

Table. Range of variation in landscape structure for Cool Moist Mixed-Conifer with Aspen Forest under the simulated HRV disturbance scenario on the Uncompahgre Plateau Landscape, Colorado, and the degree of departure of the current landscape from the simulated range of variation (see text for details).

Landscape Metric	Condition Class (seral stage)	Current Landscape <sup>1</sup>		Percentiles of Simulated Distribution							HRV Departure	
		Metric Value	Percentile of HRV	0	5	25	50	75	95	100	CV <sup>2</sup>	Index <sup>3</sup>
<i>Seral Stage Composition<sup>4</sup></i>												
PLAND	Stand Initiation	0.01	3	0.00	0.01	0.03	0.06	0.11	0.25	0.36	387	70
	Stem Exclusion	0.39	98	0.02	0.05	0.12	0.17	0.22	0.35	0.44	181	
	Understory Reinitiation	0.30	37	0.14	0.18	0.26	0.34	0.39	0.47	0.58	85	
	Shifting Mosaic	0.00	0	0.01	0.02	0.05	0.08	0.12	0.21	0.26	220	
<i>Class Configuration<sup>5</sup></i>												
PD	Stand Initiation	0.00	7	0.00	0.00	0.01	0.02	0.03	0.05	0.08	261	91
	Stem Exclusion	0.08	99	0.01	0.02	0.03	0.04	0.06	0.08	0.09	136	
	Understory Reinitiation	0.04	0	0.04	0.05	0.06	0.07	0.08	0.09	0.10	55	
	Shifting Mosaic	0.00	0	0.00	0.01	0.02	0.02	0.03	0.04	0.06	143	
ED	Stand Initiation	0.03	4	0.01	0.04	0.12	0.22	0.41	0.77	1.22	326	74
	Stem Exclusion	1.35	99	0.09	0.20	0.45	0.62	0.82	1.20	1.50	161	
	Understory Reinitiation	0.88	21	0.57	0.68	0.93	1.16	1.33	1.56	1.83	75	
	Shifting Mosaic	0.00	0	0.07	0.09	0.20	0.32	0.49	0.65	0.93	175	
AREA_MN	Stand Initiation	1.18	1	1.00	1.52	2.54	3.24	4.20	5.67	7.69	128	78
	Stem Exclusion	4.63	79	1.67	2.32	3.21	3.82	4.43	5.54	6.62	84	
	Understory Reinitiation	8.43	100	2.76	3.20	3.99	4.52	5.21	5.92	6.32	60	
	Shifting Mosaic	0.56	0	1.62	2.13	3.11	3.63	4.20	5.79	7.71	101	
AREA_AM	Stand Initiation	1.80	1	1.08	3.27	8.99	17.25	32.28	56.38	98.90	308	71
	Stem Exclusion	40.61	75	4.06	8.57	16.86	28.83	40.60	60.10	98.47	179	
	Understory Reinitiation	65.49	97	15.02	20.32	31.06	40.87	48.99	59.96	82.90	97	
	Shifting Mosaic	0.56	0	3.04	6.68	15.12	24.91	35.51	63.46	80.34	228	
GYRATE_AM	Stand Initiation	61.21	1	48.31	78.24	137.66	200.17	285.66	382.74	508.17	152	74
	Stem Exclusion	312.39	74	88.39	136.95	194.98	265.18	314.97	402.77	509.44	100	
	Understory Reinitiation	476.35	100	183.80	209.30	268.80	322.87	366.46	411.27	485.89	63	
	Shifting Mosaic	43.91	0	79.54	112.82	183.39	239.62	292.74	382.41	425.49	113	
SHAPE_MN	Stand Initiation	1.58	6	1.38	1.57	1.70	1.77	1.83	1.95	2.15	21	73

