

Attachment IP-Sc1 - Variances: Affect Multiple Landowners or Sensitive Environmental Areas (updated 2/15/18)																				Total Change (+/-) in clearing of trees by species habitat type															
Variance Number	Begin MP	End MP	Description	Parcel ID	Landowner Approval	New Landowners Affected?	Residences within 50 feet of Construction Work Area?	Description of New Route Land Use/Cover	Existing Land Use/Cover Type	Length of Forested Area Crossed (feet)	Length of Interior Forested Area Crossed (feet)	Cultural Resource/Federally List Species Affected by Deviation	Environmentally Sensitive Areas Within/Abutting Area of Deviation	Waterbodies Crossed and Width (feet)	Length of Wetlands Crossed by Type (PFO, PSS, PEM) (feet)	Nationwide 12 permit modifications	Alignment Sheet Number	Roanoke Loggerch Impact	Candy Darter Impact	Mussel Impact	RPBB Impact	Plant Impact	Total Change +/- in LOD (acres)	MYSO - Known Summer Use Habitat (acres)	MYSO - Known use spring staging/fall swarming habitat (acres)	MYSO - Suitable Unoccupied Summer Habitat (acres)	MYSO - Unknown use spring staging/fall swarming habitat (acres)	MYSO - Unknown Use Summer Habitat (acres)	NLEB known use spring staging/fall swarming habitat (acres)						
VAR-WV-WE-01	0.00	0.07	Eliminated two points of inflection.	WV-WE-001	Secured	No	No	Developed, Open Space; Deciduous Forest	Developed, Open Space; Deciduous Forest	328	29	None	None	None	None	Additional impacts to USACE Jurisdictional Features will not occur.	PA-WEWV-H600-01	No Effect - Outside RLP Range	No Effect - Outside candy darter range	No effect on mussels - variance does not occur at instream Project crossing	No effect (2)	No effect (11)	0.03	0.02	0.00	0.00	0.00	0.00	0.00						
				WV-WE-001.01	Secured																		No Effect - Outside RLP Range	No Effect - Outside candy darter range	No effect on mussels - variance does not occur at instream Project crossing	No effect (2)	No effect (11)	-0.07	-0.06	0.00	0.00	0.00	0.00	0.00	
VAR-WV-WE-02	2.71	2.71	Adjusted alignment of access road MVP-WE-008.02.	WV-WE-4215	Secured	No	Yes	Deciduous Forest; Developed, Open Space	Deciduous Forest; Developed, Open Space	0	0	None	W-YZ8	None	None	Additional impacts to USACE Jurisdictional Features will not occur.	MVP-QDAR-H600-02 MVP-ADAR-H600-02	No Effect - Outside RLP Range	No Effect - Outside candy darter range	No effect on mussels - variance does not occur at instream Project crossing	No effect (2)	No effect (11)	9.38	7.41	0.00	0.00	0.00	0.00	0.00						
VAR-WV-WE-03	2.89	3.55	Centerline adjustment to avoid existing foreign line.	WV-WE-018.01	Secured	No	No	Deciduous Forest; Developed, Open Space;	Deciduous Forest; Developed, Open Space;	0	3485	None	None	None	None	Additional impacts to USACE Jurisdictional Features will not occur.	PA-WEWV-H600-04 PA-WEWV-H600-05	No Effect - Outside RLP Range	No Effect - Outside candy darter range	No effect on mussels - variance does not occur at instream Project crossing	No effect (2)	No effect (11)	-0.65	-0.65	0.00	0.00	0.00	0.00	0.00						
				WV-WE-018.02.1	Secured																		No Effect - Outside RLP Range	No Effect - Outside candy darter range	No effect on mussels - variance does not occur at instream Project crossing	No effect (2)	No effect (11)	0.75	0.75	0.00	0.00	0.00	0.00	0.00	
				WV-WE-018.03	Secured																		No Effect - Outside RLP Range	No Effect - Outside candy darter range	No effect on mussels - variance does not occur at instream Project crossing	No effect (2)	No effect (11)	-0.47	-0.47	0.00	0.00	0.00	0.00	0.00	
				WV-WE-018.03.1	Secured																		No Effect - Outside RLP Range	No Effect - Outside candy darter range	No effect on mussels - variance does not occur at instream Project crossing	No effect (2)	No effect (11)	e in LOD with	0.00	0.00	0.00	0.00	0.00	0.00	
				BW-WE-2	Secured																		No Effect - Outside RLP Range	No Effect - Outside candy darter range	No effect on mussels - variance does not occur at instream Project crossing	No effect (2)	No effect (11)	0.25	0.08	0.00	0.00	0.00	0.00	0.00	
				WV-WE-018.06	Secured																		No Effect - Outside RLP Range	No Effect - Outside candy darter range	No effect on mussels - variance does not occur at instream Project crossing	No effect (2)	No effect (11)	-0.09	-0.09	0.00	0.00	0.00	0.00	0.00	
VAR-WV-WE-04	3.40	3.40	Adjusted extents of laydown yard MVP-LY-001 based on survey data.	WV-WE-4280	Secured	No	No	Developed, Low Intensity; Developed, Open Space; Deciduous Forest; Pasture/Hay	Developed, Low Intensity; Developed, Open Space; Deciduous Forest; Pasture/Hay	0	0	None	W-188 (Protected), W-189 (Protected), W-190 (Protected), W-191 (Protected)	None	None	Additional impacts to USACE Jurisdictional Features will not occur.	MVP-ADAS-H600-01 MVP-QDAS-H600-01	No Effect - Outside RLP Range	No Effect - Outside candy darter range	No effect on mussels - variance does not occur at instream Project crossing	No effect (2)	No effect (11)	-0.32	0.15	0.00	0.00	0.00	0.00	0.00						
				WV-WE-4281	Secured																		No Effect - Outside RLP Range	No Effect - Outside candy darter range	No effect on mussels - variance does not occur at instream Project crossing	No effect (2)	No effect (11)	0.16	0.10	0.00	0.00	0.00	0.00	0.00	
VAR-WV-HA-01	24.70	24.80	Shifted alignment and temporary workspace to avoid impacts to stream S-B14a and to avoid foreign underground utility.	WV-HA-092	Secured	No	No	Deciduous Forest	Deciduous Forest	0	528	None	S-B14a (Adjacent)	None	None	Additional impacts to USACE Jurisdictional Features will not occur.	PA-HAWV-H600-16 PA-HAWV-H600-17	No Effect - Outside RLP Range	No Effect - Outside candy darter range	No effect on mussels - variance does not occur at instream Project crossing	No effect (2)	No effect (11)	-0.18	0.00	0.00	0.00	0.00	-0.18	0.00						
				WV-HA-094	Secured																		No Effect - Outside RLP Range	No Effect - Outside candy darter range	No effect on mussels - variance does not occur at instream Project crossing	No effect (2)	No effect (11)	0.13	0.00	0.00	0.00	0.00	0.00	0.13	0.00
VAR-WV-HA-02	25.51	25.54	Eliminated point of inflection.	WV-HA-097	Secured	No	No	Deciduous Forest	Deciduous Forest	0	158	None	None	None	None	Additional impacts to USACE Jurisdictional Features will not occur.	PA-HAWV-H600-17	No Effect - Outside RLP Range	No Effect - Outside candy darter range	No effect on mussels - variance does not occur at instream Project crossing	No effect (2)	No effect (11)	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
				WV-HA-097.01	Secured																		No Effect - Outside RLP Range	No Effect - Outside candy darter range	No effect on mussels - variance does not occur at instream Project crossing	No effect (2)	No effect (11)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
				WV-HA-095	Secured																		No Effect - Outside RLP Range	No Effect - Outside candy darter range	No effect on mussels - variance does not occur at instream Project crossing	No effect (2)	No effect (11)	-0.04	0.00	0.00	0.00	0.00	0.00	-0.04	0.00
				WV-HA-098	Secured																		No Effect - Outside RLP Range	No Effect - Outside candy darter range	No effect on mussels - variance does not occur at instream Project crossing	No effect (2)	No effect (11)	0.04	0.00	0.00	0.00	0.00	0.00	0.04	0.00

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VAR-WV-LE-01	42.12	42.13	Eliminated point of inflection for foreign line crossing.	WV-LE-026	Secured	No	No	Deciduous Forest	Deciduous Forest	0	53	None	None	None	None	Additional impacts to USACE Jurisdictional Features will not occur.	PA-LEWV-H600-05	No Effect - Outside RLP Range	No Effect - Outside candy darter range	No effect on mussels - variance does not occur at instream Project crossing	No direct effect (1)	No effect (11)	-0.03	0.00	0.00	0.00	0.00	-0.02	0.00	
				WV-LE-027	Secured	No	No	Deciduous Forest	Deciduous Forest	0	53	None	None	None	None	None	Additional impacts to USACE Jurisdictional Features will not occur.	PA-LEWV-H600-05	No Effect - Outside RLP Range	No Effect - Outside candy darter range	No effect on mussels - variance does not occur at instream Project crossing	No direct effect (1)	No effect (11)	0.02	0.00	0.00	0.00	0.00	0.02	0.00
