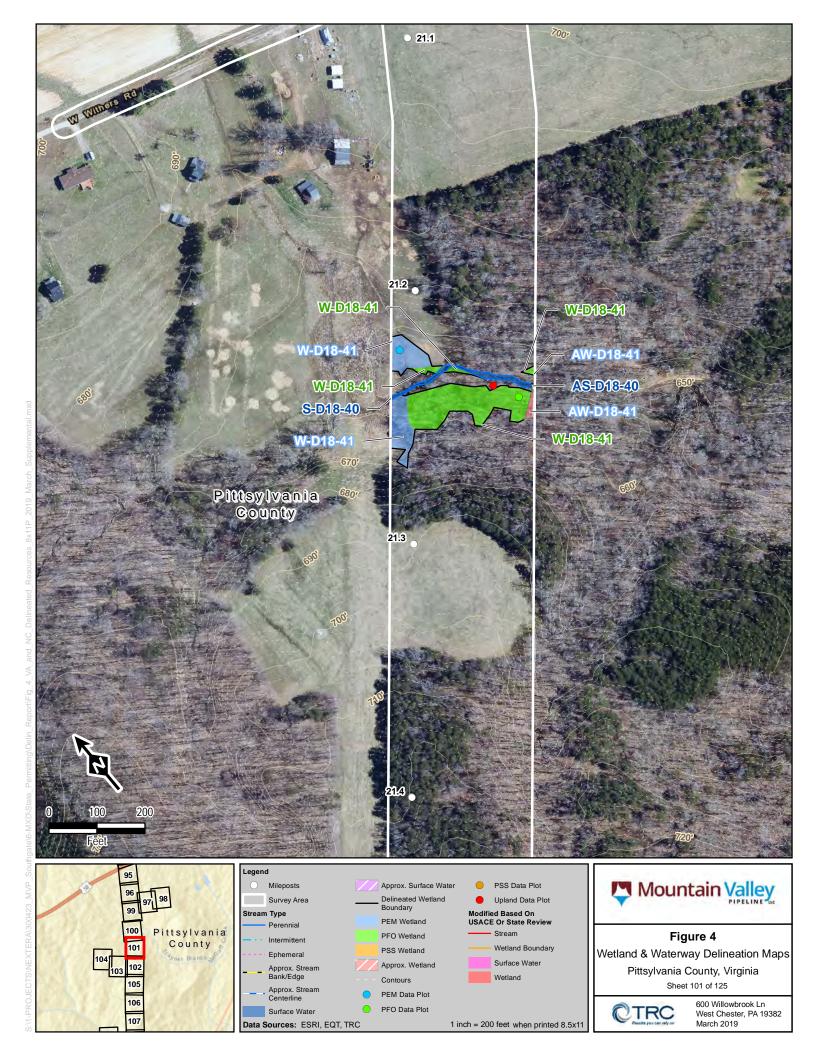


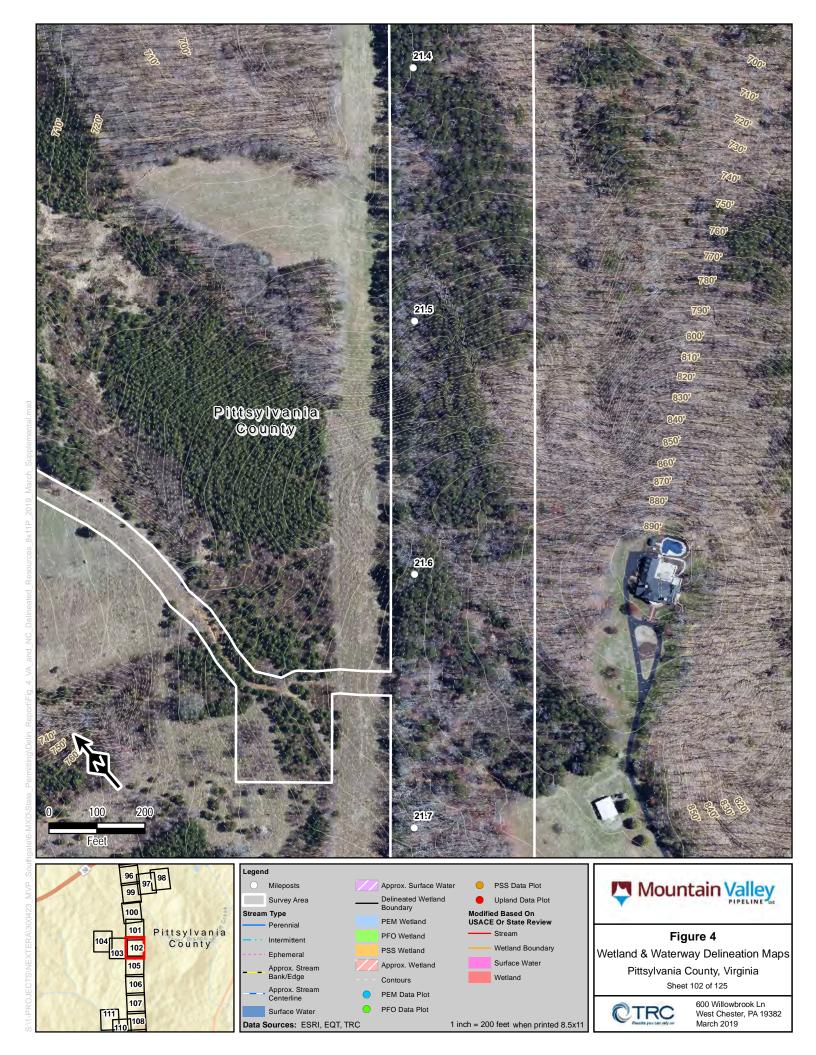
Wetland & Waterway Delineation Maps
Pittsylvania County, Virginia
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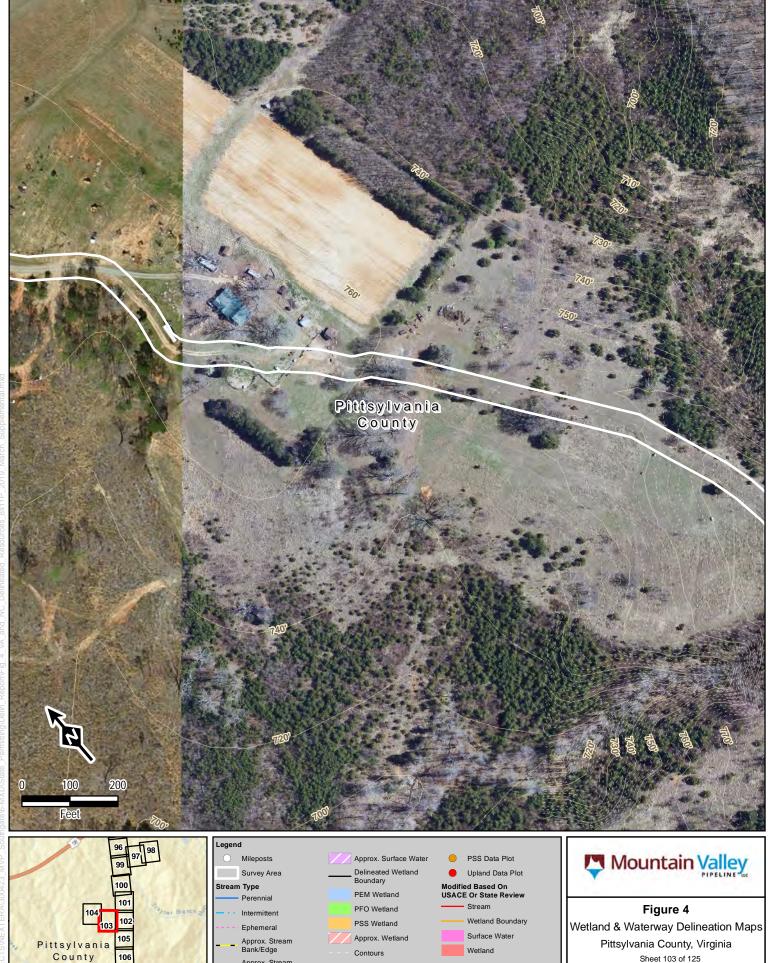












