# Appendix D-2 Part 2 Area of Influence and HYSPLIT Graphics for VISTAS and Nearby Class I Areas

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# Linville Gorge Wilderness Area



Class1 site: 22 Year: 2011-2016 Height: 100.00

Figure 1: 100-Meter Back Trajectories for the 20% Most Impaired Visibility Days (2011-2016), from Linville Gorge Wilderness Area



Class1 site: 22 Year: 2011-2016 Height: 100.00

Figure 2: 100-Meter Back Trajectories by Season for the 20% Most Impaired Visibility Days (2011-2016) from Linville Gorge Wilderness Area



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Hours by hexbin; Class I site: 22; Year: 2011-2016; all heights



#### Hours by hexbin; Class I site: 22; Year: 2011-2016; all heights



Figure 4: Residence Time (Counts per 12km Modeling Grid Cell) for Linville Gorge Wilderness Area – Full View (top) and Class I Zoom (bottom)



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### Mammoth Cave National Park



Class1 site: 25 Year: 2011-2016 Height: 100.00

Figure 1: 100-Meter Back Trajectories for the 20% Most Impaired Visibility Days (2011-2016), from Mammoth Cave National Park



Figure 2: 100-Meter Back Trajectories by Season for the 20% Most Impaired Visibility Days (2011-2016) from Mammoth Cave National Park



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Hours by hexbin; Class I site: 25; Year: 2011-2016; all heights



Hours by hexbin; Class I site: 25; Year: 2011-2016; all heights



Figure 4: Residence Time (Counts per 12km Modeling Grid Cell) for Mammoth Cave National Park – Full View (top) and Class I Zoom (bottom)



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# Mingo Wilderness Area



Class1 site: 26 Year: 2011-2016 Height: 100.00

Figure 1: 100-Meter Back Trajectories for the 20% Most Impaired Visibility Days (2011-2016), from Mingo Wilderness Area



Class1 site: 26 Year: 2011-2016 Height: 100.00

Figure 2: 100-Meter Back Trajectories by Season for the 20% Most Impaired Visibility Days (2011-2016) from Mingo Wilderness Area



Figure 3: 100-Meter, 500-Meter, 1000-Meter, and 1500-Meter Back Trajectories for the 20% Most Impaired Days (2011-2016) from Mingo Wilderness Area

Hours by hexbin; Class I site: 26; Year: 2011-2016; all heights



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## **Okefenokee Wilderness Area**



Class1 site: 28 Year: 2011-2016 Height: 100.00

Figure 1: 100-Meter Back Trajectories for the 20% Most Impaired Visibility Days (2011-2016), from Okefenokee Wilderness Area



Class1 site: 28 Year: 2011-2016 Height: 100.00

Figure 2: 100-Meter Back Trajectories by Season for the 20% Most Impaired Visibility Days (2011-2016) from Okefenokee Wilderness Area



Figure 3: 100-Meter, 500-Meter, 1000-Meter, and 1500-Meter Back Trajectories for the 20% Most Impaired Days (2011-2016) from Okefenokee Wilderness Area

Hours by hexbin; Class I site: 28; Year: 2011-2016; all heights



Figure 4: Residence Time (Counts per 12km Modeling Grid Cell) for Okefenokee Wilderness Area – Full View (top) and Class I Zoom (bottom)



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## Wolf Island Wilderness Area



Class1 site: 29 Year: 2011-2016 Height: 100.00

Figure 1: 100-Meter Back Trajectories for the 20% Most Impaired Visibility Days (2011-2016), from Wolf Island Wilderness Area





Figure 2: 100-Meter Back Trajectories by Season for the 20% Most Impaired Visibility Days (2011-2016) from Wolf Island Wilderness Area



Figure 3: 100-Meter, 500-Meter, 1000-Meter, and 1500-Meter Back Trajectories for the 20% Most Impaired Days (2011-2016) from Wolf Island Wilderness Area

Hours by hexbin; Class I site: 29; Year: 2011-2016; all heights



Figure 4: Residence Time (Counts per 12km Modeling Grid Cell) for Wolf Island Wilderness Area – Full View (top) and Class I Zoom (bottom)



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## **Cape Romain Wilderness Area**



Class1 site: 30 Year: 2011-2016 Height: 100.00

Figure 1: 100-Meter Back Trajectories for the 20% Most Impaired Visibility Days (2011-2016), from Cape Romain Wilderness Area



Class1 site: 30 Year: 2011-2016 Height: 100.00

Figure 2: 100-Meter Back Trajectories by Season for the 20% Most Impaired Visibility Days (2011-2016) from Cape Romain Wilderness Area



Figure 3: 100-Meter, 500-Meter, 1000-Meter, and 1500-Meter Back Trajectories for the 20% Most Impaired Days (2011-2016) from Cape Romain Wilderness Area

Hours by hexbin; Class I site: 30; Year: 2011-2016; all heights



Figure 4: Residence Time (Counts per 12km Modeling Grid Cell) for Cape Romain Wilderness Area – Full View (top) and Class I Zoom (bottom)



