

**From:** [Stahl, Megan D.](#)  
**To:** [Lennon, Tiernan](#)  
**Subject:** RE: MVP Remaining Plant Surveys  
**Date:** Thursday, August 3, 2017 12:14:37 PM

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Thanks Tiernan. I appreciate the quick response!

**From:** Lennon, Tiernan [mailto:[tiernan\\_lennon@fws.gov](mailto:tiernan_lennon@fws.gov)]  
**Sent:** Thursday, August 03, 2017 11:51 AM  
**To:** Stahl, Megan D. <[MStahl@eqt.com](mailto:MStahl@eqt.com)>  
**Cc:** Jennifer Stanhope <[jennifer\\_stanhope@fws.gov](mailto:jennifer_stanhope@fws.gov)>; Taina Pankiewicz <[TPankiewicz@envsi.com](mailto:TPankiewicz@envsi.com)>  
**Subject:** Re: MVP Remaining Plant Surveys

Megan - That is correct.

On Thu, Aug 3, 2017 at 10:05 AM, Stahl, Megan D. <[MStahl@eqt.com](mailto:MStahl@eqt.com)> wrote:

Jen and Tiernan,  
As I mentioned, we plan to file this plant survey report with FERC. It is my understanding this does not need to be filed as privileged because there are no positive sensitive species locations identified. Can you confirm that is correct? We plan to file it today.  
Thanks,  
Megan

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**From:** Stahl, Megan D.  
**Sent:** Wednesday, August 02, 2017 4:27 PM  
**To:** 'Lennon, Tiernan' <[tiernan\\_lennon@fws.gov](mailto:tiernan_lennon@fws.gov)>  
**Cc:** 'Jennifer Stanhope' <[jennifer\\_stanhope@fws.gov](mailto:jennifer_stanhope@fws.gov)>; 'Taina Pankiewicz' <[TPankiewicz@envsi.com](mailto:TPankiewicz@envsi.com)>  
**Subject:** RE: MVP Remaining Plant Surveys

Jen and Tiernan,  
The updated plant survey letter report for MVP is attached for your review. This will be filed with FERC this week. As discussed with Tiernan, I removed specific AMM for SWP from this report, but can send a draft of MVP's proposed AMM separately for your review and comment.  
Please let me know if you have questions or need anything else.  
Thanks,  
Megan

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**From:** Stahl, Megan D.  
**Sent:** Monday, July 24, 2017 3:13 PM  
**To:** 'Lennon, Tiernan' <[tiernan\\_lennon@fws.gov](mailto:tiernan_lennon@fws.gov)>  
**Cc:** Jennifer Stanhope <[jennifer\\_stanhope@fws.gov](mailto:jennifer_stanhope@fws.gov)>  
**Subject:** MVP Remaining Plant Surveys

Tiernan,

As we discussed during our meeting last week, I am providing shape files (attached) for the parcels associated with remaining plant surveys for MVP.

We are working on the updated plant survey report to provide the status of surveys since the BA was submitted. Please let me know if your review of the remaining survey parcel data versus your modeled habitat data indicates that SWP can be ruled out. Otherwise we will plan to include conservation measures that were discussed during the meeting for SWP. On that note, please provide the list of conservation measures you presented if possible.

Also, Jen mentioned that if SWP is found and cannot be translocated that we may be able to donate it for research. Let me know if you find anything out about whether that is an option.

Thank you,  
Megan

Megan Stahl  
Permitting Supervisor  
625 Liberty Avenue, Suite 1700  
Pittsburgh, PA 15222  
T 412-553-7783  
C 412-737-2587



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**Tiernan Lennon**  
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West Virginia Field Office  
U.S. Fish and Wildlife Service  
694 Beverly Pike  
Elkins, WV 26241  
304-636-6586 Ext. 12  
Fax: 304-636-7824  
[Tiernan\\_Lennon@fws.gov](mailto:Tiernan_Lennon@fws.gov)



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4525 Este Avenue  
Cincinnati, OH 45232  
Phone: 513-451-1777 Fax: 513-451-3321

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August 2, 2017

Mr. Troy Andersen  
U.S. Fish & Wildlife Service  
Virginia Field Office  
6669 Short Lane  
Gloucester, VA 23061

Ms. S. Rene' Hypes  
Dept. of Conservation and Recreation  
600 East Main Street, 24th Floor  
Richmond, VA 23219

Ms. Tiernan Lennon and  
Mr. John Schmidt  
U.S. Fish & Wildlife Service  
West Virginia Field Office  
694 Beverly Pike  
Elkins, WV 26241

Mr. Craig Stihler and  
Ms. Barbara Sargent  
WV Division of Natural Resources  
Ward Road, Box 67  
Elkins, WV 26241

Dear Sirs and Madams:

**RE: Field surveys for rare plants along the Proposed Mountain Valley Pipeline in Virginia and West Virginia.**

This letter is an addendum to the plant survey reports submitted for the above referenced project on November 13, 2015, November 8, 2016 (WV), and November 21, 2016 (VA). Since submission of reports in November 2016, MVP adopted a minor route variation (Variation 250) shown on Figures 1 and 2. In addition, during 2017, listed plant surveys were conducted along the revised alignment segment, as well as in areas along the remainder of the alignment where land access was previously unavailable. Details regarding these field surveys are shown below in Table 1 and on Figure 3.

**[www.ENVSI.com](http://www.ENVSI.com)**

Seven parcels were assessed for smooth coneflower (*Echinacea laevigata*) and three parted violet (*Viola tripartita*) in Virginia (Table 1). No potentially suitable habitat was observed for three parted violet; however, two parcels had potentially suitable habitat for smooth coneflower. These parcels were surveyed on June 17 during the appropriate survey window. No individuals were observed.

Two parcels were assessed for running buffalo clover (*Trifolium stoloniferum*) in West Virginia (Table 1). Potentially suitable habitat was observed and surveys were completed on June 28 during the appropriate survey window. No individuals were observed.

Three parcels were assessed for small whorled pogonia (*Isotria medeoloides*) and shale barren rock cress (*Arabis serotina*) in West Virginia (Table 1). No potentially suitable habitat was observed for shale barren rock cress; however, the parcels had potentially suitable habitat for small whorled pogonia. These parcels were surveyed on July 18 during the appropriate survey window. No individuals were observed.