PEM Data Plot

PFO Data Plot

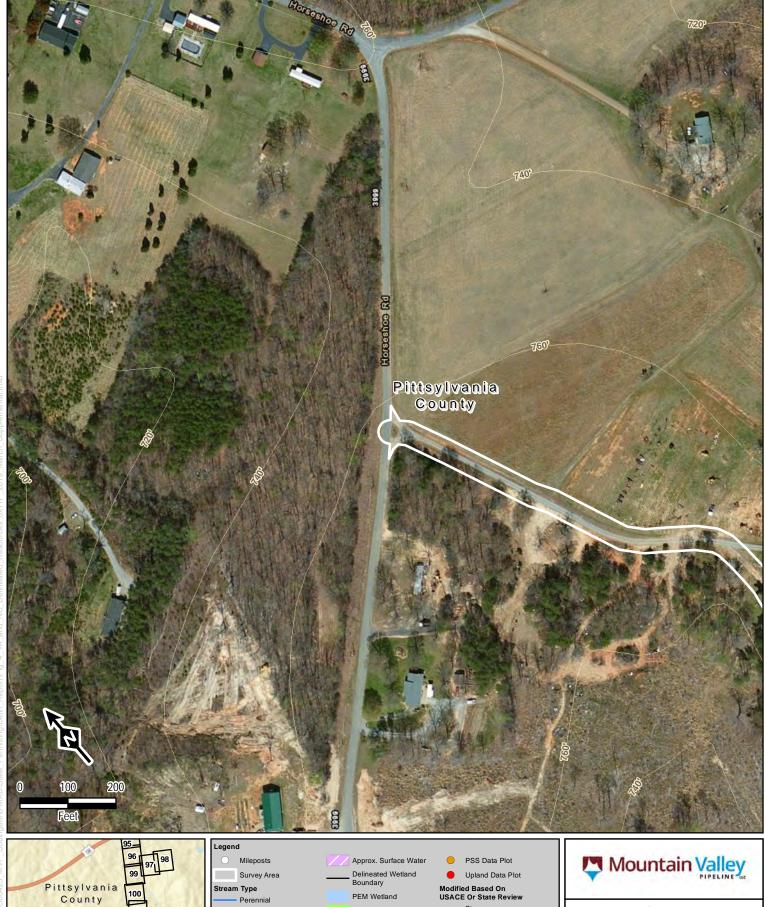
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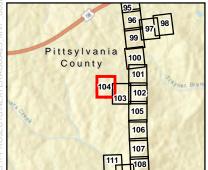
600 Willowbrook Ln West Chester, PA 19382 March 2019

CTRC

Approx. Stream

Surface Water Data Sources: ESRI, EQT, TRC





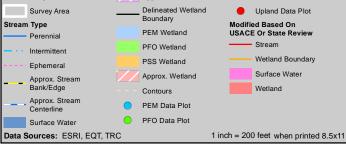


Figure 4

Wetland & Waterway Delineation Maps
Pittsylvania County, Virginia
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600 Willowbrook Ln West Chester, PA 19382 March 2019



