Table. Range of variation in landscape structure for low-elevation conifer forest 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).

Landscape Metric	Condition Class (seral stage)	Current Landscape[1] Metric Value	Current Landscape[1] Percentile of HRV	Percentiles of Simulated Distribution 0	5	25	50	75	95	100	CV[2]	HRV Departure Index[3]
Seral Stage Composition[4]												
PLAND	Early seral	0.757	100	0.052	0.116	0.182	0.241	0.326	0.450	0.566	138	100
	Mid seral	4.891	100	0.548	0.722	0.878	0.965	1.041	1.139	1.236	43	
	Late seral	13.173	100	3.639	4.296	5.835	7.322	8.654	10.841	12.681	89	
	Fire-maintained open canopy	0.000	0	5.437	7.100	9.177	10.452	11.952	13.392	14.129	60	
Class Configuration[5]												
PD	Early seral	0.242	100	0.031	0.055	0.084	0.113	0.145	0.191	0.241	121	99
	Mid seral	0.121	0	0.288	0.346	0.408	0.437	0.471	0.501	0.538	35	
	Late seral	0.371	1	0.293	0.470	0.624	0.686	0.748	0.821	0.902	51	
	Fire-maintained open canopy	0.000	0	0.335	0.371	0.398	0.418	0.437	0.467	0.487	23	
ED	Early seral	2.112	97	0.267	0.535	0.833	1.100	1.493	1.986	2.416	132	60
	Mid seral	5.127	81	2.804	3.524	4.289	4.662	5.023	5.443	5.919	41	
	Late seral	13.297	18	8.959	11.512	14.131	16.224	17.852	19.914	21.292	52	
	Fire-maintained open canopy	0.000	0	11.688	14.809	17.824	19.443	21.460	23.754	25.556	46	
AREA_MN	Early seral	3.132	100	1.602	1.776	2.029	2.197	2.359	2.628	3.257	39	100
	Mid seral	40.383	100	1.861	1.954	2.092	2.189	2.283	2.449	2.837	23	
	Late seral	35.466	100	4.291	5.522	8.082	10.902	13.541	19.833	26.841	131	
	Fire-maintained open canopy	0.000	0	13.158	16.541	21.013	24.936	29.500	34.797	40.960	73	
AREA_AM	Early seral	47.410	100	3.394	4.024	5.364	6.684	8.828	15.327	25.809	169	100
	Mid seral	749.368	100	4.503	5.311	6.440	7.417	9.094	12.138	16.847	92	
	Late seral	1783.444	100	79.072	174.158	309.031	441.959	586.066	989.289	1552.059	184	
	Fire-maintained open canopy	0.000	0	258.328	408.756	784.373	1172.142	1501.355	1991.142	2505.353	135	
GYRATE_AM	Early seral	338.033	100	81.154	90.068	104.033	114.089	127.555	160.969	188.280	62	100
	Mid seral	1164.801	100	97.591	104.460	113.408	119.417	129.211	145.580	164.245	34	
	Late seral	2101.770	100	361.910	549.054	789.580	952.237	1139.935	1592.507	2259.012	110	
	Fire-maintained open canopy	0.000	0	705.558	883.405	1269.235	1569.631	1877.647	2312.348	2860.379	91	
SHAPE_MN	Early seral	1.347	0	1.607	1.634	1.662	1.691	1.717	1.768	1.843	8	67