Table 1. 2017 Listed Plant Surveys Along the Proposed Mountain Valley Pipeline

Date	Parcel	Species	Suitable Habitat	Individuals Present	Miles	Acres
January 25	VA-MO-053	Smooth Coneflower / Three Parted Violet	N / N	N / N	2.83	61.91
January 25	VA-MO-3370	Smooth Coneflower / Three Parted Violet	N / N	N / N	0.14	7.73
January 25	VA-MO-3369	Smooth Coneflower / Three Parted Violet	N / N	N / N	0.74	22.12
January 30	VA-MO-3371	Smooth Coneflower / Three Parted Violet	N / N	N / N	0.72	17.43
February 15	VA-MO-5511	Smooth Coneflower / Three Parted Violet	N / N	N / N	0.41	7.31
June 17	VA-MO-5516	Smooth Coneflower / Three Parted Violet	Y / N	N / N	0.17	5.84
June 17	VA-MO-5530	Smooth Coneflower / Three Parted Violet	Y / N	N / N	1.66	42.54
June 28	WV-BR-064	Running Buffalo Clover	Y	N	0.12	1.47
June 28	WV-WB-001 (AR WB-120.01)	Running Buffalo Clover	Y	N	0.38	4.59
July 18	WV-GR-045.01	Small Whorled Pogonia / Shale Barren Rock Cress	Y / N	N / N	0.12	4.18
July 18	WV-GR-5470	Small Whorled Pogonia / Shale Barren Rock Cress	Y / N	N / N	0.10	0.79
July 18	WV-GR-5621	Small Whorled Pogonia / Shale Barren Rock Cress	Y / N	N / N	0.09	0.42

As of the date of this letter, plant surveys have been conducted on all project areas identified by state and federal agencies as meriting such surveys, except two parcels. These tracts are in West Virginia and surveys cannot be completed due to denied land access: WV-GR-065 (small whorled pogonia and shale barren rock cress) and WV-SU-046 (Virginia spiraea [*Spiraea virginiana*]; Table 2, Figure 4). All listed plant surveys in Virginia are complete.

Table 2. Remaining Listed Plant Surveys Along the Proposed Mountain Valley Pipeline

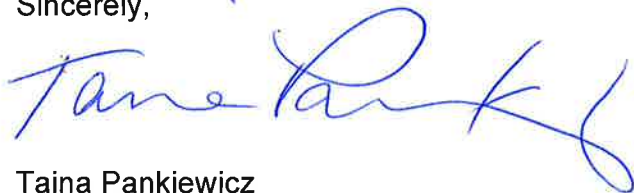
Parcel	Species	Miles	Acres
WV-GR-065	Small Whorled Pogonia / Shale Barren Rock Cress	0.22	3.51
WV-SU-046	Virginia Spiraea	0.11	2.30

MVP discussed these areas with USFWS at the Elkins Field Office on July 20, 2017, and subsequently provided shape files for the unsurveyed areas on July 24, 2017 so that USFWS could georeference the unsurveyed areas against USFWS predictive models for species occurrence for Shale Barren Rock Cress and Virginia Spiraea. MVP respectfully requests confirmation from USFWS that no additional surveys are required for Shale Barren Rock Cress and Virginia Spiraea. Likewise, since surveys for these species are complete and no plants were found, Section 7 Consultation for these species will reflect a *May Effect - Not Likely to Adversely Affect* determination.

If restricted access prohibits surveys for Small Whorled Pogonia on tract WV-GR-065 prior to construction (i.e., if land access cannot be obtained during the May – September survey window before construction occurs in this area) and/or surveys reveal presence of the species, MVP will work with USFWS to adopt appropriate Avoidance and Minimization Measures.

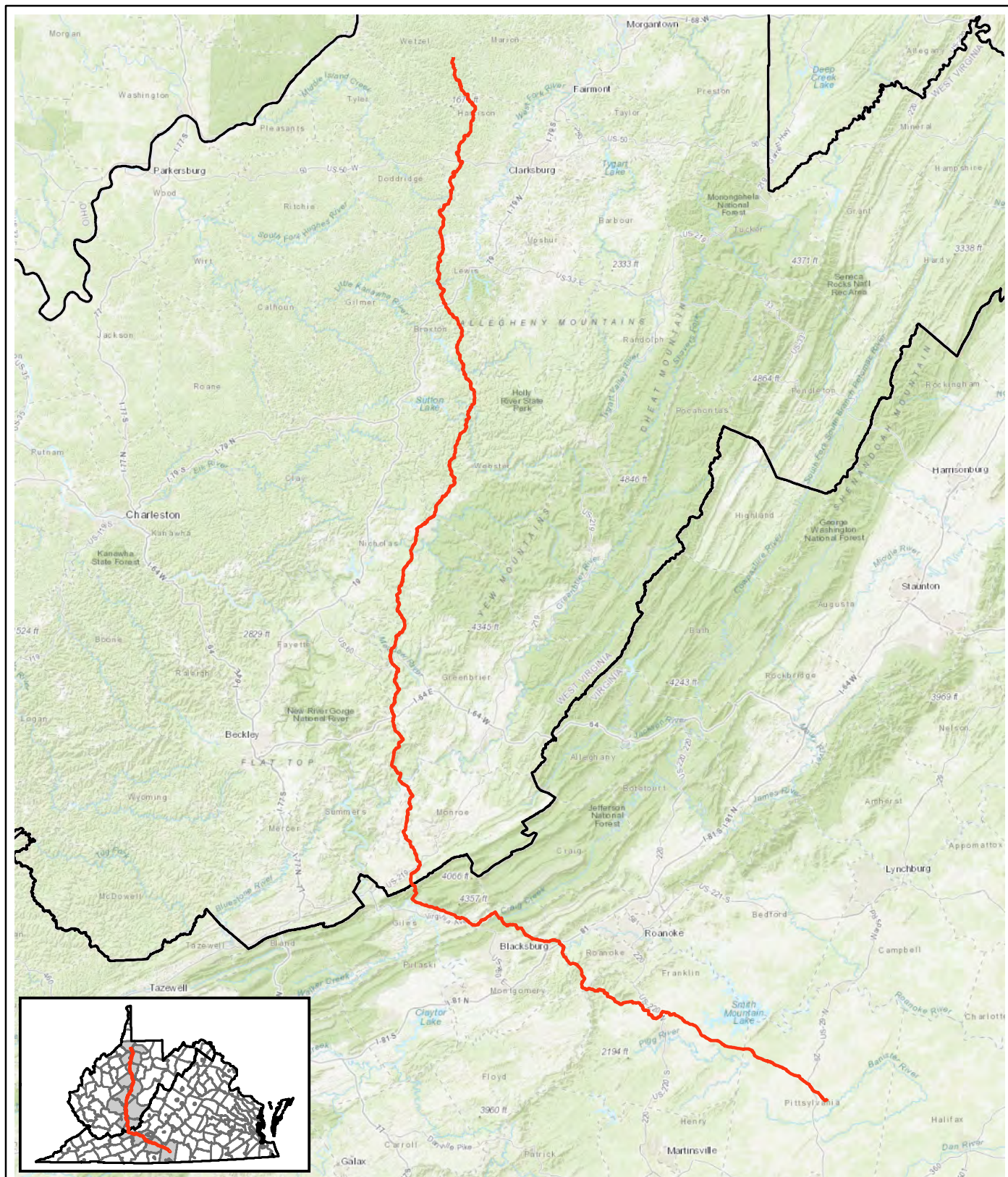
This letter and accompanying mapping fulfills all of MVPs current obligations to state and federal agencies regarding state and federal plant species. If you have any questions or comments, please do not hesitate to contact Megan Stahl ([MStahl@eqt.com](mailto:MStahl@eqt.com); 412-553-7783) or me.