Approx. Wetland

PEM Data Plot

PFO Data Plot

Contours

Approx. Stream Bank/Edge

Approx. Stream

Surface Water

Data Sources: ESRI, EQT, TRC

Surface Water

1 inch = 200 feet when printed 8.5x11

Wetland

Pittsylvania County, Virginia

CTRC

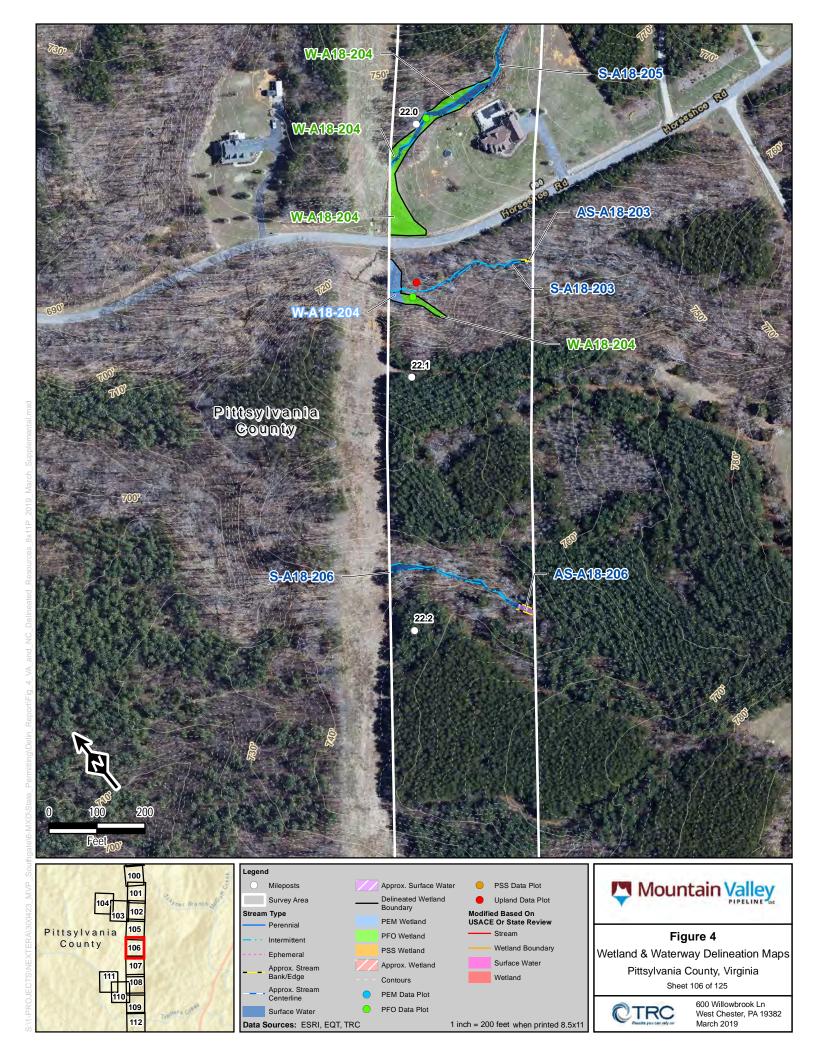
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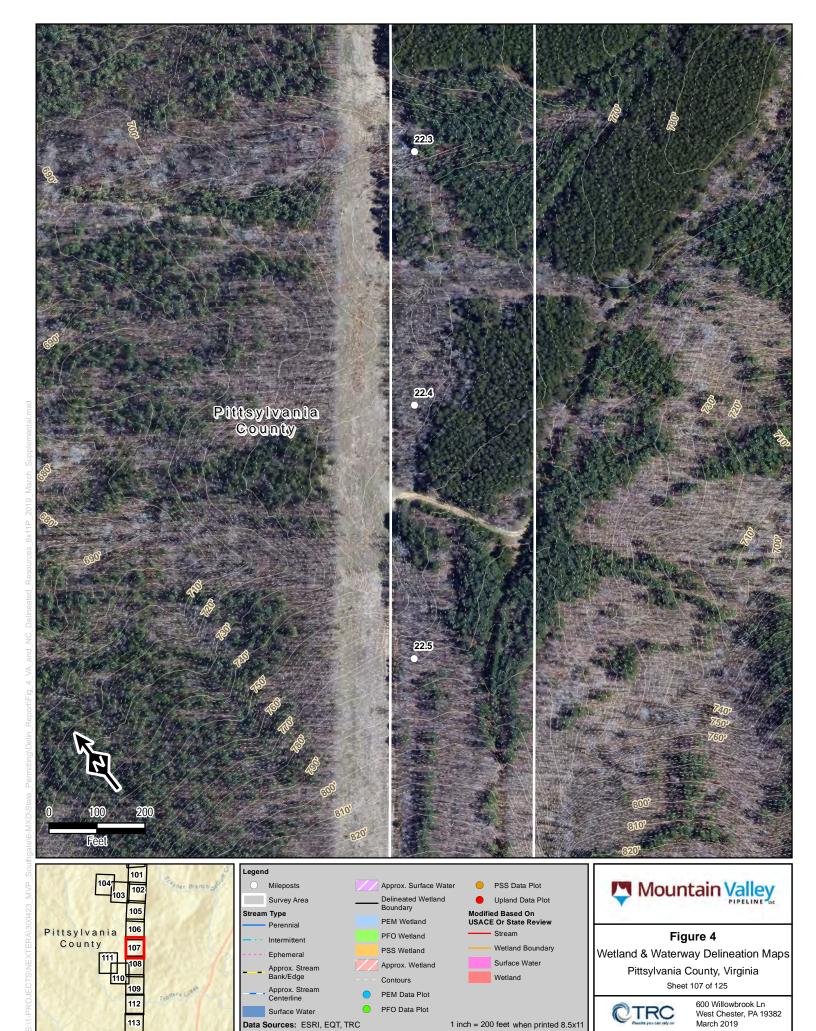
600 Willowbrook Ln

March 2019

West Chester, PA 19382

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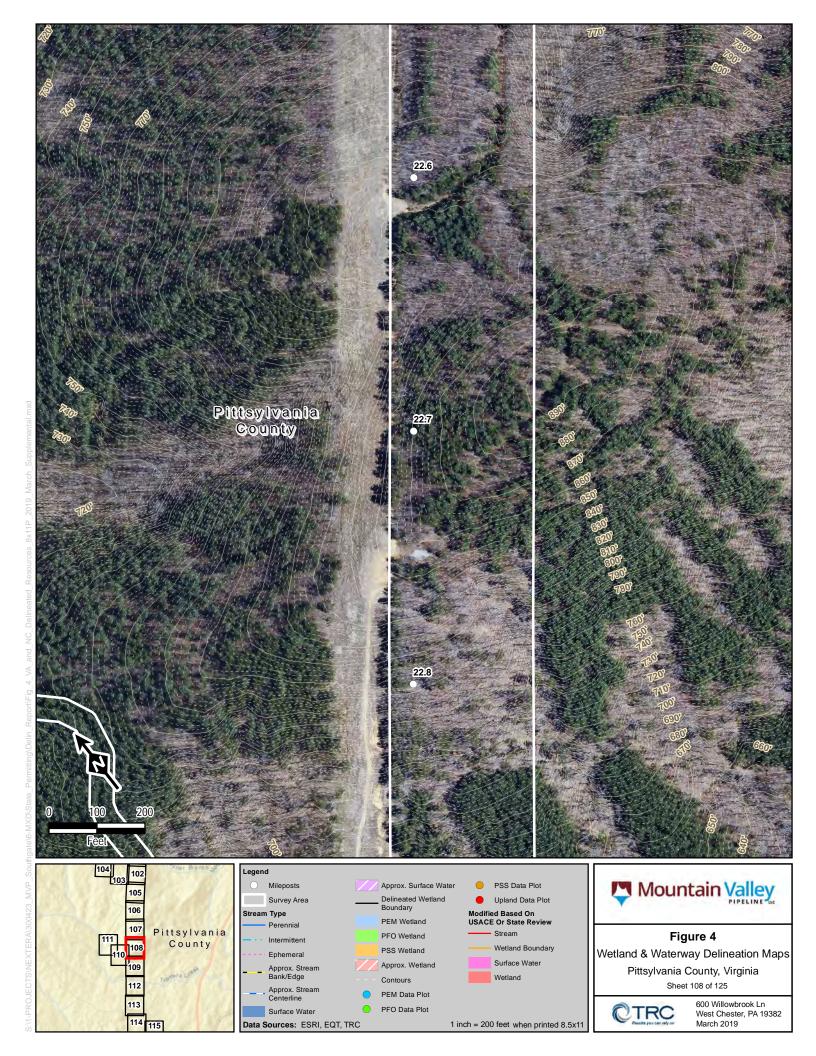