VAR-WV-LE-03	51.02	51.02	Added MVP-ATWS-1500 for truck turnaround on access road MVP-LE-069.	WV-LE-072	Secured	No	No	Deciduous Forest; Developed, Open Space	NA	0	0	None	S-KK3a (Adjacent)	None	None	Additional impacts to USACE Jurisdictional Features will not occur.	PA-LEWV-H600-14 MVP-QDAR-H600-17 MVP-ADAR-H600-17	No Effect - Outside RLP Range	No Effect - Outside candy darter range	No effect on mussels - variance does not occur at instream Project crossing	No direct effects (2)	No effect (7)	0.11	0.00	0.00	0.00	0.00	0.10	0.00	
VAR-WV-LE-04	52.38	52.40	Added MVP-ATWS-1532 for parallel pipeline crossing.	WV-LE-078	Secured	No	No	Deciduous Forest	NA	0	106	None	None	None	None	Additional impacts to USACE Jurisdictional Features will not occur.	PA-LEWV-H600-15	No Effect - Outside RLP Range	No Effect - Outside candy darter range	No effect on mussels - variance does not occur at instream Project crossing	No direct effects (2)	No effect (7)	0.12	0.00	0.00	0.00	0.00	0.12	0.00	
VAR-WV-LE-02	56.10	56.51	Adjusted alignment for foreign line parallel crossings.	WV-LE-106	Secured	No	No	Deciduous Forest	Deciduous Forest	161	2004	None	None	None	None	Additional impacts to USACE Jurisdictional Features will not occur.	PA-LEWV-H600-19 PA-LEWV-H600-20	No Effect - Outside RLP Range	No Effect - Outside candy darter range	No effect on mussels - variance does not occur at instream Project crossing	No direct effect (1)	No effect (11)	1.22	0.00	0.00	0.00	0.00	1.22	0.00	
				WV-LE-104	Secured	No	No	Deciduous Forest	Deciduous Forest	161	2004	None	None	None	None	None	Additional impacts to USACE Jurisdictional Features will not occur.	PA-LEWV-H600-19 PA-LEWV-H600-20	No Effect - Outside RLP Range	No Effect - Outside candy darter range	No effect on mussels - variance does not occur at instream Project crossing	No direct effect (1)	No effect (11)	-0.52	0.00	0.00	0.00	0.00	-0.52	0.00
				WV-LE-107	Secured	No	No	Deciduous Forest	Deciduous Forest	161	2004	None	None	None	None	None	Additional impacts to USACE Jurisdictional Features will not occur.	PA-LEWV-H600-19 PA-LEWV-H600-20	No Effect - Outside RLP Range	No Effect - Outside candy darter range	No effect on mussels - variance does not occur at instream Project crossing	No direct effect (1)	No effect (11)	-1.32	0.00	0.00	0.00	0.00	-1.32	0.00
				BW-LE-5	Secured	No	No	Deciduous Forest	Deciduous Forest	161	2004	None	None	None	None	None	Additional impacts to USACE Jurisdictional Features will not occur.	PA-LEWV-H600-19 PA-LEWV-H600-20	No Effect - Outside RLP Range	No Effect - Outside candy darter range	No effect on mussels - variance does not occur at instream Project crossing	No direct effect (1)	No effect (11)	0.62	0.00	0.00	0.00	0.00	0.62	0.00
VAR-WV-LE-05	61.80	61.80	Add MVP-ATWS-1531 for turning apron on MVP-LE-077.01 entrance.	WV-LE-133	Secured	No	No	Developed, Open Space	NA	0	0	None	S-CD21-Braid (Adjacent), S-CD21 (Adjacent), W-CD34 (Adjacent)	None	None	Additional impacts to USACE Jurisdictional Features will not occur.	MVP-QDAR-H600-21 MVP-ADAR-H600-21	No Effect - Outside RLP Range	No Effect - Outside candy darter range	No effect on mussels - variance does not occur at instream Project crossing	No direct effects (2)	No effect (7)	0.02	0.00	0.00	0.00	0.00	0.02	0.00	
VAR-WV-LE-06	65.29	65.29	Added MVP-ATWS-1501 for truck turnaround for MVP-LE-084.	WV-LE-1661	Secured	Yes	No	Deciduous Forest; Developed, Open Space	NA	0	0	None	None	None	None	Additional impacts to USACE Jurisdictional Features will not occur.	MVP-QDAR-H600-22 MVP-ADAR-H600-22	No Effect - Outside RLP Range	No Effect - Outside candy darter range	No effect on mussels - variance does not occur at instream Project crossing	No direct effects (2)	No effect (7)	0.19	0.00	0.00	0.00	0.00	0.00	0.00	
VAR-WV-BR-02	72.24	72.24	Changed designation of MVP-BR-095.01 from temporary to permanent.	WV-BR-020	Secured	No	No	Deciduous Forest; Developed, Open Space; Developed, Low Intensity	Deciduous Forest; Developed, Open Space; Developed, Low Intensity	0	0	None	S-74 (Protected. Existing culvert. No Impact.), W-42 (Protected. Maintained Road. No Impact.), W-41 (Protected. E&S BMP Protections. No Impact.)	None	None	Additional impacts to USACE Jurisdictional Features will not occur.	PA-BRWV-H600-07 PA-BRWV-H600-08 MVP-QDAR-H600-25 MVP-ADAR-H600-25	No Effect - Outside RLP Range	No Effect - Outside candy darter range	No effect on mussels - variance does not occur at instream Project crossing	No direct effect (1)	No effect (11)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				WV-BR-024	Secured	No	No	Deciduous Forest; Developed, Open Space; Developed, Low Intensity	Deciduous Forest; Developed, Open Space; Developed, Low Intensity	0	0	None	S-74 (Protected. Existing culvert. No Impact.), W-42 (Protected. Maintained Road. No Impact.), W-41 (Protected. E&S BMP Protections. No Impact.)	None	None	Additional impacts to USACE Jurisdictional Features will not occur.	PA-BRWV-H600-07 PA-BRWV-H600-08 MVP-QDAR-H600-25 MVP-ADAR-H600-25	No Effect - Outside RLP Range	No Effect - Outside candy darter range	No effect on mussels - variance does not occur at instream Project crossing	No direct effect (1)	No effect (11)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				WV-BR-1269	Secured	No	No	Deciduous Forest; Developed, Open Space; Developed, Low Intensity	Deciduous Forest; Developed, Open Space; Developed, Low Intensity	0	0	None	S-74 (Protected. Existing culvert. No Impact.), W-42 (Protected. Maintained Road. No Impact.), W-41 (Protected. E&S BMP Protections. No Impact.)	None	None	Additional impacts to USACE Jurisdictional Features will not occur.	PA-BRWV-H600-07 PA-BRWV-H600-08 MVP-QDAR-H600-25 MVP-ADAR-H600-25	No Effect - Outside RLP Range	No Effect - Outside candy darter range	No effect on mussels - variance does not occur at instream Project crossing	No direct effect (1)	No effect (11)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
VAR-WV-BR-03	72.24	72.24	Changed designation of MVP-BR-095 from permanent to temporary.	WV-BR-020.02	Secured	No	No	Deciduous Forest; Developed, Open Space	Deciduous Forest; Developed, Open Space	0	0	None	S-159 (Protected. E&S BMP Protections. No Impact.), S-160 (No Change), W-112 (No Change)	None	None	Additional impacts to USACE Jurisdictional Features will not occur.	PA-BRWV-H600-07 PA-BRWV-H600-08 MVP-QDAR-H600-25 MVP-ADAR-H600-25	No Effect - Outside RLP Range	No Effect - Outside candy darter range	No effect on mussels - variance does not occur at instream Project crossing	No direct effect (1)	No effect (11)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				WV-BR-024	Secured	No	No	Deciduous Forest; Developed, Open Space	Deciduous Forest; Developed, Open Space	0	0	None	S-159 (Protected. E&S BMP Protections. No Impact.), S-160 (No Change), W-112 (No Change)	None	None	Additional impacts to USACE Jurisdictional Features will not occur.	PA-BRWV-H600-07 PA-BRWV-H600-08 MVP-QDAR-H600-25 MVP-ADAR-H600-25	No Effect - Outside RLP Range	No Effect - Outside candy darter range	No effect on mussels - variance does not occur at instream Project crossing	No direct effect (1)	No effect (11)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.29
VAR-WV-BR-04	74.39	74.39	Adjusted edge of MVP-BR-101 to match county route right-of-way.	WV-BR-3979	Secured	No	No	NA - Area Eliminated	Deciduous Forest	0	0	None	None	None	None	Additional impacts to USACE Jurisdictional Features will not occur.	MVP-QDAR-H600-27 MVP-ADAR-H600-27	No Effect - Outside RLP Range	No Effect - Outside candy darter range	No effect on mussels - variance does not occur at instream Project crossing	No direct effect (1)	No effect (11)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
				WV-BR-035	Secured	No	No	NA - Area Eliminated	Deciduous Forest	0	0	None	None	None	None	None	Additional impacts to USACE Jurisdictional Features will not occur.	MVP-QDAR-H600-27 MVP-ADAR-H600-27	No Effect - Outside RLP Range	No Effect - Outside candy darter range	No effect on mussels - variance does not occur at instream Project crossing	No direct effect (1)	No effect (11)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
VAR-WV-BR-05	74.83	74.83	Expanded MVP-ATWS-1459 and added MVP-ATWS-1459A for crossing of Little Kanawha River by access road MVP-BR-103.01.	WV-BR-5856	Secured	No	No	Deciduous Forest; Open Space	Deciduous Forest	0	0	None	S-H132b-Braid (Adjacent), S-H132b (Adjacent)	None	None	Additional impacts to USACE Jurisdictional Features will not occur.	MVP-QDAR-H600-28 MVP-ADAR-H600-28	No Effect - Outside RLP Range	No Effect - Outside candy darter range	No effect on mussels - variance does not occur at instream Project crossing.	No direct effects (2)	No effect (7)	0.25	0.00	0.00	0.00	0.00	0.25	0.00	