Sincerely,



Taina Pankiewicz  
513-591-4311  
[Tpankiewicz@envsi.com](mailto:Tpankiewicz@envsi.com)





State Border — October 2016 Proposed Route

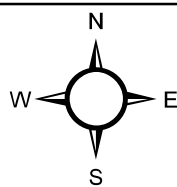
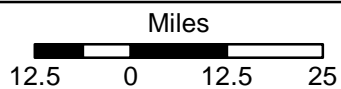


Figure 1. Location of the Mountain Valley Pipeline Project in West Virginia and Virginia.

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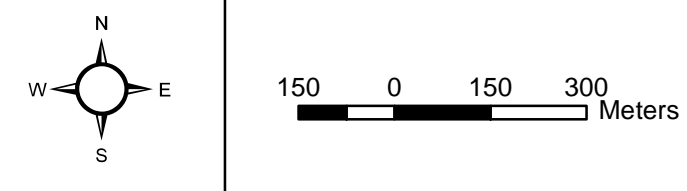
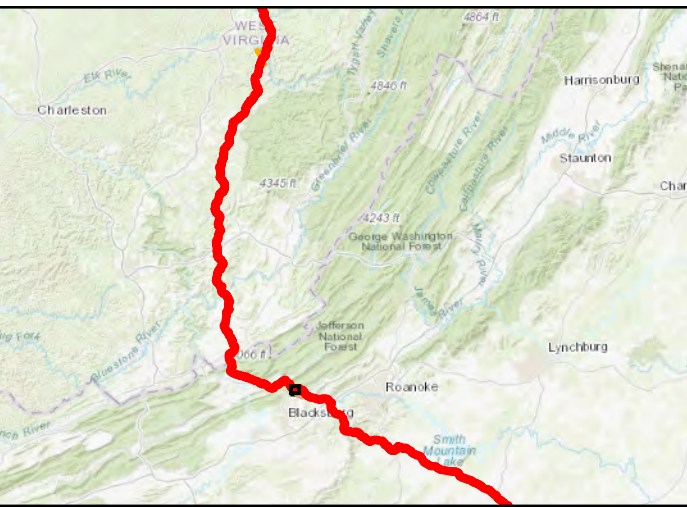
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Figure 2. Location of Mountain Valley Pipeline Project Route 250 Variation in Virginia.

- Variation 250
- October 2016 Proposed Route



Base Map: ESRI ArcGIS Web service - "USA\_Topo\_Maps" accessed - 7/27/2017



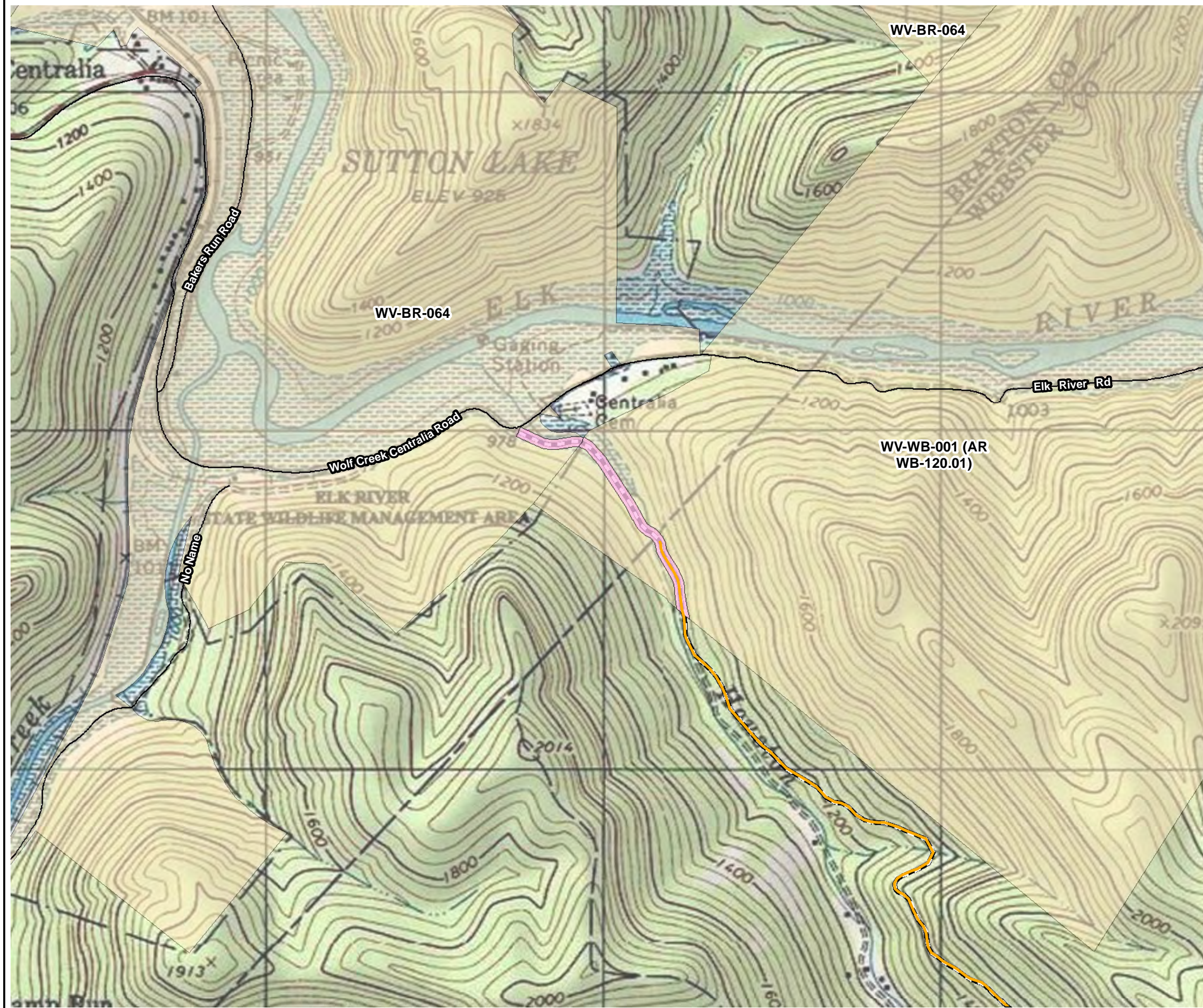
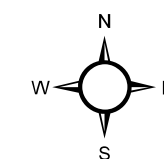
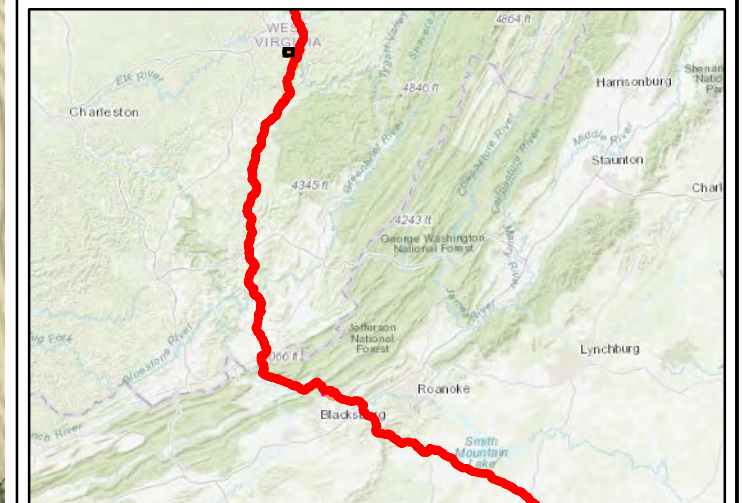


Figure 3. Locations of Listed Plant Surveys Conducted Along the Mountain Valley Pipeline Project During 2017.