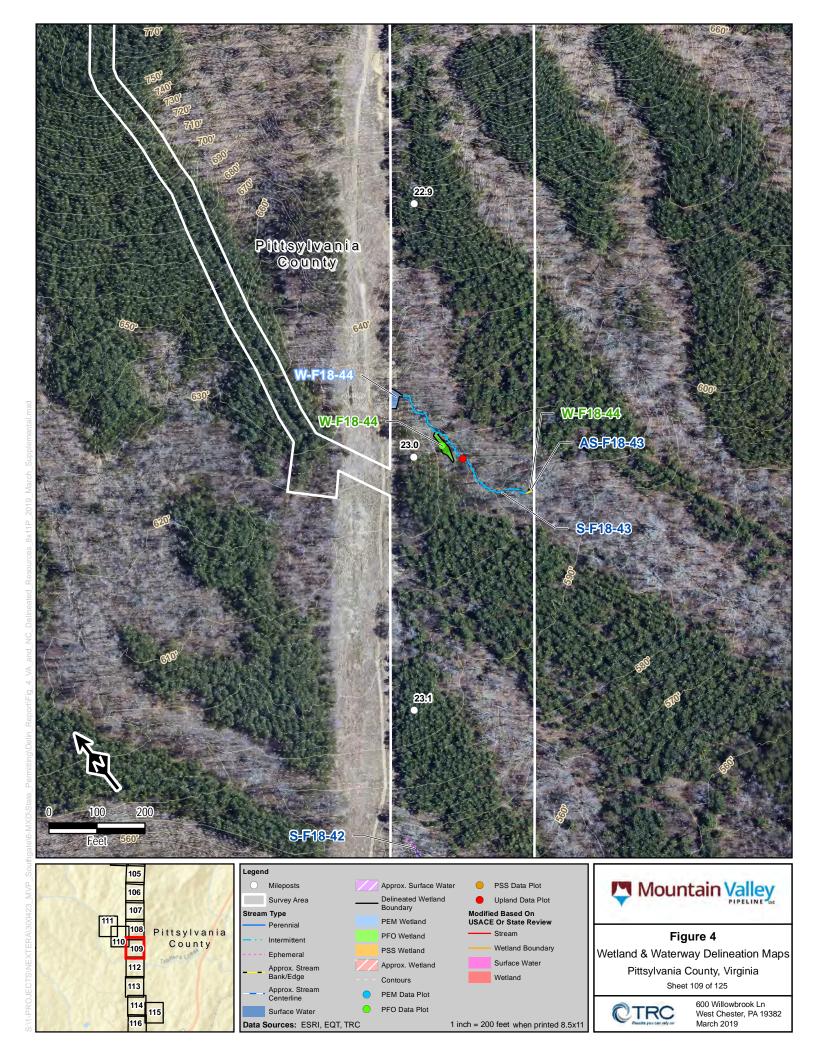


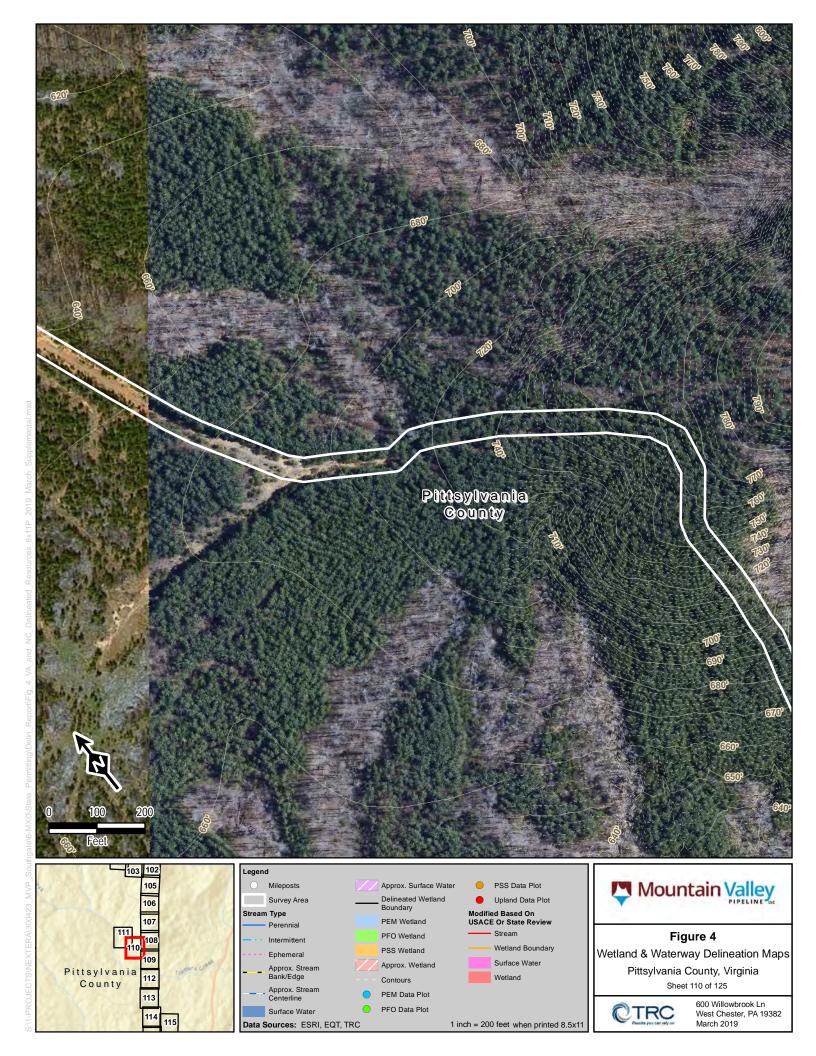
PFO Data Plot

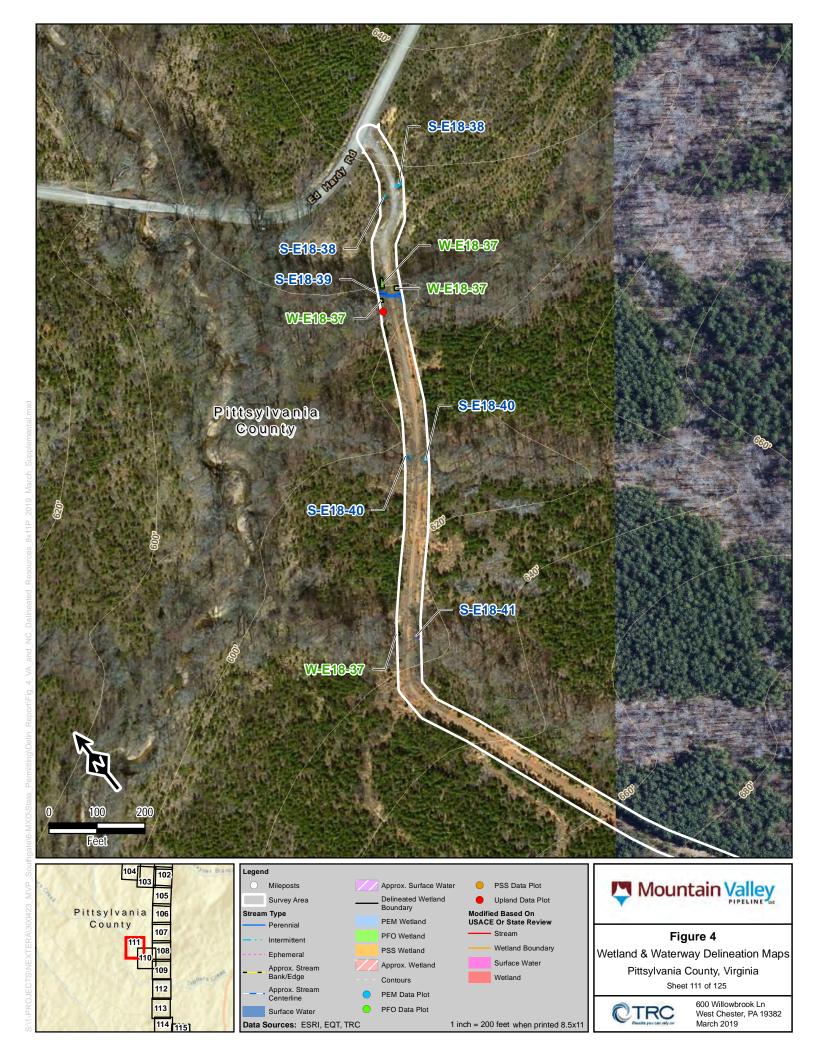