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VAR-WV-BR-06	74.83	74.83	Added MVP-ATWS-14598 to facilitate crossing of Little Kanawha River by access road MVP-BR-103.01.	WV-BR-5214	Secured	No	Yes	Deciduous Forest	Deciduous Forest, Developed, Open Space	0	0	None	S-H132b-Braid (Adjacent), S-H132b (Adjacent)	None	None	Additional impacts to USACE Jurisdictional Features will not occur.	MVP-QDAR-H600-28 MVP-ADAR-H600-28	No Effect - Outside RLP Range	No Effect - Outside candy darter range	No effect on mussels - variance does not occur at instream Project crossing	No direct effects (2)	No effect (7)	0.17	0.00	0.00	0.00	0.00	0.11	0.00

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VAR-WV-WB-01	83.94	83.94	Changed designation of MVP-WB-117.01 from temporary to permanent.	WV-WB-001.18	Secured	No	No	Developed, Open Space; Deciduous Forest	Developed, Open Space; Deciduous Forest	0	0	None	None.	None	None	Additional impacts to USACE Jurisdictional Features will not occur.	PA-WBWW-H600-04 MVP-QDAR-H600-32 MVP-ADAR-H600-32		No Effect - Outside RLP Range	No Effect - Outside candy darter range	No effect on mussels - variance does not occur at instream Project crossing	No effect (2)	No effect (4)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
				WV-WB-5643	Secured														No Effect - Outside RLP Range	No Effect - Outside candy darter range	No effect on mussels - variance does not occur at instream Project crossing	No effect (2)	No effect (4)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
				WV-WB-001.24	Secured														No Effect - Outside RLP Range	No Effect - Outside candy darter range	No effect on mussels - variance does not occur at instream Project crossing	No effect (2)	No effect (4)	0.00	0.00	0.00	0.00	0.00	0.00		
				WV-WB-001.19	Secured														No Effect - Outside RLP Range	No Effect - Outside candy darter range	No effect on mussels - variance does not occur at instream Project crossing	No effect (2)	No effect (4)	0.00	0.00	0.00	0.00	0.00	0.00		
				WV-WB-001.23	Secured														No Effect - Outside RLP Range	No Effect - Outside candy darter range	No effect on mussels - variance does not occur at instream Project crossing	No effect (2)	No effect (4)	0.00	0.00	0.00	0.00	0.00	0.00		
				WV-WB-001.212	Secured														No Effect - Outside RLP Range	No Effect - Outside candy darter range	No effect on mussels - variance does not occur at instream Project crossing	No effect (2)	No effect (4)	0.00	0.00	0.00	0.00	0.00	0.00		
				WV-WB-001.211	Secured														No Effect - Outside RLP Range	No Effect - Outside candy darter range	No effect on mussels - variance does not occur at instream Project crossing	No effect (2)	No effect (4)	0.00	0.00	0.00	0.00	0.00	0.00		
				WV-WB-001.21	Secured														No Effect - Outside RLP Range	No Effect - Outside candy darter range	No effect on mussels - variance does not occur at instream Project crossing	No effect (2)	No effect (4)	0.00	0.00	0.00	0.00	0.00	0.00		
VAR-WV-NI-01	98.00	98.00	Added laydown yard MVP-LV-005.	WV-NI-4293	Secured	WV-NI-4293	No	Developed, Low Intensity; Developed, Medium Intensity; Developed, Open Space	NA	0	0	None	W-IJ75, W-IJ76, S-IJ74 (E&S BMP Protection for all. No impact)	None	None	Additional impacts to USACE Jurisdictional Features will not occur.	MVP-QDAS-H600-03 MVP-ADAS-H600-03		No Effect - Outside RLP Range	No Effect - Outside candy darter range	No effect on mussels - variance does not occur at instream Project crossing	No effect (1)	No effect (4)	2.92	0.00	0.00	0.00	0.00	0.00	0.00	
VAR-WV-WB-02	98.13	98.58	Adjusted alignment based on survey data.	WV-WB-027	Secured	No	No	Deciduous Forest	Deciduous Forest	441	1933	None	S-O4 (Adjacent)	None	None	Additional impacts to USACE Jurisdictional Features will not occur.	PA-WBWW-H600-21 PA-WBWW-H600-22		No Effect - Outside RLP Range	No Effect - Outside candy darter range	No effect on mussels - variance does not occur at instream Project crossing	No effect (2)	No effect (4)	-0.07	0.00	0.00	0.00	0.00	-0.07	0.00	
				WV-WB-028	Secured														No Effect - Outside RLP Range	No Effect - Outside candy darter range	No effect on mussels - variance does not occur at instream Project crossing	No effect (2)	No effect (4)	-0.02	0.00	0.00	0.00	0.00	0.00	-0.02	0.00
				WV-WB-028.01	Secured														No Effect - Outside RLP Range	No Effect - Outside candy darter range	No effect on mussels - variance does not occur at instream Project crossing	No effect (2)	No effect (4)	0.17	0.00	0.00	0.00	0.00	0.00	0.17	0.00
				WV-WB-029	Secured														No Effect - Outside RLP Range	No Effect - Outside candy darter range	No effect on mussels - variance does not occur at instream Project crossing	No effect (2)	No effect (4)	0.00	0.00	0.00	0.00	0.00	0.00	-0.08	0.00
VAR-WV-WB-04	102.25	102.25	Added MVP-ATWS-1502 for truck turnaround.	WV-WB-044	Secured	No	No	Deciduous Forest	NA	0	0	None	W-E28 (Adjacent), S-E62 (Adjacent)	None	None	Additional impacts to USACE Jurisdictional Features will not occur.	PA-WBWW-H600-27		No Effect - Outside RLP Range	No Effect - Outside candy darter range	No effect on mussels - variance does not occur at instream Project crossing	No effect (1)	No effect (14)	0.64	0.00	0.00	0.64	0.00	0.00	0.00	

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VAR-WV-WB-03	104.92	105.30	Adjusted alignment per landowner request.	WV-WB-053.01	Secured	No	No	Deciduous Forest; Cultivated Crops; Developed, Open Space	Deciduous Forest; Cultivated Crops; Developed, Open Space	1167	115	None	S-C49 (Additional impact will be protected)	S-C49 (3 ft)	None	Additional impacts to USACE Jurisdictional Features will not occur.	PA-WBWW-H600-29 PA-WBWW-H600-30	No Effect - Outside RLP Range	No effect to candy darter - variance occurs within CD range but does not occur at stream crossing with suitable CD habitat	No effect on mussels - variance does not occur at instream Project crossing	No effect (2)	No effect (4)	-0.22	0.00	0.00	-0.17	0.00	0.00	0.00
				WV-WB-053.02	Secured														Additional impacts to USACE Jurisdictional Features will not occur.	No effect to candy darter - variance occurs within CD range but does not occur at stream crossing with suitable CD habitat	No effect on mussels - variance does not occur at instream Project crossing	No effect (2)	No effect (4)	0.40	0.00	0.00	0.40	0.00	0.00
				WV-WB-059.001	Secured														Additional impacts to USACE Jurisdictional Features will not occur.	No effect to candy darter - variance occurs within CD range but does not occur at stream crossing with suitable CD habitat	No effect on mussels - variance does not occur at instream Project crossing	No effect (2)	No effect (4)	-0.77	0.00	0.00	-0.53	0.00	0.00
				WV-WB-058	Secured														Additional impacts to USACE Jurisdictional Features will not occur.	No effect to candy darter - variance occurs within CD range but does not occur at stream crossing with suitable CD habitat	No effect on mussels - variance does not occur at instream Project crossing	No effect (2)	No effect (6)	0.91	0.00	0.00	0.91	0.00	0.00
				WV-WB-059.01	Secured														Additional impacts to USACE Jurisdictional Features will not occur.	No effect to candy darter - variance occurs within CD range but does not occur at stream crossing with suitable CD habitat	No effect on mussels - variance does not occur at instream Project crossing	No effect (2)	No effect (4)	-0.12	0.00	0.00	-0.12	0.00	0.00
VAR-WV-WB-05	105.20	105.20	Added MVP-ATWS-1499 to facilitate landowner requested route adjustment.	WV-WB-058	Secured	No	No	Deciduous Forest	NA	0	0	None	None	None	None	Additional impacts to USACE Jurisdictional Features will not occur.	PA-WBWW-H600-29 PA-WBWW-H600-30	No Effect - Outside RLP Range	No effect to candy darter - variance occurs within CD range but does not occur at stream crossing with suitable CD habitat	No effect on mussels - variance does not occur at instream Project crossing	No effect (1)	No effect (4)	0.91	0.00	0.00	0.91	0.00	0.00	
VAR-WV-WB-01	136.15	136.30	Eliminated three points of inflection.	WV-GR-003	Secured	No	No	Deciduous Forest	Deciduous Forest	92	0	None	W-M15, W-M16, W-M17	None	PEM (48.6 ft)	Additional impacts to USACE Jurisdictional Features will not occur.	PA-GRWW-H600-01	No Effect - Outside RLP Range	No effect to candy darter - variance occurs within CD range but does not occur at stream crossing with suitable CD habitat	No effect on mussels - variance does not occur at instream Project crossing	No effect (2)	No effect (3)	-0.01	0.00	0.00	0.00	0.00	-0.06	0.00