Map 1 of 6

- October 2016 Proposed Route Access Road
- Rare Plant Survey Segment**
- Running Buffalo Clover
  - Plant Survey Area since 1/1/2017
  - Parcel covered by Plant Survey conducted since 1/1/2017

Note: Please refer to Table 2 for a list of species surveyed on Jefferson National Forest in 2016



150 0 150 300 Meters

Base Map: ESRI ArcGIS Web service - "USA\_Topo\_Maps"  
accessed - 7/27/2017



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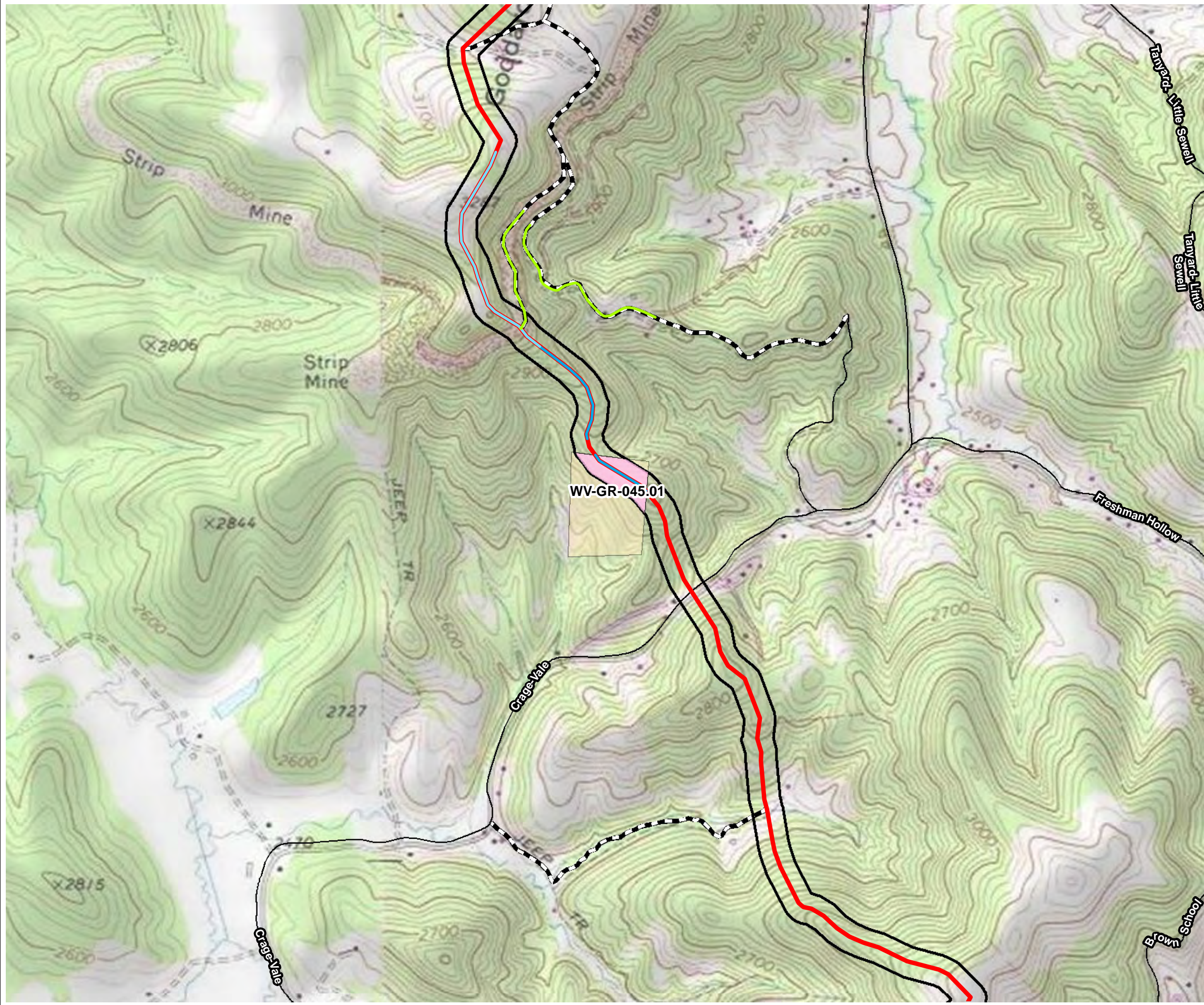
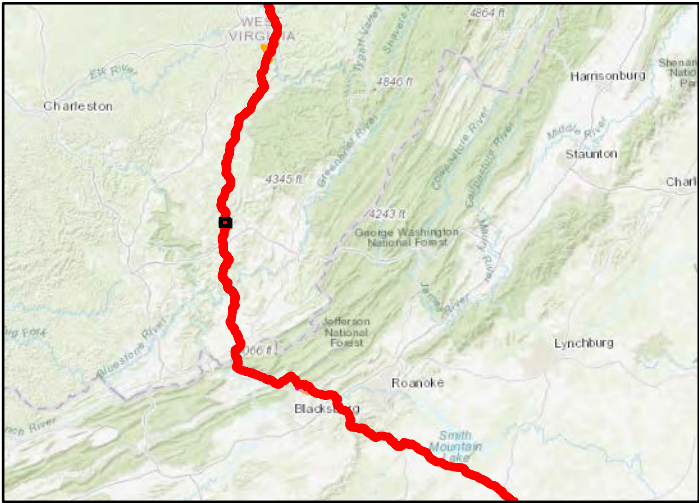


Figure 3. Locations of Listed Plant Surveys Conducted Along the Mountain Valley Pipeline Project During 2017.

- October 2016 Proposed Route
- October 2016 Proposed Route Access Road
- October 2016 Proposed Route - 150-foot Buffer
- Rare Plant Survey Segment**
  - Running Buffalo Clover and Small Whorled Pogonia
  - Shale Barren Rock Cress and Small Whorled Pogonia
  - Small Whorled Pogonia
- Plant Survey Area since 1/1/2017
- Parcel covered by Plant Survey conducted since 1/1/2017

Note: Please refer to Table 2 for a list of species surveyed on Jefferson National Forest in 2016