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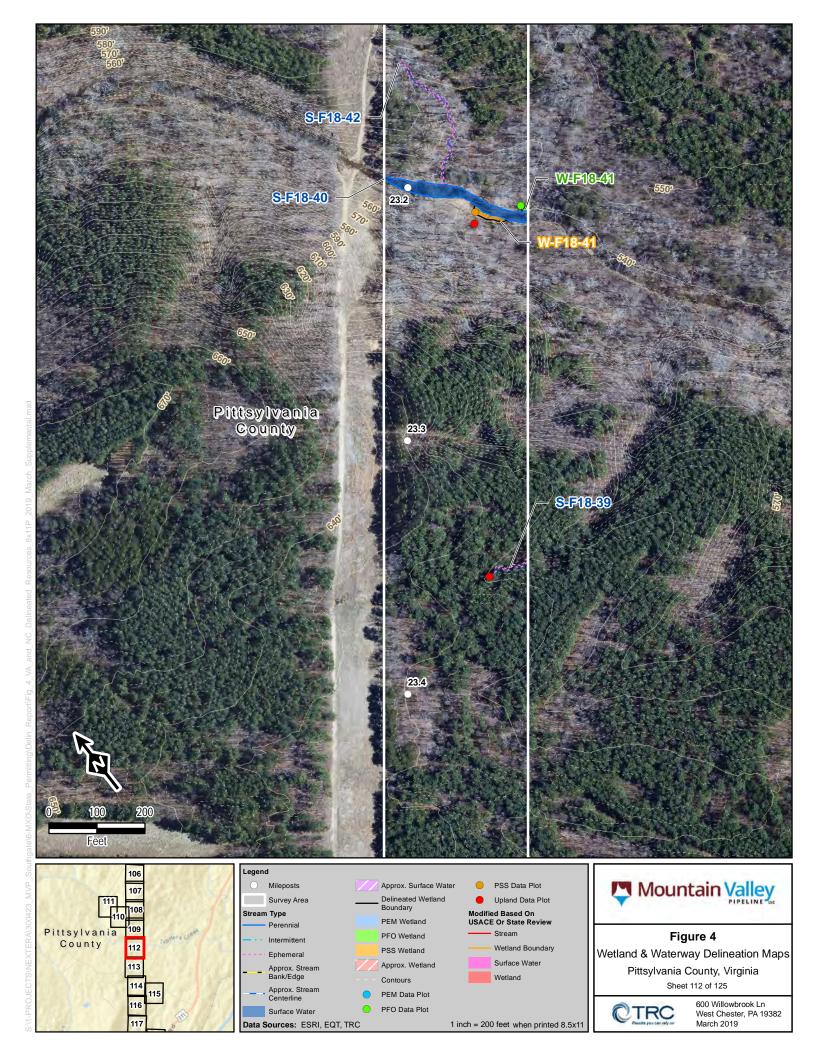
Surface Water Data Sources: ESRI, EQT, TRC **CTRC**

