

Table. Range of variation in landscape structure under the simulated HRV disturbance scenario on the Columbine District, San Juan National Forest, Colorado, and the degree of departure of the current landscape from the simulated range of variation (see text for details). Note, landscape structure is based on the reclassified and rescaled landscape in which cover types and stand conditions (seral stages) were aggregated into a smaller set of habitats of special interest.

Landscape Metric	Current Landscape		Percentiles of Simulated Distribution							HRV Departure	
	Metric Value	Percentile of HRV	0	5	25	50	75	95	100	CV <sup>1</sup>	Index <sup>2</sup>
<i>Landscape Composition</i> <sup>3</sup>											
Pinyon-Juniper woodlands: Early seral	0.17	63	0.01	0.04	0.08	0.13	0.22	0.28	0.32	188	0
Pinyon-Juniper woodlands: Mid seral	0.58	16	0.18	0.45	0.74	1.26	1.85	2.35	2.69	150	37
Pinyon-Juniper woodlands: Late seral	1.49	99	0.00	0.01	0.05	0.20	0.62	1.14	1.58	565	97
Oak-dominated shrub stands: Early seral	12.33	100	2.39	3.69	5.20	6.20	7.20	8.78	10.18	82	100
Oak-dominated shrub stands: Late seral	0.63	0	3.01	4.48	6.26	7.09	8.01	9.27	10.38	67	100
Low-elevation conifer: Early seral	0.76	100	0.05	0.12	0.18	0.24	0.33	0.45	0.57	138	100
Low-elevation conifer: Mid seral	4.89	100	0.55	0.72	0.88	0.97	1.04	1.14	1.24	43	100
Low-elevation conifer: Late seral	13.17	100	3.64	4.30	5.83	7.32	8.65	10.84	12.68	89	100
Low-elevation conifer: Fire-maintained	0.00	0	5.44	7.10	9.18	10.45	11.95	13.39	14.13	60	100
High-elevation conifer: Early seral	1.51	2	1.24	1.77	2.91	3.94	5.53	8.62	10.46	174	92
High-elevation conifer: Mid seral	7.83	86	1.97	3.02	4.45	5.79	7.09	8.82	11.32	100	45
High-elevation conifer: Late seral	33.23	88	18.33	20.81	24.42	27.92	30.88	35.55	37.82	53	53
Aspen-dominated stands: Early seral	1.95	50	0.13	0.54	1.13	1.97	3.19	6.78	10.77	317	0
Aspen-dominated stands: Mid seral	1.70	1	1.28	2.25	3.76	5.55	7.24	9.26	11.63	126	95
Aspen-dominated stands: Late seral	1.17	93	0.29	0.54	0.71	0.90	1.07	1.18	1.25	71	74
Sagebrush-dominated stands	1.18	30	0.85	0.91	1.13	1.31	1.54	1.79	1.95	67	0
<i>Landscape Configuration</i> <sup>4</sup>											
Patch density	3.20	0	4.17	4.73	5.06	5.31	5.52	5.81	6.23	20	100
Edge density	49.07	0	64.16	69.14	72.62	74.92	77.38	81.06	88.32	16	100
Mean patch size	31.20	100	16.06	17.21	18.11	18.84	19.75	21.13	23.99	21	100
Area-weighted mean patch size	5390.88	71	863.94	1829.51	2722.80	3651.98	5873.92	9706.05	13509.77	216	0
Correlation length	3180.95	84	1281.29	1628.86	1894.29	2226.22	2796.95	3766.51	4387.85	96	37
Mean shape index	1.62	0	1.86	1.88	1.89	1.91	1.93	1.97	2.04	5	100
Area-weighted mean shape index	7.69	48	5.55	6.48	7.18	7.77	8.92	12.00	15.84	71	0
Mean core area	24.82	100	12.08	13.24	14.06	14.66	15.44	16.68	18.95	23	100
Area-weighted mean core area	4655.12	72	724.83	1565.03	2358.57	3183.20	5057.32	8415.94	11796.23	215	0
Mean core area index	30.45	0	45.30	47.84	49.92	51.33	52.70	54.54	57.97	13	100
Area-weighted mean core area index	79.54	96	74.91	76.27	77.26	77.96	78.65	79.42	80.23	4	84
Mean proximity index	1327.47	81	296.55	486.77	633.64	792.02	1066.98	1737.09	2178.50	158	26
Area-weighted mean proximity index	4506.75	87	769.30	1140.64	1666.34	2316.41	3318.44	6640.71	13788.14	237	47
Contrast-weighted edge density	19.13	0	21.90	22.78	23.81	24.59	25.19	26.29	27.93	14	100

Total edge contrast index	37.90	100	29.29	30.79	31.58	32.07	32.74	33.92	35.03	10	100
Contagion	57.22	100	49.22	50.39	51.40	52.46	53.53	55.56	56.91	10	100
Interspersion & juxtaposition index	73.76	74	64.10	69.04	71.74	72.67	73.83	75.00	77.03	8	0
Simpson's diversity index	0.83	7	0.81	0.83	0.86	0.87	0.89	0.90	0.91	8	74
Simpson's evenness index	0.88	7	0.85	0.87	0.90	0.91	0.93	0.94	0.95	8	72
<b>Summary Indices<sup>5</sup>:</b>											
										<i>Landscape Composition Departure Index</i>	68
										<i>Landscape Configuration Departure Index</i>	65
										<i>Landscape Structure Departure Index</i>	67

<sup>1</sup>CV = coefficient of variation in the simulated distribution, computed as the difference between the 5 and 95 percentiles divided by the median and multiplied by 100 to convert to a percentage.

<sup>2</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 percentile range of variation, where a 0 represents no departure (i.e., within the 25-75 percentiles of variation) and 100 represents complete departure (i.e., outside the 0-100 percentiles of variation).

<sup>3</sup>Landscape composition represents the distribution of area among patch types (in this case, aggregated combinations of cover types and stand conditions or seral stages). Only dynamic patch types (i.e., those that change in area over time in response to disturbance and succession) are included here; static patch types (i.e., those that we treated as constant over time, such as water, barren, etc.) are excluded since they cannot exhibit any "departure". Note, the patch types included here represent a smaller set of classes created by reclassifying (and rescaling) cover types and stand conditions (see text for details).

<sup>4</sup>Landscape configuration represents the spatial character, distribution, and arrangement of patches (across all patch types). The landscape metrics listed here are described in detail in the FRAGSTATS methods section. Note, Simpson's diversity and evenness indices are actually landscape composition metrics but are included here for organizational purposes.

<sup>5</sup>Landscape composition departure index = mean departure index across cover types; landscape configuration departure index = mean departure index across landscape configuration metrics; landscape structure departure index = mean of the landscape composition and configuration indices.