VAR-WV-WB-02	147.40	147.54	Eliminated point of inflection.	WV-GR-037	Secured	No	No	Deciduous Forest	Deciduous Forest	404	335	None	None	None	None	Additional impacts to USACE Jurisdictional Features will not occur.	PA-GRWW-H600-15	No Effect - Outside RLP Range	No effect to candy darter - variance occurs within candy darter - variegata darter hybridization range and does not occur at stream crossing with suitable CD habitat	No effect on mussels - variance does not occur at instream Project crossing	No effect (2)	No effect (3)	0.00	0.00	0.00	0.00	0.00	0.00	
				WV-GR-039	Secured													Additional impacts to USACE Jurisdictional Features will not occur.	No effect to candy darter - variance occurs within candy darter - variegata darter hybridization range and does not occur at stream crossing with suitable CD habitat	No effect on mussels - variance does not occur at instream Project crossing	No effect (2)	No effect (3)	0.00	0.00	0.00	0.04	0.00	-0.04	0.00
VAR-WV-WB-03	151.22	151.32	Eliminated two points of inflection.	WV-GR-054	Secured	No	No	Cultivated Crops; Deciduous Forest; Pasture/Hay	Cultivated Crops; Deciduous Forest; Pasture/Hay	418	0	None	None	None	None	Additional impacts to USACE Jurisdictional Features will not occur.	PA-GRWW-H600-19	No Effect - Outside RLP Range	No effect to candy darter - variance occurs within candy darter - variegata darter hybridization range and does not occur at stream crossing with suitable CD habitat	No effect on mussels - variance does not occur at instream Project crossing	No effect (2)	No effect (3)	-0.05	0.00	0.00	0.00	0.00	0.00	
				WV-GR-055	Secured													Additional impacts to USACE Jurisdictional Features will not occur.	No effect to candy darter - variance occurs within candy darter - variegata darter hybridization range and does not occur at stream crossing with suitable CD habitat	No effect on mussels - variance does not occur at instream Project crossing	No effect (2)	No effect (5)	0.05	0.00	0.00	0.00	0.00	0.00	0.01

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Variance Number	Begin MP	End MP	Description	Parcel ID	Landowner Approval	New Landowners Affected?	Residences within 50 feet of Construction Work Area?	Description of New Route Land Use/Cover	Existing Land Use/Cover Type	Length of Forested Area Crossed (feet)	Length of Interior Forested Area Crossed (feet)	Cultural Resource/Federally List Species Affected by Deviation	Environmentally Sensitive Areas Within/Abutting Area of Deviation	Waterbodies Crossed and Width (feet)	Length of Wetlands Crossed by Type (PFO, PSS, PEM) (feet)	Nationwide 12 permit modifications	Alignment Sheet Number	Roanoke Loggerch Impact	Candy Darter Impact	Mussel Impact	RPBB Impact	Plant Impact	Total Change +/- in LOD (acres)	MYSO - Known Summer Use Habitat (acres)	MYSO - Known use spring staging/fall swarming habitat (acres)	MYSO - Suitable Unoccupied Summer Habitat (acres)	MYSO - Unknown use spring staging/fall swarming habitat (acres)	MYSO - Unknown Use Summer Habitat (acres)	NLEB known use spring staging/fall swarming habitat (acres)	
VAR-WV-GB-04	154.83	154.83	Added MVP-ATWS-605 to facilitate hydrostatic testing.	WV-GR-067.005	Secured	WV-GR-067.003; WV-GR-067.004; WV-GR-067.005	No	Developed Open Space; Pasture/Hay; Emergent Herbaceous Wetlands	NA	0	0	None	S-L25/K18 (Protected), W-K7 (Protected), W-KS (Protected), W-HH01 (Protected), S-HH8 (Protected)	None	None	PA-GRVV-H600-23		No Effect - Outside RLP Range	No effect to candy darter - variance occurs within candy darter hybridization range and does not occur at stream crossing with suitable CD habitat	No effect on mussels - variance does not occur at instream Project crossing	No effect (2)	No effect (3)	8.68	0.00	0.00	0.28	0.00	0.00	0.00	
				WV-GR-067.003	Secured														Additional impacts to USACE Jurisdictional Features will not occur.	No effect to candy darter - variance occurs within candy darter hybridization range and does not occur at stream crossing with suitable CD habitat	No effect on mussels - variance does not occur at instream Project crossing	No effect (2)	No effect (3)	3.84	0.00	0.00	0.00	0.00	0.00	0.00
				WV-GR-067.004	Secured														Additional impacts to USACE Jurisdictional Features will not occur.	No effect to candy darter - variance occurs within candy darter hybridization range and does not occur at stream crossing with suitable CD habitat	No effect on mussels - variance does not occur at instream Project crossing	No effect (2)	No effect (3)	2.34	0.00	0.00	0.00	0.00	0.00	0.00
VAR-WV-SU-07	158.59	158.78	Adjusted temporary right-of-way to avoid impacts to wetland W-J3.	WV-SU-5154	Secured	No	No	Deciduous Forest	Deciduous Forest	660	343.2	None	W-J3 (Adjacent)	None	None	PA-SUWV-H600-02	No Effect - Outside RLP Range	No effect to candy darter - variance occurs within candy darter hybridization range and does not occur at stream crossing with suitable CD habitat	No effect on mussels - variance does not occur at instream Project crossing	No effect (2)	No effect (7)	-0.09	0.00	0.00	-0.09	0.00	0.00	0.00		
				WV-SU-002.02	Secured													Additional impacts to USACE Jurisdictional Features will not occur.	No effect to candy darter - variance occurs within candy darter hybridization range and does not occur at stream crossing with suitable CD habitat	No effect on mussels - variance does not occur at instream Project crossing	No effect (2)	No effect (7)	0.05	0.00	0.00	0.05	0.00	0.00	0.00	0.00
				WV-SU-5891	Secured													Additional impacts to USACE Jurisdictional Features will not occur.	No effect to candy darter - variance occurs within candy darter hybridization range and does not occur at stream crossing with suitable CD habitat	No effect on mussels - variance does not occur at instream Project crossing	No effect (2)	No effect (7)	-0.13	0.00	0.00	0.03	0.00	0.00	0.00	0.00

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Variance Number	Begin MP	End MP	Description	Parcel ID	Landowner Approval	New Landowners Affected?	Residences within 50 feet of Construction Work Area?	Description of New Route Land Use/Cover	Existing Land Use/Cover Type	Length of Forested Area Crossed (feet)	Length of Interior Forested Area Crossed (feet)	Cultural Resource/Federally Listed Species Affected by Deviation	Environmentally Sensitive Areas Within/Abutting Area of Deviation	Waterbodies Crossed and Width (feet)	Length of Wetlands Crossed by Type (PFO, PSS, PEM) (feet)	Nationwide 12 permit modifications	Alignment Sheet Number	Roanoke Loggerch Impact	Candy Darter Impact	Mussel Impact	RPBB Impact	Plant Impact	Total Change +/- in LOD (acres)	MYSO - Known Summer Use Habitat (acres)	MYSO - Known use spring staging/fall swarming habitat (acres)	MYSO - Suitable Unoccupied Summer Habitat (acres)	MYSO - Unknown use spring staging/fall swarming habitat (acres)	MYSO - Unknown Use Summer Habitat (acres)	NLEB known use spring staging/fall swarming habitat (acres)	
VAR-WV-GB-05	162.50	162.50	Added laydown yard MVP-LY-030.	WV-GR-5838	Secured	WV-GR-5837; WV-GR-5838; WV-GR-5880	No	Cultivated Crops; Barren Land; Deciduous Forest; Developed, Low Intensity	NA	0	0	None	S-180 (Existing bridge - No Impact.), W-AD2, W-AD3, W-ACA, W-ACS, W-ACG (E&S BMP Protection for all. No impact)	None	None	Additional impacts to USACE Jurisdictional Features will not occur.	MVP-ADAS-H600-03 MVP-QDAS-H600-03		No Effect - Outside RLP Range	No Effect - Outside candy darter range	No effect on mussels - variance does not occur at instream Project crossing	No effect (2)	No effect (3)	0.27	0.00	0.00	0.00	0.00	0.00	0.00
				WV-GR-5837	Secured														No Effect - Outside RLP Range	No Effect - Outside candy darter range	No effect on mussels - variance does not occur at instream Project crossing	No effect (2)	No effect (3)	16.43	0.00	0.00	0.00	0.00	0.96	0.00
				WV-GR-5880	Secured														No Effect - Outside RLP Range	No Effect - Outside candy darter range	No effect on mussels - variance does not occur at instream Project crossing	No effect (2)	No effect (3)	0.60	0.00	0.00	0.00	0.00	0.00	0.00