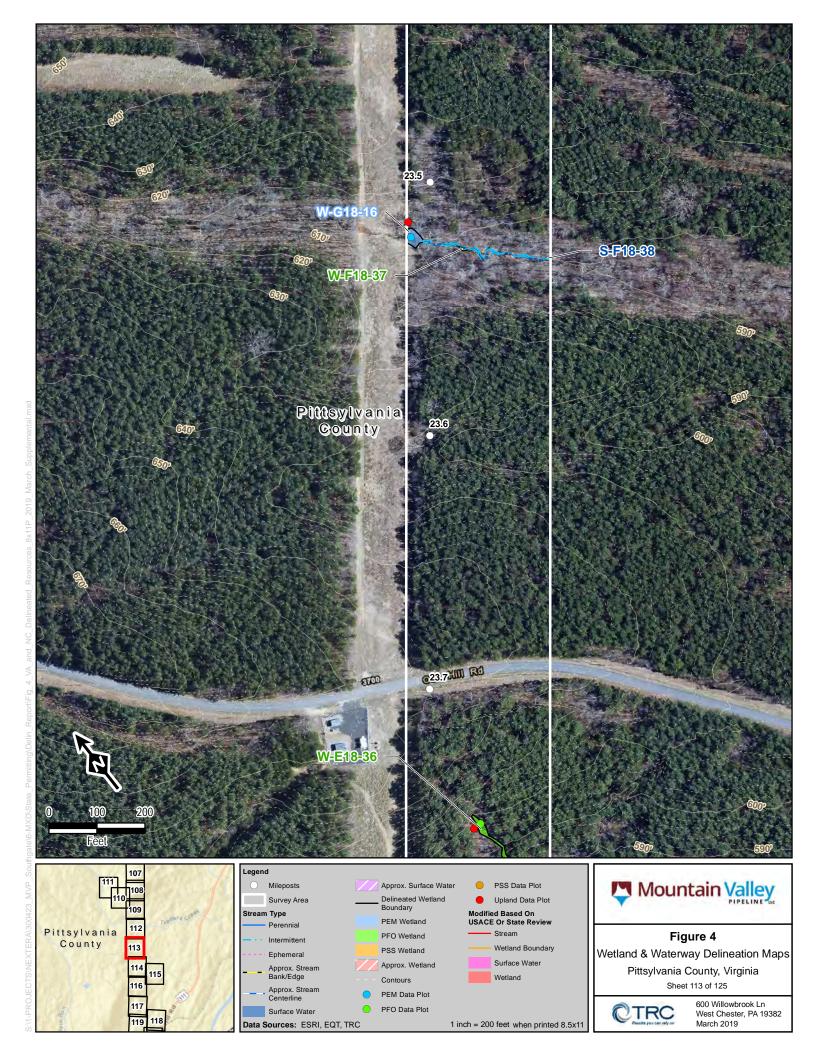


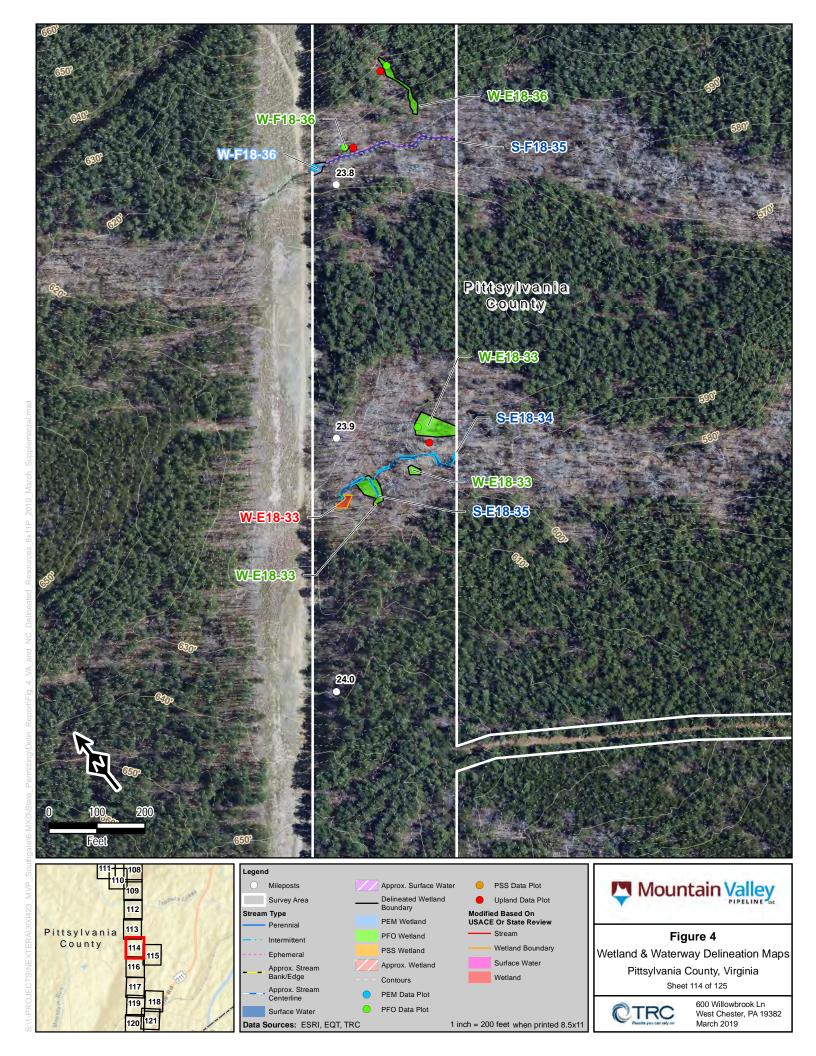


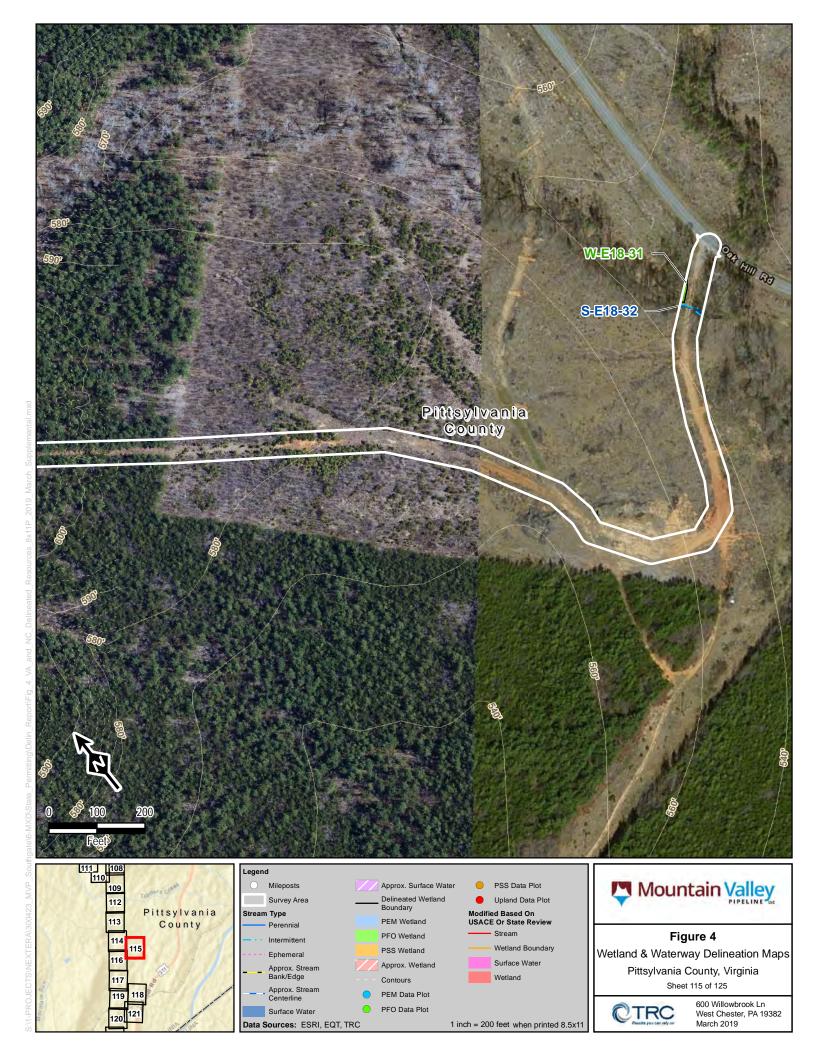


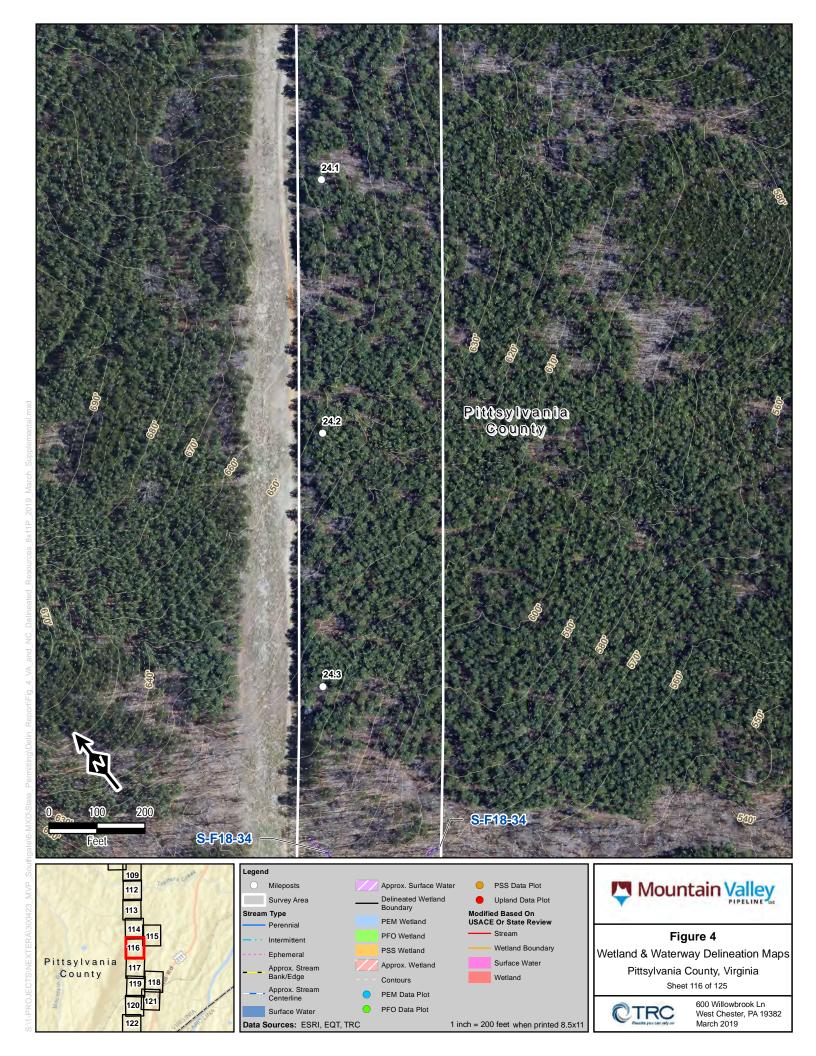




