

Table. Range of variation in landscape structure for low elevation conifer stands under the simulated HRV disturbance scenario on the 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		Percentiles of Simulated Distribution							CV ²	HRV Departure Index ³
		Metric Value	Percentile of HRV	0	5	25	50	75	95	100		
<i>Seral Stage Composition</i> ⁴												
PLAND	Early seral	0.283	84	0.058	0.106	0.173	0.217	0.263	0.341	0.417	108	84
	Mid seral	6.945	100	0.775	0.893	1.001	1.095	1.183	1.294	1.418	37	
	Late seral	14.685	100	4.532	5.656	6.697	7.705	8.759	10.668	11.768	65	
	Fire-maintained open canopy	0.000	0	8.964	10.126	12.090	13.074	14.170	15.226	16.494	39	
<i>Class Configuration</i> ⁵												
PD	Early seral	0.090	38	0.030	0.052	0.080	0.100	0.117	0.148	0.176	96	75
	Mid seral	0.121	0	0.406	0.466	0.506	0.536	0.573	0.628	0.691	30	
	Late seral	0.260	0	0.366	0.541	0.761	0.823	0.873	0.937	1.004	48	
	Fire-maintained open canopy	0.000	0	0.358	0.422	0.447	0.465	0.482	0.504	0.522	18	
ED	Early seral	0.782	24	0.272	0.494	0.785	1.000	1.193	1.507	1.859	101	57
	Mid seral	6.356	85	4.104	4.707	5.204	5.586	6.039	6.764	7.640	37	
	Late seral	13.687	4	9.593	14.292	16.620	18.139	19.545	21.644	23.458	41	
	Fire-maintained open canopy	0.000	0	17.527	18.958	21.622	23.280	24.910	26.379	27.905	32	
AREA_MN	Early seral	3.161	100	1.619	1.893	2.048	2.168	2.307	2.585	2.866	32	100
	Mid seral	57.373	100	1.794	1.851	1.919	1.988	2.067	2.351	2.942	25	
	Late seral	56.554	100	5.105	6.465	7.958	9.651	11.796	15.729	20.654	96	
	Fire-maintained open canopy	0.000	0	17.972	21.727	25.441	28.036	30.862	35.253	44.898	48	
AREA_AM	Early seral	46.727	100	4.025	4.835	6.244	7.452	9.326	14.900	27.199	135	100
	Mid seral	1458.803	100	4.879	5.521	6.093	6.843	8.066	17.780	44.659	179	
	Late seral	5203.796	100	142.961	216.976	313.994	433.069	612.530	1063.792	3117.250	196	
	Fire-maintained open canopy	0.000	0	446.833	1276.334	1885.444	2285.836	2716.396	3710.856	4991.648	107	
GYRATE_AM	Early seral	334.374	100	86.977	98.499	108.669	117.886	127.833	151.703	199.652	45	100
	Mid seral	1516.636	100	99.188	104.653	109.418	113.870	121.049	165.085	233.647	53	
	Late seral	2973.087	100	529.894	626.177	775.123	916.151	1068.011	1414.007	2423.528	86	
	Fire-maintained open canopy	0.000	0	911.799	1468.156	1756.286	1926.015	2167.703	2568.873	2965.489	57	
SHAPE_MN	Early seral	1.343	0	1.615	1.645	1.671	1.690	1.715	1.781	1.889	8	99