Base Map: ESRI ArcGIS Web service - "USA\_Topo\_Maps" accessed - 7/27/2017



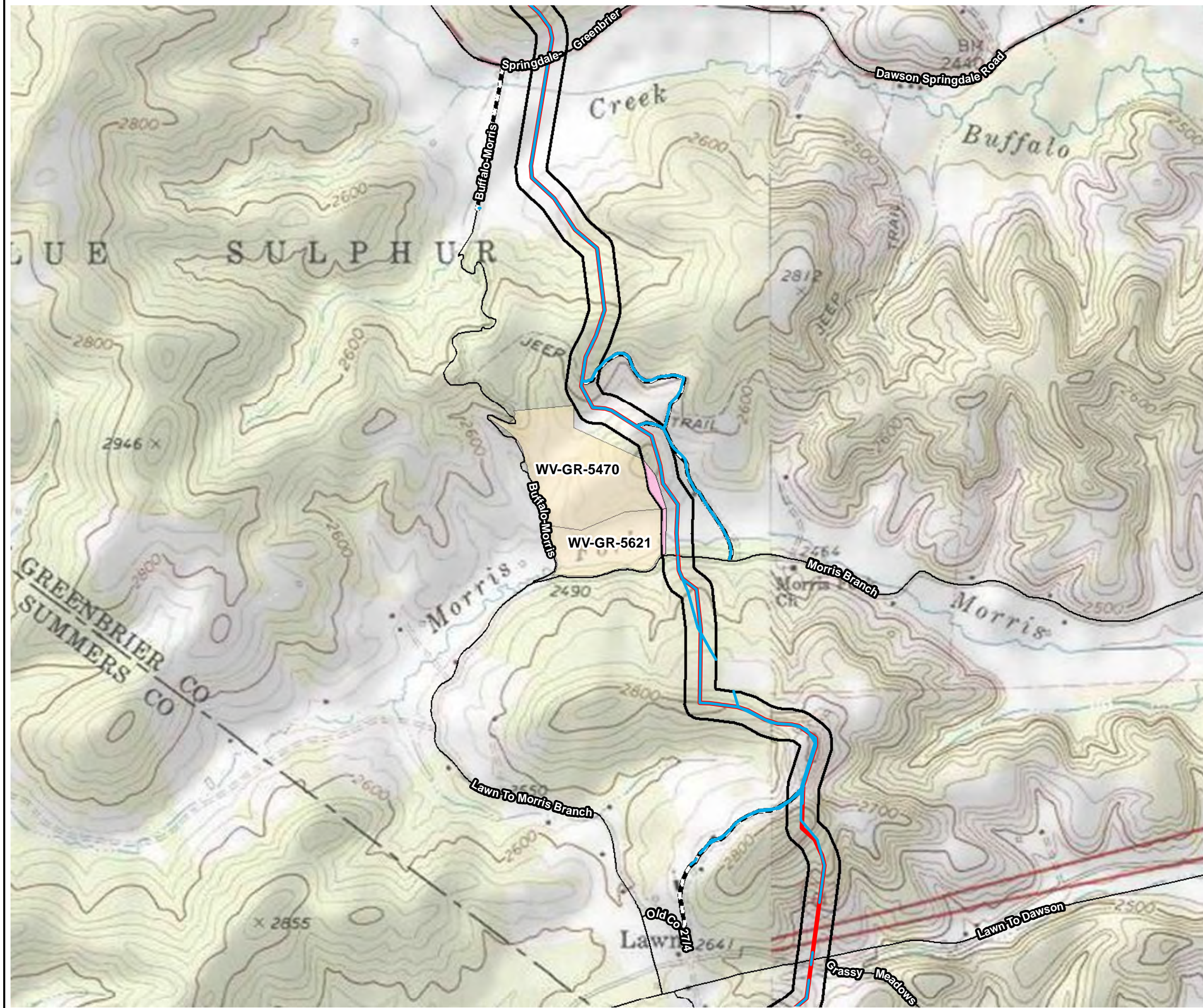
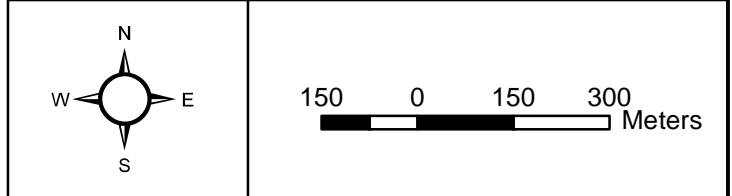
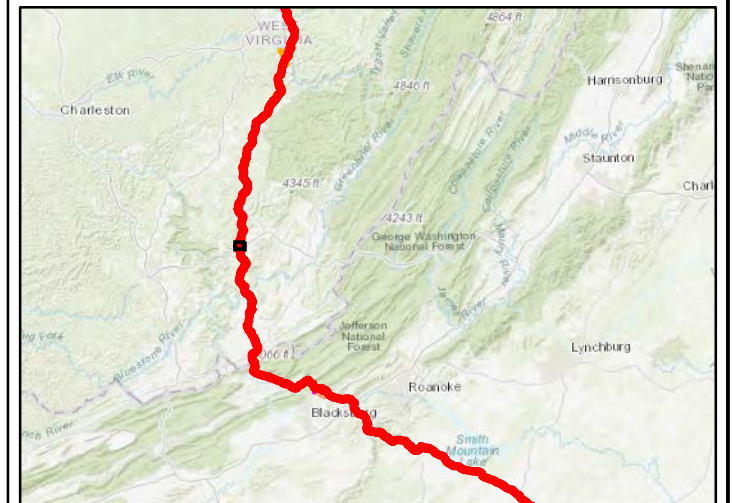


Figure 3. Locations of Listed Plant Surveys Conducted Along the Mountain Valley Pipeline Project During 2017.

Map 4 of 6

- October 2016 Proposed Route
- October 2016 Proposed Route Access Road
- October 2016 Proposed Route - 150-foot Buffer
- Rare Plant Survey Segment**
  - Shale Barren Rock Cress and Small Whorled Pogonia
  - Plant Survey Area since 1/1/2017
  - Parcel covered by Plant Survey conducted since 1/1/2017

Note: Please refer to Table 2 for a list of species surveyed on Jefferson National Forest in 2016