VAR-WV-SU-01	172.40	172.40	Adjusted access road MVP-SU-208.01 based on survey data.	WV-SU-052	Secured	No	No	Deciduous Forest; Pasture/Hay; Developed, Open Space	Deciduous Forest; Pasture/Hay; Developed, Open Space	0	0	None	S-K3 (Protected. Existing culvert present. E&S BMP protections. No impact.), S-K4, P-K2	S-K3 (None), S-K4 (2 ft)	None	Additional impacts to USACE Jurisdictional Features will not occur.	PA-SUWV-H600-17 MVP-ADAR-H600-71 MVP-QDAR-H600-71		No Effect - Outside RLP Range	No Effect - Outside candy darter range	No effect on mussels - variance does not occur at instream Project crossing	No effect (2)	No effect (7)	0.09	0.00	0.00	0.00	0.00	0.07	0.00
VAR-WV-SU-02	172.58	172.69	Eliminated two points of inflection.	WV-SU-055	Secured	No	No	Deciduous Forest; Developed, Open Space	Deciduous Forest; Developed, Open Space	41	0	None	S-J5 (Reduction)	S-J5 (20 ft)	None	Additional impacts to USACE Jurisdictional Features will not occur.	PA-SUWV-H600-17		No Effect - Outside RLP Range	No Effect - Outside candy darter range	No effect on mussels - variance does not occur at instream Project crossing	No effect (2)	No effect (7)	0.15	0.00	0.00	0.00	0.00	0.02	0.00
				WV-SU-056	Secured														No Effect - Outside RLP Range	No Effect - Outside candy darter range	No effect on mussels - variance does not occur at instream Project crossing	No effect (2)	No effect (7)	0.06	0.00	0.00	0.00	0.00	0.00	0.00
VAR-WV-SU-03	173.11	173.29	Eliminated point of inflection.	WV-SU-056	Secured	No	No	Pasture/Hay; Deciduous Forest	Pasture/Hay; Deciduous Forest	436	108	None	S-J4	S-J4 (5 ft)	None	Additional impacts to USACE Jurisdictional Features will not occur.	PA-SUWV-H600-18		No Effect - Outside RLP Range	No Effect - Outside candy darter range	No effect on mussels - variance does not occur at instream Project crossing	No effect (2)	No effect (7)	0.06	0.00	0.00	0.00	0.00	0.06	0.00
VAR-WV-SU-04	173.55	173.66	Eliminated point of inflection.	WV-SU-055.01	Secured	No	No	Deciduous Forest; Pasture/Hay	Deciduous Forest; Pasture/Hay	335	45	None	None	None	None	Additional impacts to USACE Jurisdictional Features will not occur.	PA-SUWV-H600-18		No Effect - Outside RLP Range	No Effect - Outside candy darter range	No effect on mussels - variance does not occur at instream Project crossing	No effect (2)	No effect (7)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				WV-SU-055	Secured														No Effect - Outside RLP Range	No Effect - Outside candy darter range	No effect on mussels - variance does not occur at instream Project crossing	No effect (2)	No effect (7)	0.15	0.00	0.00	0.00	0.00	0.00	0.00
VAR-WV-SU-05	174.06	174.26	Eliminated two points of inflection.	WV-SU-055	Secured	No	No	Pasture/Hay; Developed, Low Intensity; Cultivated Crops	Pasture/Hay; Developed, Low Intensity; Cultivated Crops	0	0	None	S-G47 (Reduction), W-G7 (Reduction)	S-G47 (2 ft)	PEM (19.4 ft)	Additional impacts to USACE Jurisdictional Features will not occur.	PA-SUWV-H600-19		No Effect - Outside RLP Range	No Effect - Outside candy darter range	No effect on mussels - variance does not occur at instream Project crossing	No effect (2)	No effect (7)	0.15	0.00	0.00	0.00	0.00	0.02	0.00
				WV-SU-059	Secured														No Effect - Outside RLP Range	No Effect - Outside candy darter range	No effect on mussels - variance does not occur at instream Project crossing	No effect (2)	No effect (7)	-0.07	0.00	0.00	0.00	0.00	0.00	0.00
VAR-WV-SU-06	174.37	174.55	Eliminated point of inflection.	WV-SU-059.01	Secured	No	No	Pasture/Hay; Deciduous Forest	Pasture/Hay; Deciduous Forest	171	0	None	None	None	None	Additional impacts to USACE Jurisdictional Features will not occur.	PA-SUWV-H600-19 PA-MOWV-H600-01		No Effect - Outside RLP Range	No Effect - Outside candy darter range	No effect on mussels - variance does not occur at instream Project crossing	No effect (2)	No effect (7)	-0.07	0.00	0.00	0.00	0.00	0.00	0.00
				WV-MO-004	Secured														No Effect - Outside RLP Range	No Effect - Outside candy darter range	No effect on mussels - variance does not occur at instream Project crossing	No effect (2)	No effect (10)	-0.03	0.00	0.00	0.00	0.00	0.00	0.00
VAR-WV-MO-01	174.64	174.77	Eliminated point of inflection.	WV-MO-004	Secured	No	No	Deciduous Forest	Deciduous Forest	0	0	None	None	None	None	Additional impacts to USACE Jurisdictional Features will not occur.	PA-MOWV-H600-01		No Effect - Outside RLP Range	No Effect - Outside candy darter range	No effect on mussels - variance does not occur at instream Project crossing	No effect (2)	No effect (10)	-0.03	0.00	0.00	0.00	0.00	0.00	0.00
				WV-MO-0860	Secured														No Effect - Outside RLP Range	No Effect - Outside candy darter range	No effect on mussels - variance does not occur at instream Project crossing	No effect (2)	No effect (10)	0.02	0.00	0.00	0.00	0.00	0.00	0.00
VAR-WV-MO-02	174.77	174.77	Eliminated point of inflection.	WV-MO-012.030	Secured	No	No	Deciduous Forest	Deciduous Forest	0	0	None	None	None	None	Additional impacts to USACE Jurisdictional Features will not occur.			No Effect - Outside RLP Range	No Effect - Outside candy darter range	No effect on mussels - variance does not occur at instream Project crossing	No effect (2)	No effect (10)	0.10	0.00	0.10	0.00	0.00	0.00	0.00

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VAR-WV-WU-02	177.04	177.14	infection.	WV-MO-012.035	Secured	No	No	Deciduous Forest	Deciduous Forest	0	422	None	None	None	None	PA-MOWV-H600-04		No Effect - Outside RLP Range	No Effect - Outside candy darter range	No effect on mussels - variance does not occur at instream Project crossing	No effect (2)	No effect (10)	-0.11	0.00	-0.11	0.00	0.00	0.00	0.00	
VAR-WV-MO-03	177.97	178.06	Eliminated two points of infection.	WV-MO-012.030	Secured	No	No	Deciduous Forest	Deciduous Forest	0	475	None	None	None	None	PA-MOWV-H600-04		No Effect - Outside RLP Range	No Effect - Outside candy darter range	No effect on mussels - variance does not occur at instream Project crossing	No effect (2)	No effect (10)	-0.06	0.00	-0.06	0.00	0.00	0.00	0.00	
				WV-MO-012.035	Secured											PA-MOWV-H600-04		No Effect - Outside RLP Range	No Effect - Outside candy darter range	No effect on mussels - variance does not occur at instream Project crossing	No effect (2)	No effect (10)	0.02	0.00	0.02	0.00	0.00	0.00	0.00	
VAR-WV-MO-08	179.06	179.06	Added access road MVP-MO-215.01 to serve as dedicated timber mat crossing of environmentally sensitive area during bore operations. Access road will be entirely encompassed within permitted pipeline LOD.	WV-MO-012.040	Secured	No	No	Pasture/Hay; Developed, Open Space	Pasture/Hay; Deciduous Forest; Developed, Low Intensity; Developed, Open Space	0	0	46ME311 (avoidance)	None	None	None	PA-MOWV-H600-06		No Effect - Outside RLP Range	No Effect - Outside candy darter range	No effect on mussels - variance does not occur at instream Project crossing	No effect (1)	No effect (12)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
VAR-WV-MO-05	179.23	179.23	Added MVP-ATWS-1513 to facilitate winch hill construction.	WV-MO-012.055	Secured	No	No	Evergreen Forest; Deciduous Forest	NA	0	0	None	None	None	None	PA-MOWV-H600-06		No Effect - Outside RLP Range	No Effect - Outside candy darter range	No effect on mussels - variance does not occur at instream Project crossing	No effect (1)	No effect (12)	0.51	0.00	0.51	0.00	0.00	0.00	0.00	
VAR-WV-MO-04	187.19	187.19	Adjusted alignment of access road MVP-MO-225 to match existing road.	WV-MO-012.180	Secured	No	No	Evergreen Forest; Mixed Forest; Deciduous Forest	Evergreen Forest; Mixed Forest; Deciduous Forest	0	0	None	S-H59 (Adjacent)	None	None	PA-MOWV-H600-15		No Effect - Outside RLP Range	No Effect - Outside candy darter range	No effect on mussels - variance does not occur at instream Project crossing	No effect (2)	No effect (10)	0.09	0.00	0.05	0.00	0.00	0.00	0.00	
				WV-MO-012.183	Secured				MVP-ADAR-H600-76							MVP-QDAR-H600-76	No Effect - Outside RLP Range	No Effect - Outside candy darter range	No effect on mussels - variance does not occur at instream Project crossing	No effect (2)	No effect (10)	-0.03	0.00	-0.03	0.00	0.00	0.00	0.00		
VAR-WV-MO-06	195.93	195.93	Added MVP-ATWS-1491 to facilitate winch hill construction.	WV-MO-230.01	Secured	No	No	Deciduous Forest	NA	0	0	None	None	None	None	PA-MOWV-H600-24		No Effect - Outside RLP Range	No Effect - Outside candy darter range	No effect on mussels - variance does not occur at instream Project crossing	No effect (1)	No effect (12)	0.58	0.00	0.00	0.00	0.58	0.00	0.00	