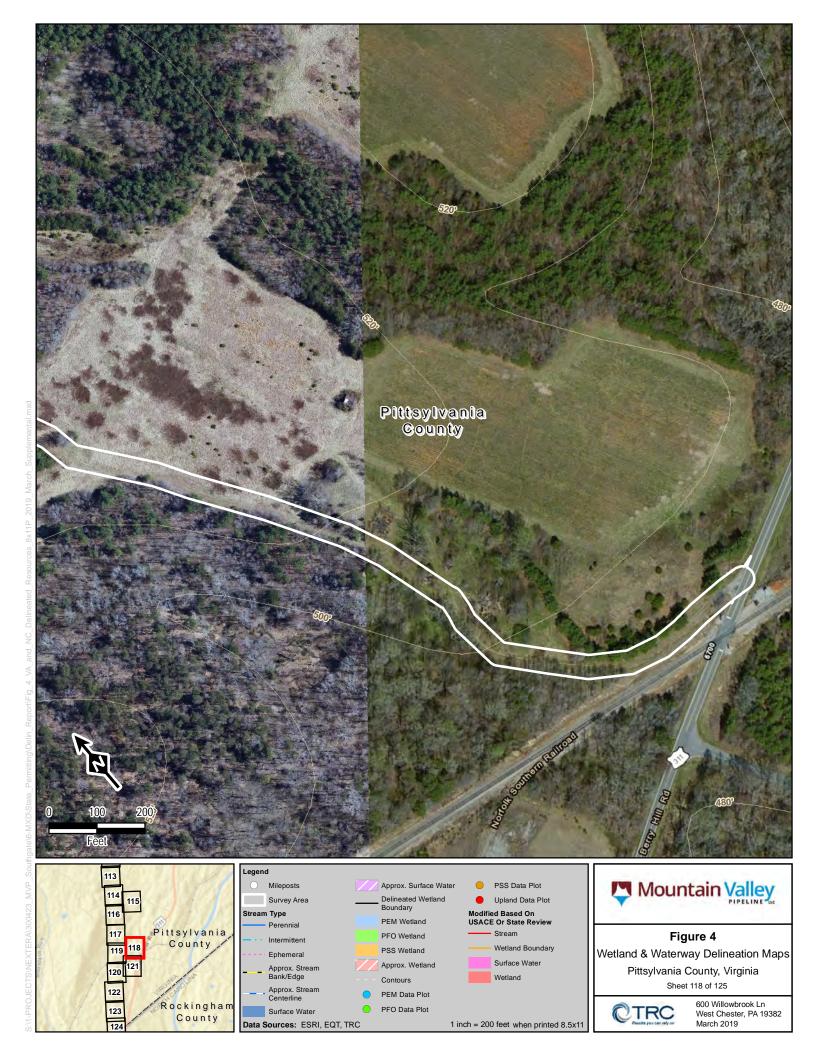


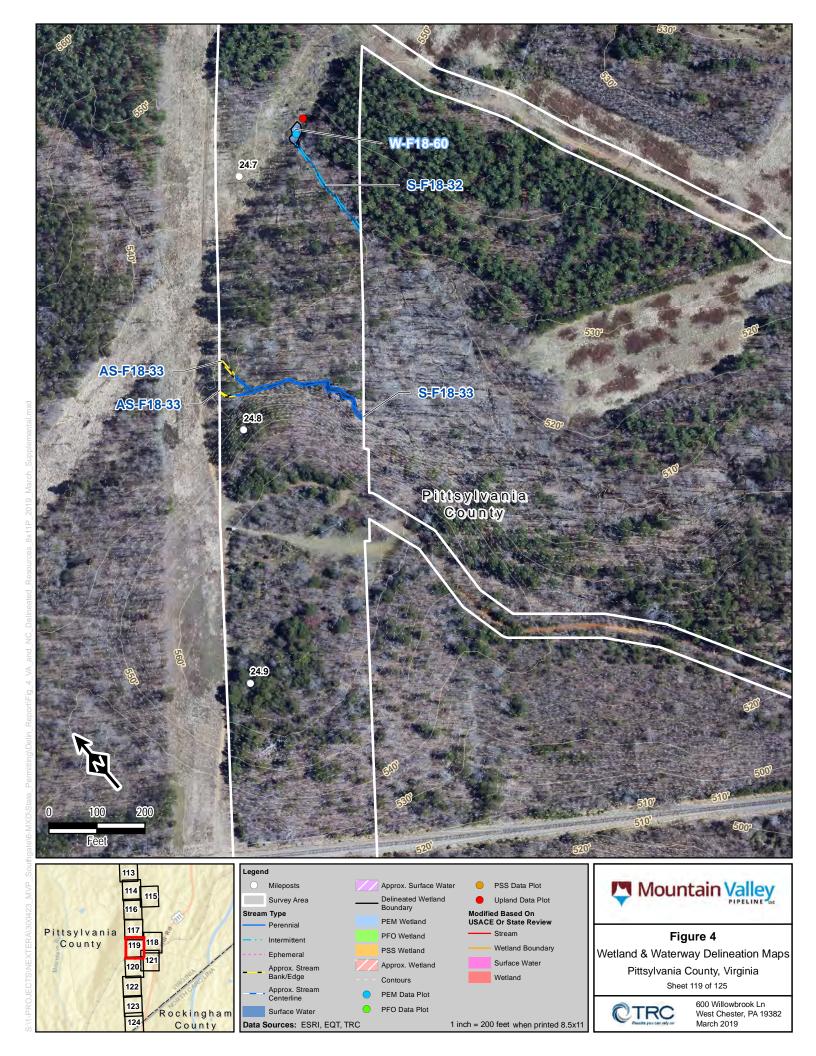


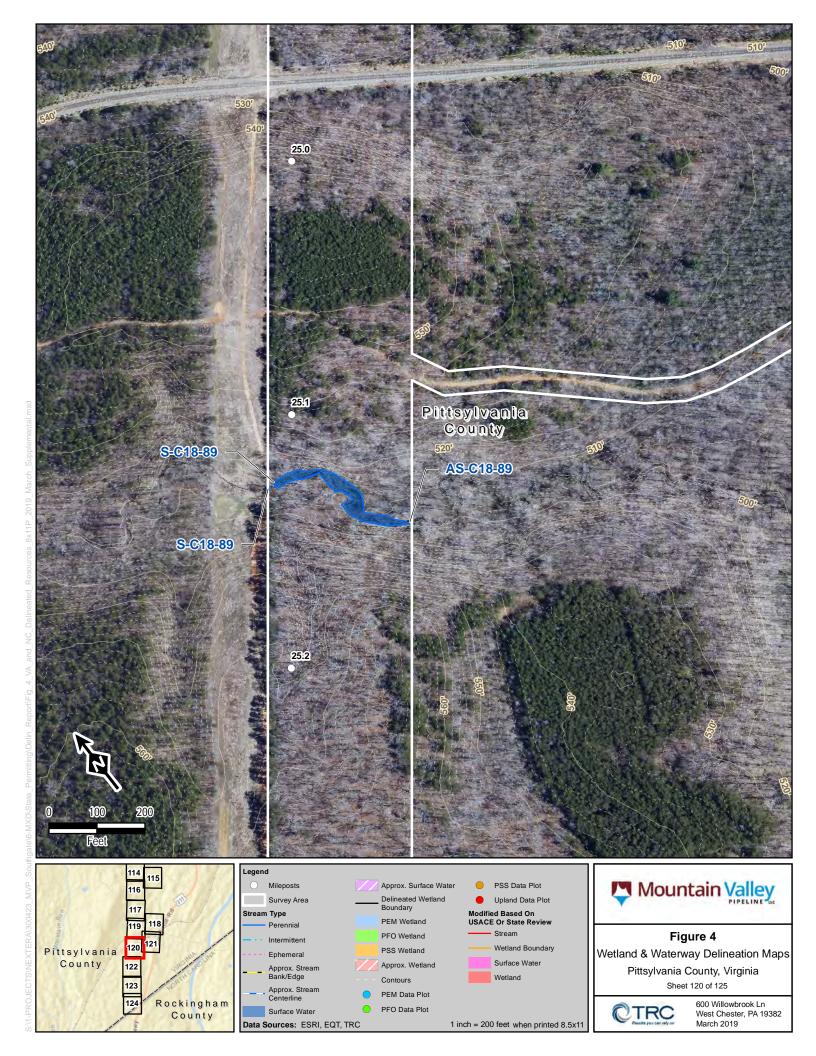






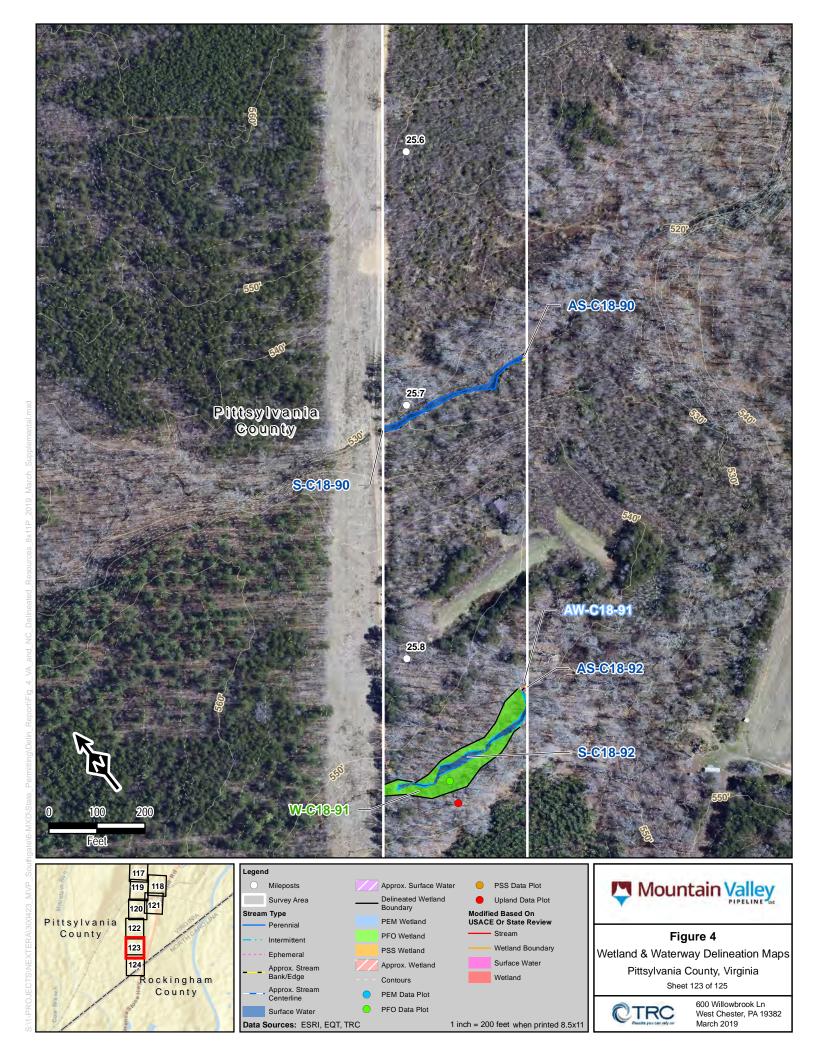