Base Map: ESRI ArcGIS Web service - "USA\_Topo\_Maps" accessed - 7/27/2017



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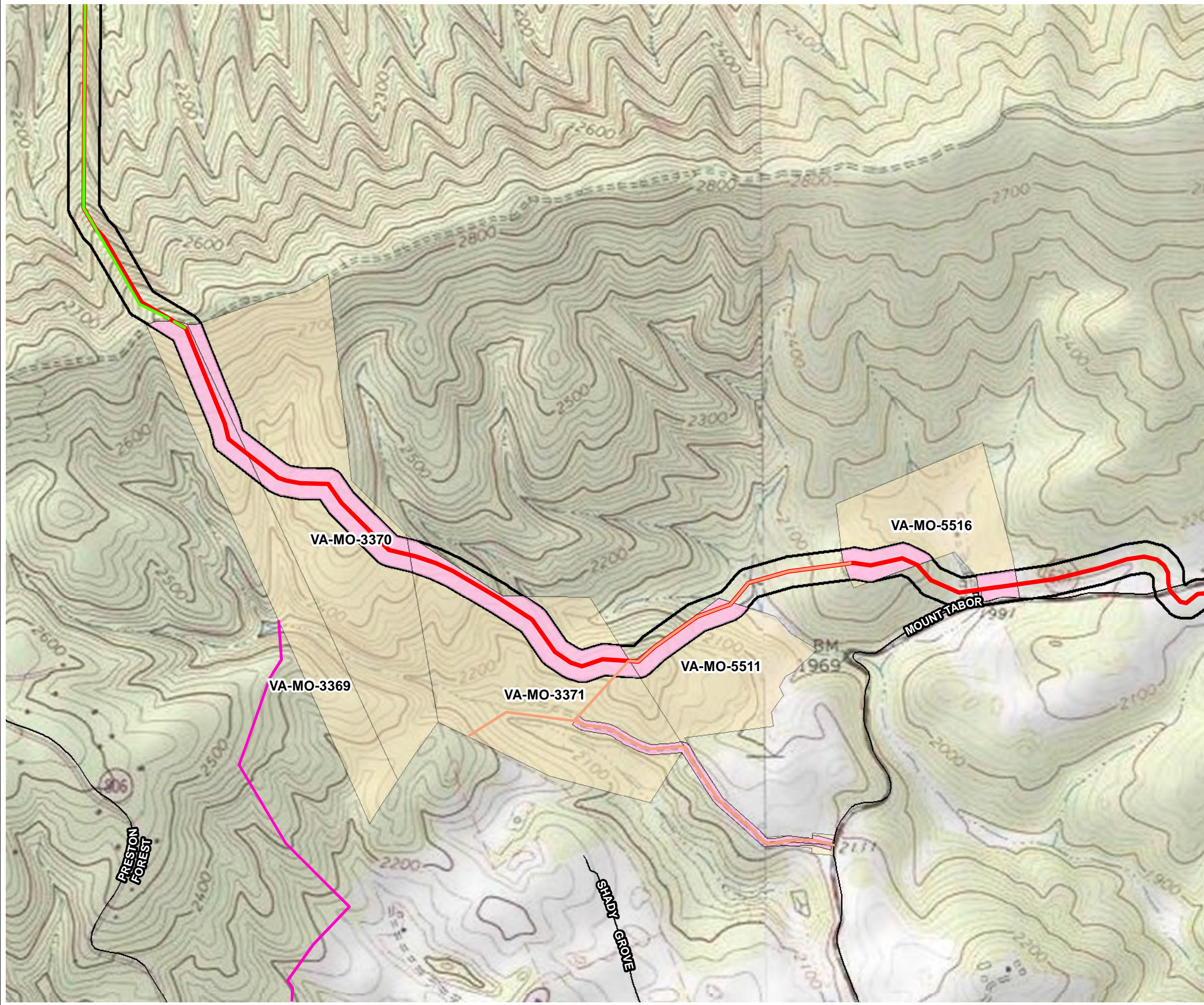
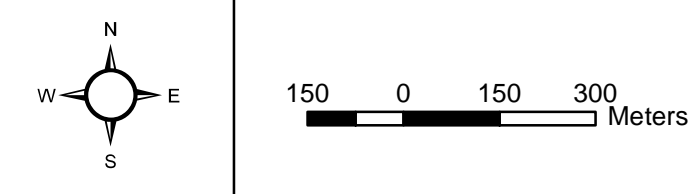
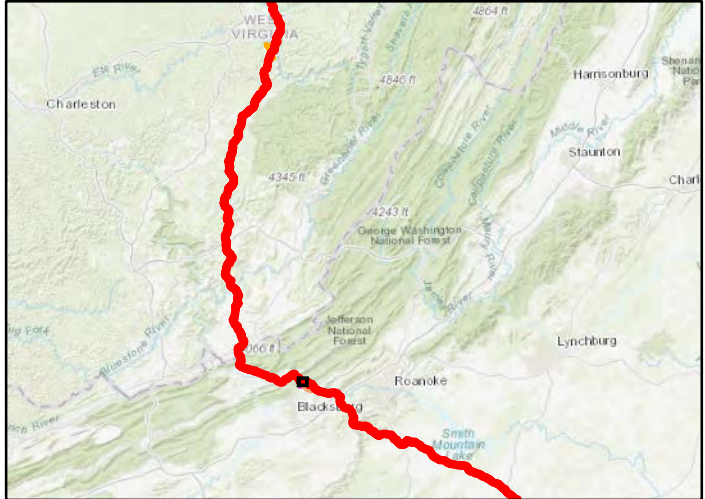


Figure 3. Locations of Listed Plant Surveys Conducted Along the Mountain Valley Pipeline Project During 2017.

- October 2016 Proposed Route
- October 2016 Proposed Route Access Road
- October 2016 Proposed Route - 150-foot Buffer
- Rare Plant Survey Segment**
- Smooth Coneflower and Three-parted violet
- Three-parted violet
- Jefferson National Forest Species
- Plant Survey Area since 1/1/2017
- Parcel covered by Plant Survey conducted since 1/1/2017

Note: Please refer to Table 2 for a list of species surveyed on Jefferson National Forest in 2016