	Mid seral	1.900	100	1.753	1.774	1.796	1.814	1.834	1.868	1.902	5	
	Late seral	1.828	0	1.821	1.863	1.890	1.916	1.940	1.974	2.015	6	
	Fire-maintained open canopy			1.915	2.001	2.052	2.084	2.112	2.143	2.166	7	
SHAPE_AM	Early seral	3.056	100	1.832	1.955	2.042	2.116	2.203	2.352	2.542	19	82
	Mid seral	4.886	100	2.135	2.184	2.249	2.298	2.374	2.541	2.948	16	
	Late seral	7.815	87	4.112	4.761	5.603	6.299	7.041	8.840	12.990	65	
	Fire-maintained open canopy			6.785	9.975	11.640	12.715	13.859	15.738	17.554	45	
CPLAND	Early seral	0.192	100	0.016	0.028	0.049	0.062	0.078	0.107	0.135	127	100
	Mid seral	5.982	100	0.647	0.767	0.864	0.947	1.022	1.117	1.228	37	
	Late seral	11.867	100	3.359	4.115	4.873	5.558	6.369	7.948	8.827	69	
	Fire-maintained open canopy	0.000	0	6.481	7.308	8.607	9.194	10.017	10.774	11.636	38	
CORE_MN	Early seral	2.142	100	0.344	0.465	0.559	0.631	0.722	0.876	1.029	65	100
	Mid seral	49.420	100	1.473	1.581	1.651	1.723	1.803	2.034	2.523	26	
	Late seral	45.702	100	3.783	4.709	5.739	6.917	8.494	11.650	15.218	100	
	Fire-maintained open canopy	0.000	0	13.270	15.500	17.904	19.748	21.996	25.197	31.534	49	
CORE_AM	Early seral	35.364	100	1.402	1.855	2.616	3.326	4.543	8.223	17.436	191	100
	Mid seral	1272.353	100	4.380	4.891	5.499	6.267	7.400	15.081	38.057	163	
	Late seral	4692.581	100	110.517	166.783	246.464	343.715	494.107	845.914	2699.641	198	
	Fire-maintained open canopy	0.000	0	334.024	978.786	1445.174	1757.904	2103.400	2871.617	3905.330	108	
CAI_MN	Early seral	28.397	100	9.603	12.240	14.022	15.049	15.968	17.413	19.052	34	100
	Mid seral	67.702	0	76.908	80.256	82.302	83.180	84.020	84.988	85.917	6	
	Late seral	43.151	0	51.229	55.815	58.920	60.986	62.903	65.222	67.250	15	
	Fire-maintained open canopy	0.000	0	40.923	44.034	46.707	49.485	52.040	55.475	59.062	23	
CAI_AM	Early seral	67.770	100	19.453	23.970	27.263	29.187	31.108	34.078	37.134	35	75
	Mid seral	86.138	36	81.351	84.059	85.707	86.525	87.311	88.067	88.986	5	
	Late seral	80.812	100	64.220	68.320	71.033	72.773	74.373	76.332	77.929	11	
	Fire-maintained open canopy	0.000	0	65.675	68.016	70.167	71.109	72.196	73.379	75.329	8	
PROX_MN	Early seral	39.764	100	0.670	1.151	1.735	2.170	2.632	3.424	6.319	105	100
	Mid seral	426.850	100	2.777	3.404	3.852	4.396	5.030	6.850	9.914	78	
	Late seral	1222.699	100	46.064	77.099	128.122	190.693	266.323	506.042	1395.240	225	
	Fire-maintained open canopy	0.000	0	295.298	684.164	1046.417	1293.236	1728.051	2424.487	3130.667	135	
PROX_AM	Early seral	59.774	100	0.681	1.183	2.036	2.684	3.472	5.276	16.501	152	92

	Mid seral	1074.304	100	3.420	4.315	5.074	5.840	6.826	10.225	26.780	101	
	Late seral	1428.279	92	164.344	276.453	448.166	648.742	960.607	1665.134	5032.618	214	
	Fire-maintained open canopy	0.000	0	594.693	1164.064	2413.664	3562.089	4640.861	6484.499	9956.757	149	
CWED	Early seral	0.219	9	0.101	0.183	0.287	0.368	0.438	0.557	0.677	102	77
	Mid seral	1.967	100	0.915	1.026	1.143	1.229	1.328	1.482	1.674	37	
	Late seral	4.828	86	1.988	2.747	3.386	3.919	4.498	5.471	5.993	69	
	Fire-maintained open canopy	0.000	0	4.350	5.229	6.138	6.866	7.424	8.165	9.030	43	
TECI	Early seral	27.983	0	35.851	36.189	36.583	36.848	37.116	37.526	38.038	4	100
	Mid seral	30.502	100	21.438	21.592	21.730	21.877	22.038	22.424	22.916	4	
	Late seral	34.938	100	14.758	17.585	20.084	21.643	23.552	25.991	28.099	39	
	Fire-maintained open canopy			23.639	25.809	27.552	28.973	30.407	32.647	37.496	24	
CLUMPY	Early seral	0.831	100	0.645	0.688	0.708	0.717	0.728	0.743	0.762	8	100
	Mid seral	0.939	100	0.648	0.657	0.666	0.673	0.681	0.702	0.741	7	
	Late seral	0.932	100	0.808	0.820	0.832	0.841	0.851	0.866	0.877	5	
	Fire-maintained open canopy			0.857	0.862	0.866	0.871	0.875	0.887	0.902	3	
IJI	Early seral	45.407	58	33.673	39.401	42.771	44.809	46.750	48.808	50.993	21	67
	Mid seral	73.270	100	36.771	38.739	40.799	42.018	43.097	44.718	46.577	14	
	Late seral	78.410	100	56.893	61.941	65.969	69.262	72.236	75.410	78.348	19	
	Fire-maintained open canopy			64.321	66.684	68.886	70.422	71.910	74.084	78.870	11	

Summary Indices⁶:

<i>Seral-Stage Departure Index</i>	84
<i>Class Configuration Departure Index</i>	90
<i>Cover Type Departure Index</i>	87

¹Some 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.

²CV = 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).

³HRV 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).

⁴Landscape 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.

⁵Landscape 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.

⁶Seral-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.