	Stem Exclusion	1.90	84	1.55	1.67	1.76	1.81	1.87	1.95	2.04	16	
	Understory Reinitiation	2.09	100	1.70	1.76	1.82	1.87	1.91	1.96	2.02	11	
	Shifting Mosaic	2.00	95	1.58	1.65	1.75	1.82	1.87	2.00	2.20	19	
SHAPE_AM	Stand Initiation	1.67	1	1.45	1.84	2.25	2.62	3.06	4.48	6.77	101	65
	Stem Exclusion	3.50	78	1.82	2.21	2.60	2.95	3.40	4.60	6.76	81	
	Understory Reinitiation	4.39	94	2.33	2.68	3.04	3.37	3.88	4.44	4.97	52	
	Shifting Mosaic	2.00	6	1.82	1.94	2.56	2.89	3.19	5.26	6.01	115	
CPLAND	Stand Initiation	0.00	4	0.00	0.00	0.02	0.04	0.08	0.19	0.30	439	69
	Stem Exclusion	0.23	98	0.01	0.02	0.06	0.09	0.13	0.21	0.26	207	
	Understory Reinitiation	0.16	44	0.05	0.08	0.12	0.17	0.21	0.26	0.33	106	
	Shifting Mosaic	0.00	0	0.00	0.01	0.03	0.05	0.08	0.11	0.16	216	
CORE_MN	Stand Initiation	0.75	4	0.45	0.80	1.63	2.24	3.13	4.59	6.33	169	74
	Stem Exclusion	2.71	78	0.55	0.95	1.64	2.22	2.61	3.24	4.07	103	
	Understory Reinitiation	4.47	100	0.99	1.49	1.88	2.28	2.65	3.24	3.56	77	
	Shifting Mosaic	0.00	0	0.24	1.03	1.75	2.14	2.56	3.35	4.41	109	
CORE_AM	Stand Initiation	1.12	1	0.45	2.01	6.38	13.16	28.24	46.70	80.46	340	72
	Stem Exclusion	29.57	77	1.80	4.46	10.97	19.95	28.89	43.63	78.66	196	
	Understory Reinitiation	42.66	96	7.68	11.08	17.75	26.01	32.94	41.35	51.60	116	
	Shifting Mosaic	0.00	0	0.72	3.68	10.29	16.07	23.84	51.01	64.72	295	
CAI_MN	Stand Initiation	63.81	74	27.56	42.75	52.94	59.04	64.09	72.66	78.60	51	25
	Stem Exclusion	37.10	61	14.89	21.91	29.08	34.54	40.30	47.92	59.41	75	
	Understory Reinitiation	31.83	39	12.37	19.48	28.12	34.01	39.11	42.95	45.63	69	
	Shifting Mosaic	0.00	0	10.51	27.76	38.19	45.11	51.50	61.85	70.08	76	
CAI_AM	Stand Initiation	64.01	28	34.75	49.58	63.01	69.86	76.75	82.80	88.73	48	25
	Stem Exclusion	58.43	66	31.31	38.64	49.50	55.22	60.28	66.82	76.45	51	
	Understory Reinitiation	53.05	65	29.81	38.54	46.33	50.54	54.92	59.34	63.21	41	
	Shifting Mosaic	0.00	0	14.86	40.90	52.32	56.87	62.90	73.71	77.47	58	
PROX_MN	Stand Initiation	0.30	2	0.02	0.50	3.38	7.05	15.07	26.77	37.13	372	62
	Stem Exclusion	21.39	82	1.00	3.58	8.80	13.77	19.94	26.69	31.24	168	
	Understory Reinitiation	14.84	18	5.76	8.28	16.10	23.23	29.52	39.46	51.27	134	
	Shifting Mosaic	0.00	0	0.44	1.54	4.12	8.32	15.83	29.01	37.36	330	
PROX_AM	Stand Initiation	0.28	3	0.02	0.41	3.86	9.64	20.90	64.13	102.84	661	65