Base Map: ESRI ArcGIS Web service - "USA\_Topo\_Maps" accessed - 7/27/2017



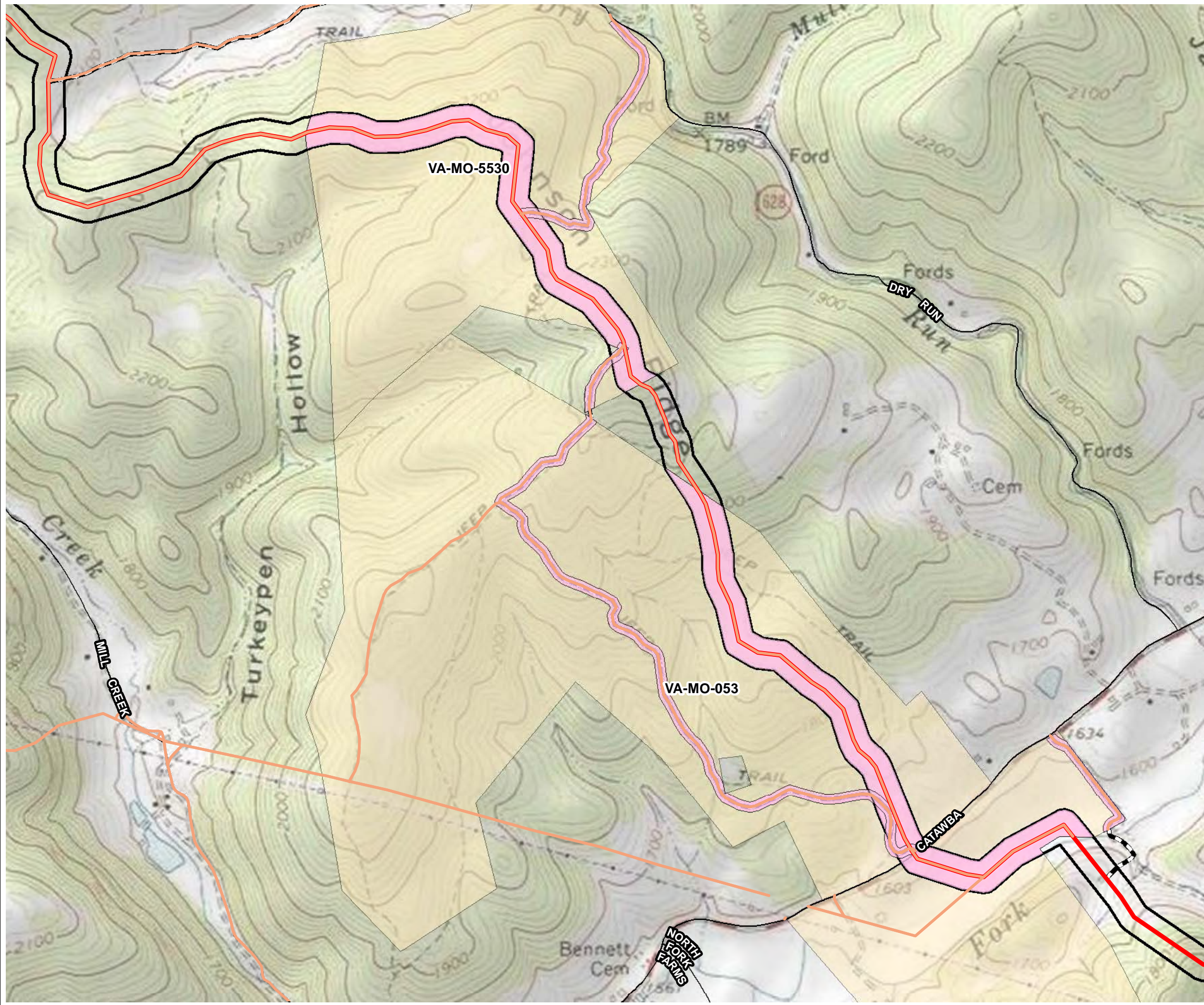
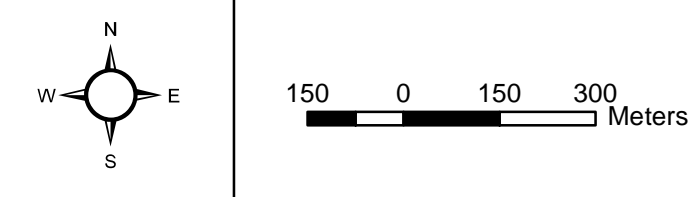
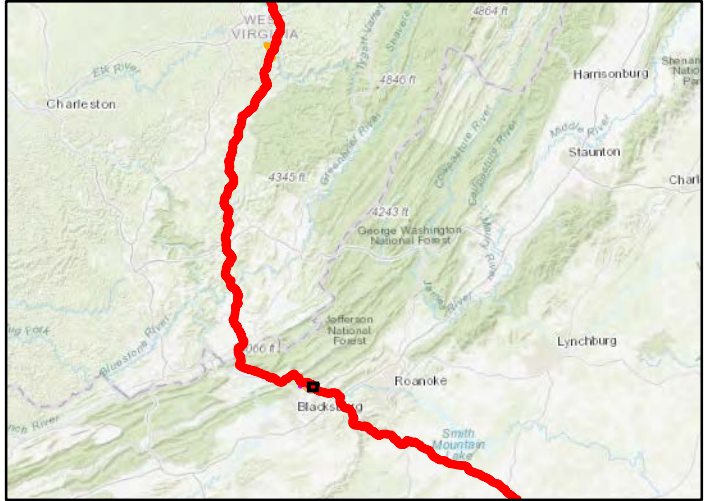


Figure 3. Locations of Listed Plant Surveys Conducted Along the Mountain Valley Pipeline Project During 2017.

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Note: Please refer to Table 2 for a list of species surveyed on Jefferson National Forest in 2016



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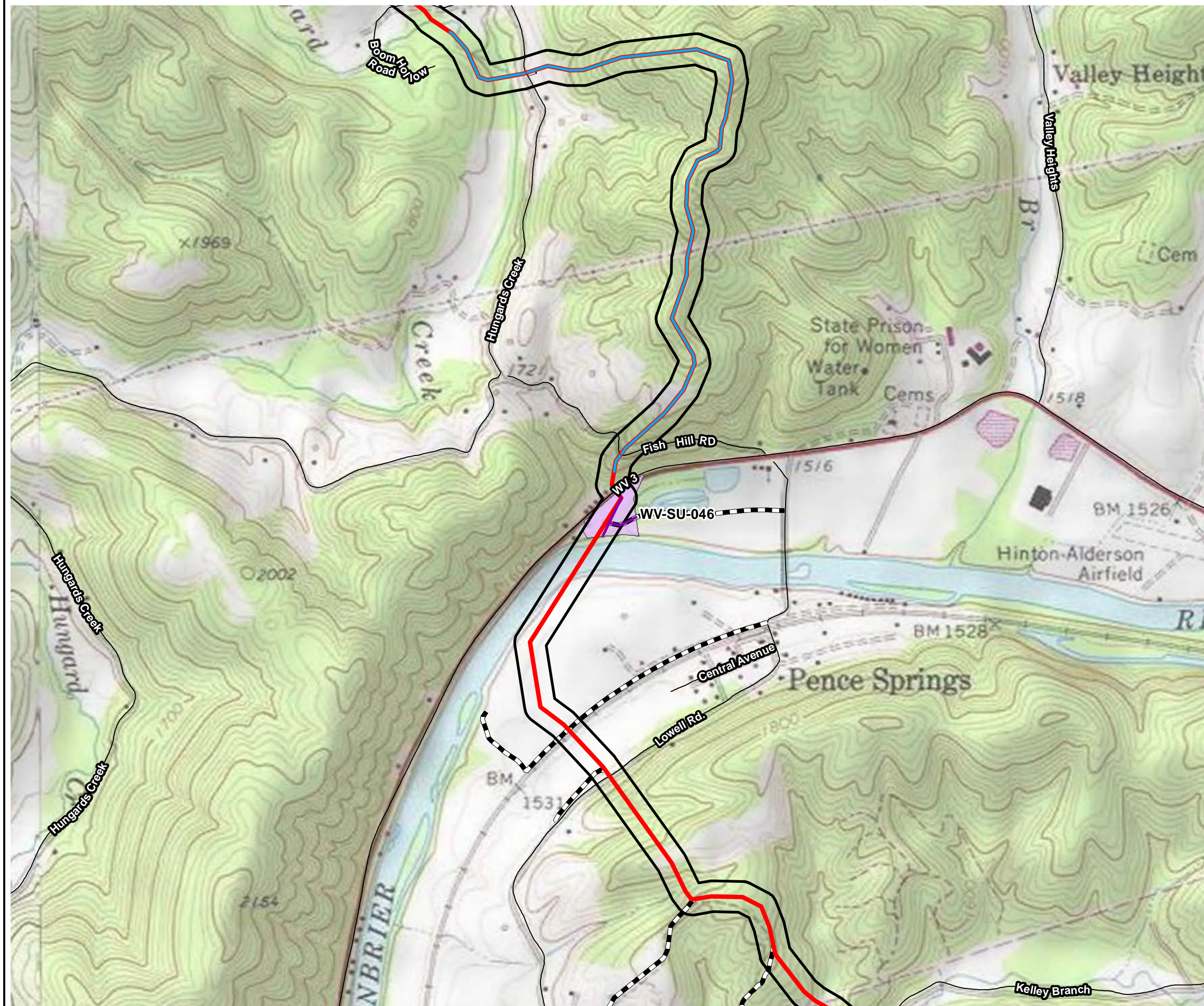
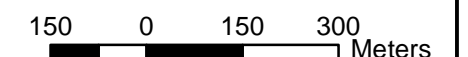
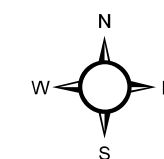
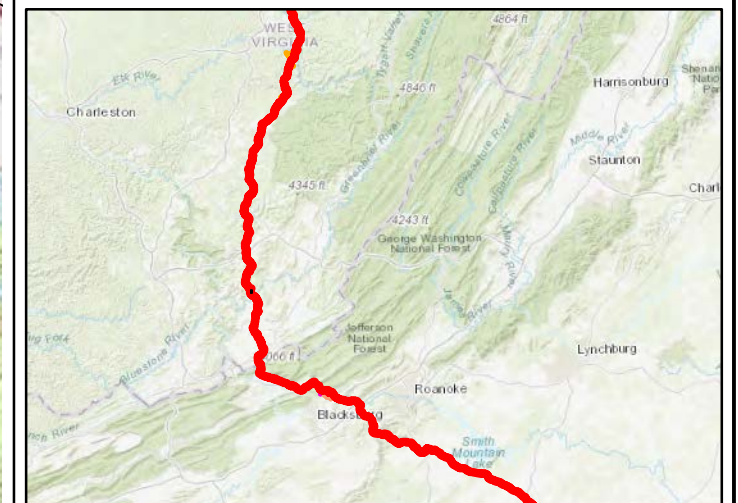