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## St Marks Wilderness Area



Class1 site: 32 Year: 2011-2016 Height: 100.00

Figure 1: 100-Meter Back Trajectories for the 20% Most Impaired Visibility Days (2011-2016), from St Marks Wilderness Area



Class1 site: 32 Year: 2011-2016 Height: 100.00

Figure 2: 100-Meter Back Trajectories by Season for the 20% Most Impaired Visibility Days (2011-2016) from St Marks Wilderness Area



Figure 3: 100-Meter, 500-Meter, 1000-Meter, and 1500-Meter Back Trajectories for the 20% Most Impaired Days (2011-2016) from St Marks Wilderness Area

Hours by hexbin; Class I site: 32; Year: 2011-2016; all heights





Figure 4: Residence Time (Counts per 12km Modeling Grid Cell) for St Marks Wilderness Area – Full View (top) and Class I Zoom (bottom)



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## Shenandoah National Park



Class1 site: 35 Year: 2011-2016 Height: 100.00

Figure 1: 100-Meter Back Trajectories for the 20% Most Impaired Visibility Days (2011-2016), from Shenandoah National Park



Class1 site: 35 Year: 2011-2016 Height: 100.00

Figure 2: 100-Meter Back Trajectories by Season for the 20% Most Impaired Visibility Days (2011-2016) from Shenandoah National Park



Figure 3: 100-Meter, 500-Meter, 1000-Meter, and 1500-Meter Back Trajectories for the 20% Most Impaired Days (2011-2016) from Shenandoah National Park

Hours by hexbin; Class I site: 35; Year: 2011-2016; all heights



Figure 4: Residence Time (Counts per 12km Modeling Grid Cell) for Shenandoah National Park – Full View (top) and Class I Zoom (bottom)



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## Shining Rock Wilderness Area



Class1 site: 36 Year: 2011-2016 Height: 100.00

Figure 1: 100-Meter Back Trajectories for the 20% Most Impaired Visibility Days (2011-2016), from Shining Rock Wilderness Area



Class1 site: 36 Year: 2011-2016 Height: 100.00

Figure 2: 100-Meter Back Trajectories by Season for the 20% Most Impaired Visibility Days (2011-2016) from Shining Rock Wilderness Area



Figure 3: 100-Meter, 500-Meter, 1000-Meter, and 1500-Meter Back Trajectories for the 20% Most Impaired Days (2011-2016) from Shining Rock Wilderness Area



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# Sipsey Wilderness Area



Class1 site: 37 Year: 2011-2016 Height: 100.00

Figure 1: 100-Meter Back Trajectories for the 20% Most Impaired Visibility Days (2011-2016), from Sipsey Wilderness Area



Class1 site: 37 Year: 2011-2016 Height: 100.00

Figure 2: 100-Meter Back Trajectories by Season for the 20% Most Impaired Visibility Days (2011-2016) from Sipsey Wilderness Area



Figure 3: 100-Meter, 500-Meter, 1000-Meter, and 1500-Meter Back Trajectories for the 20% Most Impaired Days (2011-2016) from Sipsey Wilderness Area

Hours by hexbin; Class I site: 37; Year: 2011-2016; all heights



Hours by hexbin; Class I site: 37; Year: 2011-2016; all heights



Figure 4: Residence Time (Counts per 12km Modeling Grid Cell) for Sipsey Wilderness Area – Full View (top) and Class I Zoom (bottom)



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### Swanquarter Wilderness Area



#### Class1 site: 38 Year: 2011-2016 Height: 100.00

Figure 1: 100-Meter Back Trajectories for the 20% Most Impaired Visibility Days (2011-2016), from Swanquarter Wilderness Area



Class1 site: 38 Year: 2011-2016 Height: 100.00

Figure 2: 100-Meter Back Trajectories by Season for the 20% Most Impaired Visibility Days (2011-2016) from Swanquarter Wilderness Area



Figure 3: 100-Meter, 500-Meter, 1000-Meter, and 1500-Meter Back Trajectories for the 20% Most Impaired Days (2011-2016) from Swanquarter Wilderness Area

Hours by hexbin; Class I site: 38; Year: 2011-2016; all heights



Hours by hexbin; Class I site: 38; Year: 2011-2016; all heights



Figure 4: Residence Time (Counts per 12km Modeling Grid Cell) for Swanquarter Wilderness Area – Full View (top) and Class I Zoom (bottom)



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# Upper Buffalo Wilderness Area



Class1 site: 39 Year: 2011-2016 Height: 100.00

Figure 1: 100-Meter Back Trajectories for the 20% Most Impaired Visibility Days (2011-2016), from Upper Buffalo Wilderness Area



Class1 site: 39 Year: 2011-2016 Height: 100.00

Figure 2: 100-Meter Back Trajectories by Season for the 20% Most Impaired Visibility Days (2011-2016) from Upper Buffalo Wilderness Area



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