	Mid seral	1.783	53	1.689	1.744	1.764	1.781	1.803	1.836	1.877	5	
	Late seral	1.595	0	1.788	1.822	1.863	1.903	1.939	1.995	2.038	9	
	Fire-maintained open canopy			1.909	1.957	2.010	2.050	2.086	2.144	2.259	9	
SHAPE_AM	Early seral	3.098	100	1.789	1.895	1.995	2.094	2.186	2.413	2.749	25	67
	Mid seral	4.534	100	2.065	2.146	2.214	2.262	2.346	2.471	2.624	14	
	Late seral	6.617	58	3.076	4.217	5.513	6.331	7.194	8.762	10.337	72	
	Fire-maintained open canopy			5.342	6.641	8.986	10.631	12.327	13.679	15.330	66	
CPLAND	Early seral	0.509	100	0.010	0.027	0.048	0.071	0.094	0.140	0.188	159	100
	Mid seral	4.257	100	0.474	0.636	0.780	0.856	0.934	1.017	1.129	44	
	Late seral	10.600	100	2.702	3.279	4.472	5.555	6.643	8.188	9.895	88	
	Fire-maintained open canopy	0.000	0	4.192	5.167	6.631	7.547	8.575	9.565	10.056	58	
CORE_MN	Early seral	2.107	100	0.290	0.404	0.533	0.613	0.722	0.910	1.242	82	100
	Mid seral	35.151	100	1.614	1.726	1.846	1.942	2.047	2.185	2.554	24	
	Late seral	28.540	100	3.186	4.215	6.192	8.235	10.315	15.509	20.944	137	
	Fire-maintained open canopy	0.000	0	10.146	11.938	15.083	18.164	21.339	24.468	29.161	69	
CORE_AM	Early seral	35.804	100	0.978	1.354	2.060	2.793	4.282	8.262	16.561	247	100
	Mid seral	676.646	100	4.176	4.798	5.922	6.824	8.401	11.400	15.767	97	
	Late seral	1516.575	100	63.952	141.153	255.992	357.672	476.666	811.665	1301.196	187	
	Fire-maintained open canopy	0.000	0	196.981	300.543	602.988	876.696	1115.649	1481.157	1865.933	135	
CAI_MN	Early seral	28.593	100	9.055	11.490	13.242	14.505	15.838	17.708	20.611	43	100
	Mid seral	71.288	0	78.825	83.084	84.676	85.743	86.785	87.933	89.200	6	
	Late seral	28.542	0	50.796	56.424	60.908	63.536	65.926	68.206	70.933	19	
	Fire-maintained open canopy	0.000	0	39.446	43.849	50.073	53.221	57.344	62.035	67.792	34	
CAI_AM	Early seral	67.285	100	17.486	22.200	25.817	28.154	30.944	34.911	38.964	45	87
	Mid seral	87.044	9	84.160	86.579	88.194	89.006	89.783	90.818	91.758	5	
	Late seral	80.472	96	67.817	70.839	74.811	76.837	78.565	80.351	81.648	12	
	Fire-maintained open canopy	0.000	0	66.056	68.269	70.749	72.198	73.557	75.597	78.773	10	
PROX_MN	Early seral	40.510	100	0.325	0.920	1.575	2.047	2.695	3.703	6.267	136	98
	Mid seral	340.505	100	2.944	3.413	4.116	4.618	5.176	6.086	7.332	58	
	Late seral	810.641	98	18.140	54.404	130.809	214.574	318.994	615.749	998.936	262	
	Fire-maintained open canopy	0.000	0	169.374	297.476	651.603	1051.317	1533.226	2126.937	2727.602	174	
PROX_AM	Early seral	61.458	100	0.214	0.870	1.682	2.320	3.213	5.330	15.061	192	92

	Mid seral	1083.337	100	3.090	4.167	5.054	5.787	6.808	8.534	11.451	75	
	Late seral	1416.881	92	82.628	196.266	431.149	644.953	955.126	1596.829	2670.634	217	
	Fire-maintained open canopy	0.000	0	208.657	622.970	1356.010	2202.895	3274.136	5034.351	11796.239	200	
CWED	Early seral	0.592	82	0.103	0.198	0.311	0.412	0.554	0.743	0.911	133	72
	Mid seral	1.447	100	0.618	0.765	0.927	1.011	1.082	1.170	1.268	40	
	Late seral	4.417	90	1.393	1.698	2.356	3.177	3.862	4.830	5.862	99	
	Fire-maintained open canopy	0.000	0	2.290	3.377	4.427	5.237	6.011	7.191	7.660	73	
TECI	Early seral	27.975	0	35.766	36.235	36.727	37.128	37.501	37.938	38.607	5	100
	Mid seral	27.922	100	20.919	21.141	21.364	21.529	21.719	21.969	22.325	4	
	Late seral	32.894	100	11.356	14.394	16.920	19.418	21.669	24.817	27.727	54	
	Fire-maintained open canopy			19.374	22.050	24.623	26.310	28.470	31.363	35.915	35	
CLUMPY	Early seral	0.828	100	0.645	0.687	0.707	0.720	0.734	0.751	0.775	9	100
	Mid seral	0.932	100	0.657	0.675	0.687	0.696	0.705	0.717	0.733	6	
	Late seral	0.928	100	0.794	0.813	0.841	0.852	0.862	0.875	0.884	7	
	Fire-maintained open canopy			0.852	0.859	0.865	0.869	0.873	0.884	0.902	3	
IJI	Early seral	44.378	65	32.929	37.024	40.574	43.041	45.332	47.965	49.691	25	66
	Mid seral	74.339	100	34.853	38.285	41.117	42.900	44.204	45.997	47.839	18	
	Late seral	77.941	99	51.553	57.959	63.428	68.605	71.753	75.812	78.405	26	
	Fire-maintained open canopy			62.074	65.449	68.856	70.862	73.093	75.483	79.238	14	

Summary Indices[6]:	
Seral-Stage Departure Index	100
Class Configuration Departure Index	89
Cover Type Departure Index	95

[1]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.

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

[3]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 25-75th percentile range of variation, where a 0 represents no departure (i.e., within the 25-75th percentiles of variation) and 100 represents complete departure (i.e., outside the 0-100th percentiles of variation).

[4]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.

[5]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.

[6]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.