Figure 4. Locations of Tracts Remaining Unserved for Listed Plants Along the Mountain Valley Pipeline Project.

- October 2016 Proposed Route
- - - October 2016 Proposed Route Access Road
- October 2016 Proposed Route - 150-foot Buffer
- Rare Plant Survey Segment**
- Shale Barren Rock Cress and Small Whorled Pogonia
- Virginia Spiraea
- Remaining Parcel that require Plant Survey



Base Map: ESRI ArcGIS Web service - "USA\_Topo\_Maps"  
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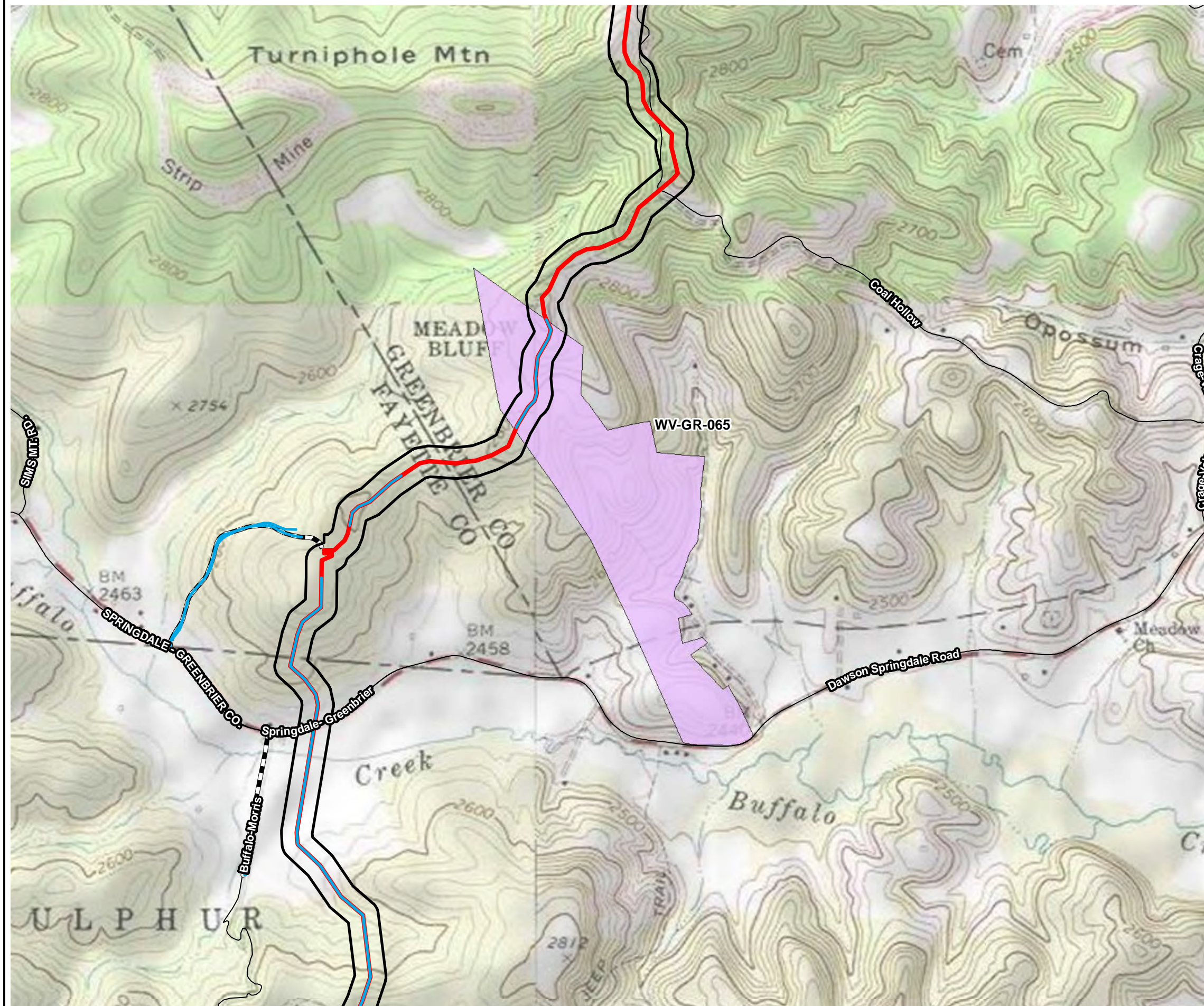
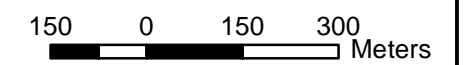
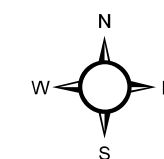
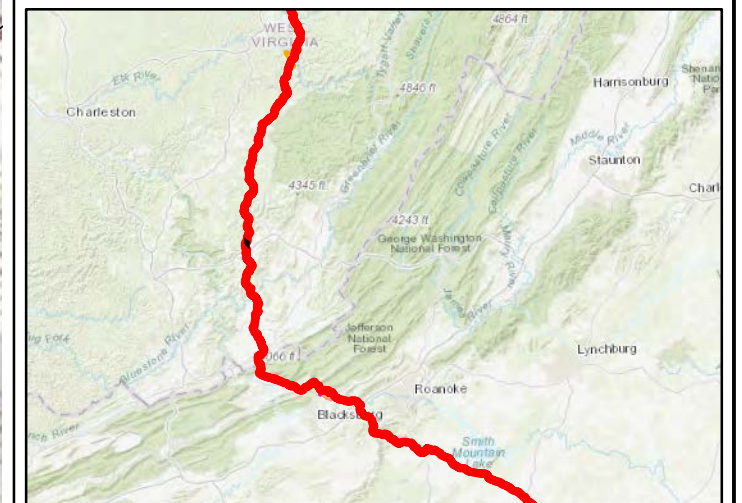


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