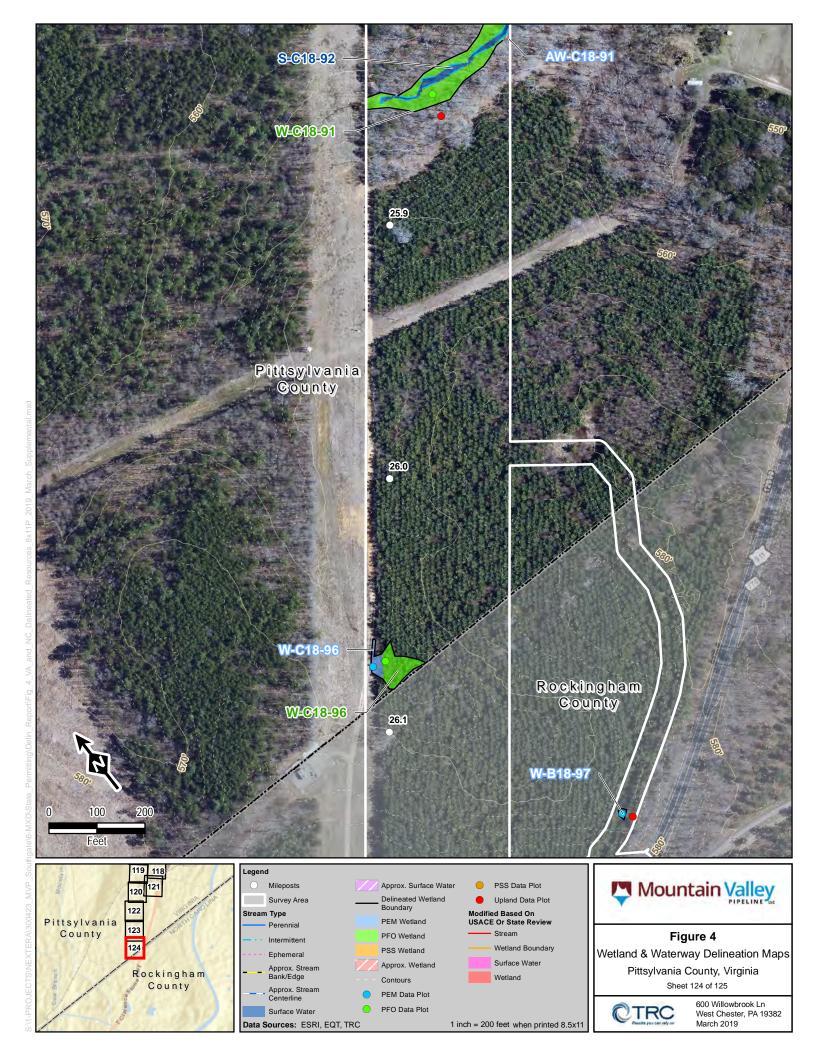










Figure 4

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600 Willowbrook Ln West Chester, PA 19382 March 2019