VAR-WV-MO-07	196.25	196.25	Added MVP-ATWS-1492 to facilitate Appalachian National Scenic Trail bore.	WV-MO-230.01	Secured	No	No	Deciduous Forest	NA	0	0	None	None	None	None	PA-MOWV-H600-24		No Effect - Outside RLP Range	No Effect - Outside candy darter range	No effect on mussels - variance does not occur at instream Project crossing	No direct effects (2)	No effect (12)	0.23	0.00	0.00	0.00	0.23	0.00	0.00	
VAR-VA-GI-01	200.00	200.00	Added MVP-LY-028 and access roads MVP-ANC-004 and MVP-ANC-005 to allow entry to and travel through laydown yard MVP-LY-028.	VA-GI-5930	Secured	VA-GI-5871; VA-GI-5872; VA-GI-5873; VA-GI-5930	Yes	Developed, Open Space; Developed, Low Intensity; Developed, Medium Intensity; Deciduous Forest; Open Water; Developed, High Intensity	NA	NA	0	0	None	S-MN35 (Protected), W-MN13b (Protected), W-MN13a (Protected), W-AD1 (Protected), W-AC1 (Protected), W-AC2 (Protected), W-MN12 (Protected)	None	None	MVP-QDAS-H600-06		No Effect - Outside RLP Range	No effect to candy darter - variance occurs within CD range but does not occur at stream crossing with suitable CD habitat	No effect on mussels - variance does not occur at instream Project crossing	No direct effect (1)	No effect (11)	0.60	0.00	0.00	0.00	0.00	0.00	0.00
				VA-GI-5873	Secured												MVP-QDAS-H600-06		No Effect - Outside RLP Range	No effect to candy darter - variance occurs within CD range but does not occur at stream crossing with suitable CD habitat	No effect on mussels - variance does not occur at instream Project crossing	No direct effect (1)	No effect (11)	4.23	0.00	0.00	0.00	0.00	0.84	0.00
				VA-GI-5872	Secured												MVP-QDAS-H600-06		No Effect - Outside RLP Range	No effect to candy darter - variance occurs within CD range but does not occur at stream crossing with suitable CD habitat	No effect on mussels - variance does not occur at instream Project crossing	No direct effect (1)	No effect (11)	5.44	0.00	0.00	0.00	0.00	2.31	0.00
				VA-GI-5871	Secured												MVP-QDAS-H600-06		No Effect - Outside RLP Range	No effect to candy darter - variance occurs within CD range but does not occur at stream crossing with suitable CD habitat	No effect on mussels - variance does not occur at instream Project crossing	No direct effect (1)	No effect (11)	1.30	0.00	0.00	0.00	0.00	0.00	0.00
VAR-VA-GI-02	209.42	209.42	Changed designation of MVP-GI-245.01 from temporary to permanent.	VA-GI-5447	Secured	No	No	Deciduous Forest; Evergreen Forest; Developed, Open Space	Deciduous Forest; Evergreen Forest; Developed, Open Space	0	0	None	S-U6-a (No Change)	None	None	PA-GVA-H600-14		No Effect - Outside RLP Range	No Effect - Outside candy darter range	No effect on mussels - variance does not occur at instream Project crossing	No direct effect (1)	No effect (11)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
				VA-GI-4417	Secured											MVP-ADAR-H600-84	MVP-QDAR-H600-84	No Effect - Outside RLP Range	No Effect - Outside candy darter range	No effect on mussels - variance does not occur at instream Project crossing	No direct effect (1)	No effect (11)	0.00	0.00	0.00	0.00	0.00	0.00		



Attachment IP-Sc1 - Variances: Affect Multiple Landowners or Sensitive Environmental Areas (updated 2/15/18)																							Total Change (+/-) in clearing of trees by species habitat type								
Variance Number	Begin MP	End MP	Description	Parcel ID	Landowner Approval	New Landowners Affected?	Residences within 50 feet of Construction Work Area?	Description of New Route Land Use/Cover	Existing Land Use/Cover Type	Length of Forested Area Crossed (feet)	Length of Interior Forested Area Crossed (feet)	Cultural Resource/Federally Listed Species Affected by Deviation	Environmentally Sensitive Areas Within/Abutting Area of Deviation	Waterbodies Crossed and Width (feet)	Length of Wetlands Crossed by Type (PFO, PSS, PEM) (feet)	Nationwide 12 permit modifications	Alignment Sheet Number	Roanoke Loggerch Impact	Candy Darter Impact	Mussel Impact	RPBB Impact	Plant Impact	Total Change +/- in LOD (acres)	MYSO - Known Summer Use Habitat (acres)	MYSO - Known use spring staging/fall swarming habitat (acres)	MYSO - Suitable Unoccupied Summer Habitat (acres)	MYSO - Unknown use spring staging/fall swarming habitat (acres)	MYSO - Unknown Use Summer Habitat (acres)	NLEB known use spring staging/fall swarming habitat (acres)		
VAR-VA-MN-01	225.20	225.20	Rerouted access road MVP-MN-266.03 based on survey data.	VA-MO-5530	Secured	No	No	Developed, Open Space; Deciduous Forest	Developed, Open Space; Deciduous Forest	0	0	None	S-AC1 (Adjacent), W-AD4	None	PEM (32 ft)	Additional impacts to USACE Jurisdictional Features will not occur.	PA-MOVA-H600-09 MVP-ADAR-H600-87 MVP-QDAR-H600-87	No effect to Roanoke loggerch - variance occurs within RLP range and does not occur at stream crossing with suitable RLP habitat.	No Effect - Outside candy darter range	No effect on mussels - variance does not occur at instream Project crossing	No direct effect (1)	No effect (9)	0.54	0.00	0.00	0.00	0.26	0.00	0.00		
VAR-VA-MN-06	226.40	227.08	Rerouted pipeline alignment based on landowner request.	VA-MO-053	Secured	No	No	Deciduous Forest; Pasture/Hay; Cultivated Crop; Developed, Open Space	Deciduous Forest; Evergreen Forest; Cultivated Crops; Pasture/Hay; Developed, Open Space	598	984	None	S-MN16 (Adjacent)	None	None	Additional impacts to USACE Jurisdictional Features will not occur.	PA-MOVA-H600-09 PA-MOVA-H600-10	No direct effects on Roanoke Loggerch. Slight sediment increase will occur, but no increase in Roanoke Loggerch take as impacts in the receiving waters are already accounted for.	No Effect - Outside candy darter range	No effect on mussels - variance does not occur at instream Project crossing	No direct effects (2)	No effect (13)	0.18	0.00	0.00	0.00	-1.33	0.00	0.00		
VAR-VA-MN-07	226.90	226.90	Added MVP-ATWS-1157A to replace MVP-ATWS-1158.	VA-MO-053	Secured	No	No	Developed, Open Space; Cultivated Crops; Pasture/Hay	Developed, Open Space; Cultivated Crops; Pasture/Hay	0	0	None	None	None	None	Additional impacts to USACE Jurisdictional Features will not occur.	PA-MOVA-H600-10	No direct effects on Roanoke Loggerch. Slight sediment increase will occur, but no increase in Roanoke Loggerch take as impacts in the receiving waters are already accounted for.	No Effect - Outside candy darter range	No effect on mussels - variance does not occur at instream Project crossing	No direct effects (2)	No effect (13)	0.18	0.00	0.00	0.00	-1.33	0.00	0.00		
VAR-VA-MN-02	227.36	227.36	Changed designation and name of MVP-MN-268 from permanent to temporary and to MVP-MN-268.01 past groundbed MVP-CPGB-23.	VA-MO-053	Secured	No	No	Pasture/Hay; Deciduous Forest; Developed, Open Space	Pasture/Hay; Deciduous Forest; Developed, Open Space	0	0	None	S-G36, S-NN8b, S-G38 (Adjacent), S-G40 (Adjacent), W-NN7 (Adjacent)	S-G36 (20 ft)	None	Additional impacts to USACE Jurisdictional Features will not occur.	PA-MOVA-H600-11 MVP-ADAR-H600-88 MVP-QDAR-H600-88	No effect to Roanoke loggerch - variance occurs within RLP range and does not occur at stream crossing with suitable RLP habitat.	No Effect - Outside candy darter range	No effect on mussels - variance does not occur at instream Project crossing	No direct effect (1)	No effect (9)	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
				VA-MO-057	Secured																									Additional impacts to USACE Jurisdictional Features will not occur.	PA-MOVA-H600-11 MVP-ADAR-H600-88 MVP-QDAR-H600-88
VAR-VA-MN-03	228.48	228.48	Extended edge of access road MVP-MN-270 to match existing state road right-of-way.	VA-MO-5356	Secured	No	No	Deciduous Forest; Evergreen Forest; Mixed Forest; Developed, Open Space; Pasture/Hay	Deciduous Forest; Evergreen Forest; Mixed Forest; Developed, Open Space; Pasture/Hay	0	0	None	None	None	None	None	Additional impacts to USACE Jurisdictional Features will not occur.	MVP-ADAR-H600-90 MVP-QDAR-H600-90	No effect to Roanoke loggerch - variance occurs within RLP range and does not occur at stream crossing with suitable RLP habitat.	No Effect - Outside candy darter range	No effect on mussels - variance does not occur at instream Project crossing	No direct effect (1)	No effect (9)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
				VA-MO-5885	Secured																										Additional impacts to USACE Jurisdictional Features will not occur.