	Stem Exclusion	22.80	54	1.00	5.02	12.09	19.84	32.27	58.10	87.14	268	
	Understory Reinitiation	13.76	7	6.53	11.42	21.85	33.22	51.05	70.95	88.44	179	
	Shifting Mosaic	0.00	0	0.44	0.99	4.05	11.66	27.68	58.47	80.88	493	
CWED	Stand Initiation	0.01	1	0.00	0.01	0.03	0.05	0.09	0.17	0.30	290	72
	Stem Exclusion	0.34	98	0.03	0.06	0.12	0.16	0.21	0.30	0.37	148	
	Understory Reinitiation	0.28	27	0.17	0.20	0.28	0.34	0.39	0.47	0.56	78	
	Shifting Mosaic	0.00	0	0.02	0.02	0.04	0.07	0.10	0.17	0.24	211	
TECI	Stand Initiation	18.69	6	12.63	18.03	22.13	24.22	26.39	29.21	32.62	46	44
	Stem Exclusion	24.99	30	11.50	18.94	23.91	27.73	30.55	32.81	33.58	50	
	Understory Reinitiation	32.15	72	19.55	23.01	26.02	29.40	32.66	39.69	45.23	57	
	Shifting Mosaic	43.33	100	9.96	13.07	18.68	23.00	27.49	32.82	41.11	86	
CLUMPY	Stand Initiation	0.66	1	0.64	0.69	0.73	0.76	0.79	0.83	0.84	18	71
	Stem Exclusion	0.78	66	0.70	0.72	0.75	0.77	0.79	0.82	0.83	13	
	Understory Reinitiation	0.82	97	0.71	0.75	0.77	0.78	0.80	0.82	0.84	9	
	Shifting Mosaic	0.50	0	0.67	0.70	0.75	0.77	0.78	0.83	0.87	17	
IJI	Stand Initiation	55.61	33	43.48	47.46	53.86	58.10	61.70	64.50	69.25	29	25
	Stem Exclusion	61.98	47	45.21	54.39	59.99	62.15	64.17	66.68	70.45	20	
	Understory Reinitiation	63.07	47	54.08	57.14	61.25	63.24	65.06	67.71	70.12	17	
	Shifting Mosaic	20.94	0	42.10	51.48	56.33	59.27	61.55	64.90	67.35	23	

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**Summary Indices<sup>6</sup>:**

<i>Seral-Stage Departure Index</i>	70
<i>Class Configuration Departure Index</i>	63
<i>Cover Type Departure Index</i>	66

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<sup>1</sup>Some stand conditions are not represented in the current landscape. Certain metrics are logically zero if the class is absent, while others are undefined (indicated by missing data). HRV departure index is undefined if the current landscape condition is undefined.

<sup>2</sup>CV = coefficient of variation in the simulated distribution, computed as the difference between the 5 and 95<sup>th</sup> percentiles divided by the median and multiplied by 100 to convert to a percentage. n/d = not defined (division by zero).

<sup>3</sup>HRV departure index represents the degree of departure of the current landscape condition from the historic range of variability and is given here specifically as the degree of departure from the 25-75<sup>th</sup> percentile range of variation, where a 0 represents no departure (i.e., within the 25-75<sup>th</sup> percentiles of variation) and 100 represents complete departure (i.e., outside the 0-100<sup>th</sup> percentiles of variation).

<sup>4</sup>Landscape composition here represents the distribution of area among seral stages for the corresponding cover type. PLAND = the percent of the landscape encompassed by the corresponding seral stage. Note, PLAND = the percentage of the entire landscape, not as a percent of the corresponding cover type.

<sup>5</sup>Landscape configuration here represents the spatial character, distribution, and arrangement of the corresponding cover type. The landscape metrics listed here are described in detail in the FRAGSTATS methods section. PD = patch density; ED = edge density; AREA\_MN = mean patch size; AREA\_AM = area-weighted mean patch size; GYRATE\_AM = area-weighted mean patch radius of gyration (correlation length); SHAPE\_MN = mean patch shape index; SHAPE\_AM = area-weighted mean patch shape index; CPLAND = core area percent of landscape; CORE\_MN = mean patch core area; CORE\_AM = area-weighted mean patch core area; CAI\_MN = mean patch core area index; CAI\_AM = area-weighted mean patch core area index; PROX\_MN = mean proximity index; PROX\_AM = area-weighted mean proximity index; CWED = contrast-weighted edge density; TECI = total edge contrast index; CLUMPY = clumpiness index; IJI = interspersion and juxtaposition index.

<sup>6</sup>Seral-stage departure index is based on the distribution of area (percentage of landscape) among seral stages and is computed as the mean departure across seral stages. Class configuration departure index is based on several landscape metrics that quantify different aspects of the spatial distribution of the cover type and is computed as the mean departure across metrics. Cover type departure index is computed as the mean of the seral-stage and class configuration departure indices.