

TABLE 11

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**SUMMARY OF FIELD SITE SUBSIDENCE EFFECTS
AND OBSERVED CANOPY STRESSES**

Potentially Stressed Canopy Location/ Field Site	Observed Ground Disturbance ⁽¹⁾	Estimated Subsidence		Predominant Tree Species	Observed Canopy Stress ⁽²⁾
		Horizontal Strain (10 ⁻³ ft/ft)	Magnitude (ft)		
Bailey Mine					
A-1-1		-4 to 6	-1.2 to -3.6	Black locust	Leaf Browning, Defoliation, Transparency
A-1-2		-2 to 6	-1.2 to -2.8	Black locust, Elm	Leaf Browning, Defoliation, Transparency
A-1-3	cracks	-6 to 8	-2.4 to -3.6	Oak, Maple, Black locust	Branch Dieback, Leaf Browning, Defoliation
A-1-4	slope terracing	-2 to 8	-1.2 to -3.2	Black locust, Elm	Leaf Browning, Defoliation, Transparency
A-1-5	slope terracing	0 to 6	-1.2 to -3.2	Elm	Leaf Browning, Defoliation, Transparency
A-1-8	cracks	0 to 6	-1.2 to -1.6	Black locust, Cherry	Leaf Browning, Defoliation
A-1-x1		-2 to 2	-1.6 to -3.2	Black locust, Elm	Leaf Browning, Defoliation
A-1-x2		-2 to 2	-1.2 to -1.6	Maple	None observed
Panel 7/8 Stop 1	crack	-2 to 6	-1.2 to -1.6	Maple	
Stop 2	slope terracing	0 to 6	-1.2 to -3.2	Maple	
Stop 3	hummocky	0 to 6	-1.2 to -3.2		
Stop 4	crack, scarp	0 to 6	-1.2 to -1.6	Maple, Cherry	
Stop 5	hummocky	0 to 10	-1.2 to -2.0	Beech	
Stop 6	slope terracing	0 to 8	-1.2 to -2.4	Maple, Beech	
Stop 7		0 to 6	-1.2 to -2.4	Maple, Beech	
Panel 6/7 Stop 1	slope terracing	-4 to 2	-1.2 to -3.6	Oak	
Stop 2	slope terracing	-4 to 2	-1.2 to -3.6	Maple, Beech	
Stop 3	hummocky	-4 to 2	-1.2 to -2.0	Maple	
Stop 4		-4 to 2	-1.2 to -3.6	Maple	
A-2-1		-4 to 0	0 to -3.2	Black locust	Leaf Browning, Defoliation
A-2-2		-6 to 4	-0.4 to -3.2	Black locust	Leaf Browning, Defoliation, Transparency
A-2-3	slope terracing, hummocky	-6 to 6	-1.2 to -3.2	Black locust, Walnut, Elm	Leaf Browning, Defoliation

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		Horizontal Strain (10 ⁻³ ft/ft)	Magnitude (ft)		
Blacksville Mine					
B-1-1		-5 to 3	0 to -3.2	Black locust	Defoliation, Transparency
B-1-4		0 to 1	0 to -0.8	Oak	Branch Dieback
B-1-9	slope terracing	-1 to 3	-2.0 to -3.2	Black locust	Leaf Browning, Defoliation
Panel 3 Stop 1		3 to 5	-1.6	Maple, Poplar	
B-2-1	hummocky	-3 to 1	-2.0 to -2.8	Black locust, Elm, Cherry, Black walnut	Leaf Browning, Defoliation, Transparency
B-2-2	slope terracing	-3 to 3	-1.6 to -2.8	Black locust	Leaf Browning, Defoliation
B-2-4		-5 to 1	-2 to -3.2		
B-2-5		-3 to 1	-1.6 to -2.8	Black locust, Elm, Cherry, Ash	Leaf Browning, Defoliation
B-2-6		-3 to 1	-2.0 to -2.8	Black locust	Leaf Browning, Defoliation
B-2-8	hummocky	-3 to 3	-1.2 to -2.8	Black locust	Leaf Browning, Defoliation
Humphrey No. 7 Mine					
D-1-1	slope terracing, hummocky	-4 to 4	-1.2 to -2.8	Black locust, Sassafras	Leaf Browning, Defoliation
D-1-2	hummocky	0 to 4	-1.6 to 2.0	Black locust	Leaf Browning, Defoliation
D-1-4		-1 to 3	-0.4 to -2.4	Aspen	Branch Dieback
Lee Property	Slide/scarp, hummocky			Ash	Branch Dieback
D-2-1	hummocky	0 to -4	-0.4 to -1.2	Oak, Elm	Branch Dieback
D-2-3		0 to 2	0 to -0.4	Oak	Branch Dieback
D-2-4	hummocky	-4 to 2	-0.4 to -1.6	Oak	Branch Dieback
D-2-5		0 to 2	0 to -0.4	Oak	Branch Dieback
Panel 12/13 Stop 1	slope terracing, scarp	2 to 4	-0.4 to -0.8	Maple	
Stop 2	scarp	4 to 5	-0.8 to -1.2	Maple, Elm	

⁽¹⁾ Observed ground disturbance effects as noted; where blank, no ground disturbance effects were noted.

⁽²⁾ Observed canopy stress as noted; where blank, no crown classification conducted, but conditions noted are generally healthy.