VAR-VA-MN-04	230.54	230.70	Adjusted pipeline centerline based on proposed substation construction.	VA-MO-073	Secured	No	Yes	Mixed Forest; Pasture/Hay; Developed, Low Intensity; Developed, Open Space	Mixed Forest; Pasture/Hay; Developed, Low Intensity; Developed, Open Space	0	0	None	None	None	None	None	Additional impacts to USACE Jurisdictional Features will not occur.	PA-MOVA-H600-14 PA-MOVA-H600-15	No direct effect to Roanoke loggerch - variance occurs within RLP range and does not occur at stream crossing with suitable RLP habitat. Slight sediment increase will occur, but no increase in Roanoke Loggerch take as impacts in the receiving waters are already accounted for.	No Effect - Outside candy darter range	No effect on mussels - variance does not occur at instream Project crossing	No direct effect (1)	No effect (9)	No change in LOD within Parcel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				VA-MO-074	Secured																										
VAR-VA-MN-05	232.77	232.77	Adjusted access road MVP-MN-276.03 to straighten alignment and reduce LOD per landowner request.	VA-MO-082	Secured	No	No	Deciduous Forest	Deciduous Forest	0	0	None	None	None	None	None	Additional impacts to USACE Jurisdictional Features will not occur.	PA-MOVA-H600-16	No direct effect to Roanoke loggerch - variance occurs within RLP range and does not occur at stream crossing with suitable RLP habitat. Reduction in upland acreage disturbed therefore reduction in sedimentation.	No Effect - Outside candy darter range	No effect on mussels - variance does not occur at instream Project crossing	No direct effect (1)	No effect (9)	-0.47	0.00	0.00	-0.38	-0.08	0.00	0.00	
				VA-MO-080	Secured																										Additional impacts to USACE Jurisdictional Features will not occur.
VAR-VA-FR-02	248.45	248.62	Eliminated three points of inflection.	VA-FR-010	Secured	No	No	Deciduous Forest	Deciduous Forest	191	707	None	S-D17 (No change), S-D14 (Adjacent)	S-D17 (7 ft)	None	Additional impacts to USACE Jurisdictional Features will not occur.	PA-FRVA-H600-02 PA-FRVA-H600-03	No direct effect to Roanoke loggerch - variance occurs within RLP range and does not occur at stream crossing with suitable RLP habitat. Reduction in upland acreage disturbed therefore reduction in sedimentation.	No Effect - Outside candy darter range	No effect on mussels - variance does not occur at instream Project crossing	No effect (2)	No effect (10)	-0.03	0.00	0.00	-0.03	0.00	0.00	0.00		
VAR-VA-FR-08	257.55	257.55	Added MVP-ATWS-1488 to facilitate removal of structure MVP-STR-480.	VA-FR-017.47	Secured	No	No	Deciduous Forest	NA	0	0	None	None	None	None	Additional impacts to USACE Jurisdictional Features will not occur.	PA-FRVA-H600-12	No direct effect to Roanoke loggerch - variance occurs within RLP range but does not occur at stream crossing with suitable RLP habitat. Slight sediment increase will occur within headwaters of Teels and Little Creek but not significant enough to increase take of RLP.	No Effect - Outside candy darter range	No effect on mussels - variance does not occur at instream Project crossing	No effect (1)	No effect (13)	0.04	0.00	0.00	0.04	0.00	0.00	0.00		
VAR-VA-FR-09	265.00	265.00	Added laydown yard MVP-LY-034 and access road MVP-ANC-006.	VA-FR-5921	Secured	Yes	No	Developed, Low Intensity; Developed, Open Space; Pasture/Hay; Developed, Medium Intensity	NA	0	0	None	None	None	None	Additional impacts to USACE Jurisdictional Features will not occur.	MVP-ADAS-H600-07 MVP-QDAS-H600-07	No direct effects on Roanoke Loggerch. Acreage proposed to be disturbed is in extreme headwaters of North Fork Little Chestnut Creek watershed (Pigg River drainage). The limited sedimentation impacts potentially occurring within this watershed will have no effect to Roanoke Loggerch.	No Effect - Outside candy darter range	No effect on mussels - variance does not occur at instream Project crossing	No effect (1)	No effect (13)	2.77	0.00	0.00	0.00	0.00	0.00	0.00		

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Variance Number	Begin MP	End MP	Description	Parcel ID	Landowner Approval	New Landowners Affected?	Residences within 50 feet of Construction Work Area?	Description of New Route Land Use/Cover	Existing Land Use/Cover Type	Length of Forested Area Crossed (feet)	Length of Interior Forested Area Crossed (feet)	Cultural Resource/Federally List Species Affected by Deviation	Environmentally Sensitive Areas Within/Abutting Area of Deviation	Waterbodies Crossed and Width (feet)	Length of Wetlands Crossed by Type (PFO, PSS, PEM) (feet)	Nationwide 12 permit modifications	Alignment Sheet Number	Roanoke Loggerch Impact	Candy Darter Impact	Mussel Impact	RPBB Impact	Plant Impact	Total Change +/- in LOD (acres)	MYSO - Known Summer Use Habitat (acres)	MYSO - Known use spring staging/fall swarming habitat (acres)	MYSO - Suitable Unoccupied Summer Habitat (acres)	MYSO - Unknown use spring staging/fall swarming habitat (acres)	MYSO - Unknown Use Summer Habitat (acres)	NLEB known use spring staging/fall swarming habitat (acres)
VAR-VA-FR-03	265.00	265.00	Added laydown yard MVP-LY-033	VA-FR-5866	Secured	VA-FR-5866	No	Pasture/Hay, Developed, Open Space; Developed, Low Intensity; Developed, Medium Intensity	NA	0	0	None	W-KL45 (protected)	None	None	Additional impacts to USACE Jurisdictional Features will not occur.	MVP-ADAS-H600-07 MVP-QDAS-H600-07	No direct effect to Roanoke loggerch - variance occurs within RLP range and does not occur at stream crossing with suitable RLP habitat	No Effect - Outside candy darter range	No effect on mussels - variance does not occur at instream Project crossing	No effect (2)	No effect (10)	2.35	0.00	0.00	0.00	0.00	0.00	0.00
VAR-VA-FR-04	265.00	265.00	Added laydown yard MVP-LY-032.	VA-FR-5869	Secured	VA-FR-5867; VA-FR-5868; VA-FR-5869	No	Developed, Open Space; Pasture/Hay; Deciduous Forest; Developed, Low Intensity; Developed, Medium Intensity	NA	0	0	None	W-KL44 (Protected)	None	Additional impacts to USACE Jurisdictional Features will not occur.	MVP-ADAS-H600-07 MVP-QDAS-H600-07	No direct effect to Roanoke loggerch - variance occurs within RLP range and does not occur at stream crossing with suitable RLP habitat	No Effect - Outside candy darter range	No effect on mussels - variance does not occur at instream Project crossing	No effect (2)	No effect (10)	4.49	0.00	0.00	0.00	0.00	1.94	0.00	
				VA-FR-5868	Secured												No direct effect to Roanoke loggerch - variance occurs within RLP range and does not occur at stream crossing with suitable RLP habitat	No Effect - Outside candy darter range	No effect on mussels - variance does not occur at instream Project crossing	No effect (2)	No effect (10)	1.93	0.00	0.00	0.00	0.00	0.00	0.00	
				VA-FR-5867	Secured												No direct effect to Roanoke loggerch - variance occurs within RLP range and does not occur at stream crossing with suitable RLP habitat	No Effect - Outside candy darter range	No effect on mussels - variance does not occur at instream Project crossing	No effect (2)	No effect (10)	0.33	0.00	0.00	0.00	0.00	0.00	0.00	
VAR-VA-FR-10	271.26	271.26	Added access road MVP-FR-313.01.	VA-FR-140	Secured	No	No	Pasture/Hay; Developed, Open Space	NA	0	0	None	None	None	None	Additional impacts to USACE Jurisdictional Features will not occur.	PA-FRVA-H600-27	No direct effects on Roanoke Loggerch. Slight sediment increase will occur, but no increase in Roanoke Loggerch take as impacts in the receiving waters are already accounted for.	No Effect - Outside candy darter range	No effect on mussels - variance does not occur at instream Project crossing	No effect (1)	No effect (12)	0.39	0.00	0.00	0.00	0.00	0.00	
VAR-VA-FR-11	271.26	271.26	Added MVP-ATWS-1485.	VA-FR-140	Secured	No	No	Pasture/Hay	NA	0	0	None	None	None	None	Additional impacts to USACE Jurisdictional Features will not occur.	PA-FRVA-H600-27	No direct effects on Roanoke Loggerch. Slight sediment increase will occur, but no increase in Roanoke Loggerch take as impacts in the receiving waters are already accounted for.	No Effect - Outside candy darter range	No effect on mussels - variance does not occur at instream Project crossing	No effect (1)	No effect (12)	1.00	0.00	0.00	0.00	0.00	0.00	
VAR-VA-FR-12	271.26	271.26	Added MVP-ATWS-1484.	VA-FR-140	Secured	No	No	Pasture/Hay; Developed, Open Space	NA	0	0	None	None	None	None	Additional impacts to USACE Jurisdictional Features will not occur.	PA-FRVA-H600-27	No direct effects on Roanoke Loggerch. Slight sediment increase will occur, but no increase in Roanoke Loggerch take as impacts in the receiving waters are already accounted for.	No Effect - Outside candy darter range	No effect on mussels - variance does not occur at instream Project crossing	No effect (1)	No effect (12)	0.74	0.00	0.00	0.00	0.00	0.00	
VAR-VA-FR-05	274.85	275.36	Eliminated three points of inflection to parallel overhead power line right-of-way.	VA-FR-157	Secured	No	No	Evergreen Forest; Mixed Forest; Pasture/Hay; Developed, Open Space; Deciduous Forest	Evergreen Forest; Mixed Forest; Pasture/Hay; Developed, Open Space; Deciduous Forest	0	0	None	S-G17, S-E19 (Adjacent)	None	None	Additional impacts to USACE Jurisdictional Features will not occur.	PA-FRVA-H600-31	No direct effect to Roanoke loggerch - variance occurs within RLP range and does not occur at stream crossing with suitable RLP habitat. Reduction in upland acreage disturbed therefore reduction in sedimentation.	No Effect - Outside candy darter range	No effect on mussels - variance does not occur at instream Project crossing	No effect (2)	No effect (10)	-0.39	0.00	0.00	-0.03	0.00	0.00	0.00
				VA-FR-157.01	Secured													No direct effect to Roanoke loggerch - variance occurs within RLP range and does not occur at stream crossing with suitable RLP habitat. Reduction in upland acreage disturbed therefore reduction in sedimentation.	No Effect - Outside candy darter range	No effect on mussels - variance does not occur at instream Project crossing	No effect (2)	No effect (10)	0.06	0.00	0.00	0.00	0.00	0.00	0.00
VAR-VA-FR-06	275.36	275.72	Adjusted pipeline centerline to parallel overhead power line right-of-way.	VA-FR-157	Secured	No	No	Pasture/Hay; Mixed Forest; Deciduous Forest;	Pasture/Hay; Mixed Forest; Deciduous Forest;	0	0	None	S-E18, S-E17, W-E5 (Adjacent); S-I15 (Adjacent)	S-E18 (7 ft), S-E17 (8 ft)	None	Additional impacts to USACE Jurisdictional Features will not occur.	PA-FRVA-H600-31 PA-FRVA-H600-32	No direct effect to Roanoke loggerch - variance occurs within RLP range and does not occur at stream crossing with suitable RLP habitat. Variance of alignment imposes no net change in sedimentation.	No Effect - Outside candy darter range	No effect on mussels - variance does not occur at instream Project crossing	No effect (2)	No effect (10)	-0.10	0.00	0.00	0.02	0.00	0.00	0.00
				VA-FR-160	Secured													No direct effect to Roanoke loggerch - variance occurs within RLP range and does not occur at stream crossing with suitable RLP habitat. Variance of alignment imposes no net change in sedimentation.	No Effect - Outside candy darter range	No effect on mussels - variance does not occur at instream Project crossing	No effect (2)	No effect (10)	0.06	0.00	0.00	0.02	0.00	0.00	0.00
VAR-VA-FR-07	281.61	281.80	Adjusted pipeline centerline to parallel overhead power line right-of-way.	VA-FR-192	Secured	No	No	Shrub/Scrub; Deciduous Forest	Shrub/Scrub; Deciduous Forest	0	1003	None	None	None	None	Additional impacts to USACE Jurisdictional Features will not occur.	PA-FRVA-H600-37	No direct effect to Roanoke loggerch - variance occurs within RLP range and does not occur at stream crossing with suitable RLP habitat. Variance of alignment imposes no net change in sedimentation.	No Effect - Outside candy darter range	No effect on mussels - variance does not occur at instream Project crossing	No effect (2)	No effect (10)	-0.02	0.00	0.00	-0.02	0.00	0.00	0.00
				VA-FR-193	Secured													No direct effect to Roanoke loggerch - variance occurs within RLP range and does not occur at stream crossing with suitable RLP habitat. Variance of alignment imposes no net change in sedimentation.	No Effect - Outside candy darter range	No effect on mussels - variance does not occur at instream Project crossing	No effect (2)	No effect (10)	0.00	0.00	0.00	-0.04	0.00	0.00	0.00

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Variance Number	Begin MP	End MP	Description	Parcel ID	Landowner Approval	New Landowners Affected?	Residences within 50 feet of Construction Work Area?	Description of New Route Land Use/Cover	Existing Land Use/Cover Type	Length of Forested Area Crossed (feet)	Length of Interior Forested Area Crossed (feet)	Cultural Resource/Federally List Species Affected by Deviation	Environmentally Sensitive Areas Within/Abutting Area of Deviation	Waterbodies Crossed and Width (feet)	Length of Wetlands Crossed by Type (PFO, PSS, PEM) (feet)	Nationwide 12 permit modifications	Alignment Sheet Number	Roanoke Loggerch Impact	Candy Darter Impact	Mussel Impact	RPBB Impact	Plant Impact	Total Change +/- in LOD (acres)	MYSO - Known Summer Use Habitat (acres)	MYSO - Known use spring staging/fall swarming habitat (acres)	MYSO - Suitable Unoccupied Summer Habitat (acres)	MYSO - Unknown use spring staging/fall swarming habitat (acres)	MYSO - Unknown Use Summer Habitat (acres)	NLEB known use spring staging/fall swarming habitat (acres)
VAR-VA-PI-03	287.00	287.00	Added laydown yard MVP-LY-035.	VA-PI-5870	Secured	Yes	No	Deciduous Forest; Developed, Open Space; Pasture/Hay	NA	0	0	None	None	None	None	Additional impacts to USACE Jurisdictional Features will not occur.	MVP-ADAS-H600-07 MVP-QDAS-H600-07	No direct effects to Roanoke Loggerch. Taken alone, this will result in a minimal increase in sedimentation to the Pigg River mainstream. However, this increase is offset by the decrease in sedimentation due to HDD alignment at MP 288.5. Furthermore, the amount of additional sedimentation from this increase is not enough to elevate this section of the Pigg River above the 10% increase threshold and warrant take by harassment in the Pigg mainstem, even without the HDD decrease.	No Effect - Outside candy darter range	No effect on mussels - variance does not occur at instream Project crossing	No effect (1)	No effect (10)	15.63	0.00	0.00	0.00	0.00	15.14	0.00
VAR-VA-PI-01	299.25	299.42	Eliminated two points of inflection.	VA-PI-088	Secured	No	No	Pasture/Hay; Developed, Open Space; Deciduous Forest	Pasture/Hay; Developed, Open Space; Deciduous Forest	0	0	None	None	None	None	Additional impacts to USACE Jurisdictional Features will not occur.	PA-PIVA-H600-16	No Effect - Outside RLP Range	No Effect - Outside candy darter range	No effect on mussels - variance does not occur at instream Project crossing	No effect (2)	No effect (8)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				VA-PI-090	Secured				Additional impacts to USACE Jurisdictional Features will not occur.							No Effect - Outside RLP Range		No Effect - Outside candy darter range	No effect on mussels - variance does not occur at instream Project crossing	No effect (2)	No effect (8)	0.08	0.00	0.00	0.12	0.00	0.00	0.00	
VAR-VA-PI-02	299.72	299.72	Adjusted alignment of access road MVP-PI-339 to avoid structure MVP-STR-914.	VA-PI-093	Secured	No	No	Pasture/Hay	Pasture/Hay	0	0	None	None	None	None	Additional impacts to USACE Jurisdictional Features will not occur.	PA-PIVA-H600-16	No Effect - Outside RLP Range	No Effect - Outside candy darter range	No effect on mussels - variance does not occur at instream Project crossing	No effect (2)	No effect (8)	0.03	0.00	0.00	0.00	0.00	0.00	
				VA-PI-4156	Secured				Additional impacts to USACE Jurisdictional Features will not occur.							No Effect - Outside RLP Range		No Effect - Outside candy darter range	No effect on mussels - variance does not occur at instream Project crossing	No effect (2)	No effect (8)	-0.03	0.00	0.00	0.00	0.00	0.00		
																						<b>7.23</b>	<b>0.48</b>	<b>2.04</b>	<b>-1.90</b>	<b>21.63</b>	<b>0.00</b>		

- 1 No individuals are currently known to occur near variance. Variance is within historic range and has potential habitat for RPBB; however clearing and revegetation are likely to increase habitat connectivity and quality of foraging habitat, thus benefiting RPBB.
- 2 No individuals or populations are known to occur at the variance. Variance is within historic range and has potential habitat for RPBB; however any clearing and revegetation will increase habitat connectivity and quality of foraging habitat, thus benefiting RPBB.
- 3 No individuals of running buffalo clover are known to occur at variance. No individuals or potential habitat for shale barren rockcress occur at variance. No individuals of small whorled pogonia known to occur near variance. No individuals or habitat for Virginia spiraea known to occur at variance. Outside of smooth coneflower known range.
- 4 No individuals of running buffalo clover known to occur at variance. Outside of shale barren rockcress known range. Outside small whorled pogonia known range. Outside of Virginia spiraea known range. Outside of smooth coneflower known range.
- 5 No individuals or potential habitat for running buffalo clover are known to occur at variance. No individuals or potential habitat for shale barren rockcress occur at variance. No individuals of small whorled pogonia known to occur near variance. No individuals or habitat for Virginia spiraea known to occur at variance. Outside of smooth coneflower known range.
- 6 No individuals or potential habitat for running buffalo clover are known to occur at variance. Outside of shale barren rockcress known range. Outside small whorled pogonia known range. Outside of Virginia spiraea known range. Outside of smooth coneflower known range.
- 7 Outside of known range for running buffalo clover. Outside of shale barren rockcress known range. Outside small whorled pogonia known range. No individuals or potential habitat for Virginia spiraea known to occur at variance. Outside of smooth coneflower known range.
- 8 Outside running buffalo clover known range. Outside of shale barren rockcress known range. No individuals of small whorled pogonia known to occur at variance. Outside of Virginia spiraea known range. Outside of smooth coneflower known range.
- 9 Outside running buffalo clover known range. Outside of shale barren rockcress known range. Outside of small whorled pogonia known range. Outside of Virginia spiraea known range. No direct effects on Smooth Coneflower as no individuals and no habitat occur at variance.
- 10 Outside running buffalo clover known range. Outside of shale barren rockcress known range. Outside of small whorled pogonia known range. Outside of Virginia spiraea known range. No direct effects on Smooth Coneflower as no individuals are known to occur at variance.
- 11 Outside known range of running buffalo clover, shale barren rockcress, small whorled pogonia, Virginia spiraea, smooth coneflower.