

Table. Range of variation in landscape structure for aspen-dominated 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 <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</i> <sup>4</sup>												
PLAND	Early seral	0.738	5	0.142	0.749	1.443	2.204	3.234	4.932	7.155	190	88
	Mid seral	2.622	3	1.861	2.796	4.111	5.069	5.989	7.744	8.993	98	
	Late seral	2.082	99	0.867	1.138	1.430	1.587	1.743	1.940	2.184	51	
<i>Class Configuration</i> <sup>5</sup>												
PD	Early seral	0.154	5	0.068	0.150	0.234	0.278	0.327	0.390	0.446	86	92
	Mid seral	0.097	0	0.358	0.435	0.503	0.554	0.595	0.647	0.721	38	
	Late seral	0.064	1	0.061	0.069	0.075	0.080	0.084	0.094	0.109	32	
ED	Early seral	1.483	2	0.638	2.239	3.789	4.983	6.553	8.762	11.483	131	82
	Mid seral	3.282	0	5.189	7.273	9.372	10.713	12.094	14.182	15.474	64	
	Late seral	2.614	88	1.511	1.837	2.167	2.343	2.507	2.705	2.903	37	
AREA_MN	Early seral	4.802	9	2.107	4.124	6.209	7.834	10.385	13.922	18.031	125	88
	Mid seral	27.037	100	4.429	5.764	7.664	9.033	10.498	13.329	14.904	84	
	Late seral	32.381	100	10.660	14.370	18.023	19.902	21.875	24.372	28.608	50	
AREA_AM	Early seral	319.582	55	9.961	61.232	158.216	292.420	524.473	1419.799	2894.619	465	0
	Mid seral	338.668	35	78.812	168.374	295.225	433.804	642.063	1443.178	2696.033	294	
	Late seral	223.649	65	81.318	107.263	160.751	197.280	238.464	287.686	320.152	91	
GYRATE_AM	Early seral	719.401	54	136.483	320.634	503.421	693.199	937.700	1418.448	2241.673	158	1
	Mid seral	832.216	49	365.585	521.838	689.225	837.268	1013.879	1442.430	1991.632	110	
	Late seral	649.071	76	397.158	451.215	554.912	597.178	644.480	703.626	739.261	42	
SHAPE_MN	Early seral	1.298	0	1.659	1.753	1.794	1.831	1.856	1.896	2.013	8	97
	Mid seral	1.741	0	1.753	1.801	1.835	1.854	1.873	1.925	1.967	7	
	Late seral	1.860	97	1.707	1.771	1.801	1.817	1.835	1.855	1.870	5	
SHAPE_AM	Early seral	4.477	58	2.147	2.995	3.631	4.229	5.255	7.480	10.583	106	33
	Mid seral	3.244	0	3.086	3.677	4.276	4.757	5.444	7.317	9.282	77	
	Late seral	3.016	44	2.484	2.655	2.923	3.039	3.188	3.374	3.507	24	

CPLAND	Early seral	0.425	7	0.038	0.316	0.779	1.306	2.053	3.340	5.010	231	76
	Mid seral	2.071	10	1.136	1.715	2.658	3.492	4.207	5.726	6.570	115	
	Late seral	1.675	99	0.629	0.882	1.128	1.254	1.404	1.569	1.800	55	
CORE_MN	Early seral	2.765	17	0.565	1.804	3.308	4.632	6.693	9.671	13.195	170	78
	Mid seral	21.354	100	2.465	3.536	4.992	6.202	7.488	9.786	11.110	101	
	Late seral	26.046	100	8.047	11.023	14.097	15.851	17.557	19.742	23.579	55	
CORE_AM	Early seral	231.501	49	4.692	40.099	120.560	234.654	415.755	1156.245	2411.626	476	0
	Mid seral	294.819	38	61.471	129.956	242.202	361.371	541.956	1212.657	2289.213	300	
	Late seral	184.409	66	65.806	88.843	136.854	162.926	195.112	232.707	261.895	88	
CAI_MN	Early seral	8.854	0	10.446	12.543	15.574	17.519	19.399	22.238	24.480	55	86
	Mid seral	56.006	100	21.090	23.270	26.051	27.625	29.772	32.554	40.001	34	
	Late seral	67.468	90	41.303	50.760	57.497	62.451	65.005	68.852	72.281	29	
CAI_AM	Early seral	57.582	40	26.825	43.583	53.655	59.269	64.628	69.346	73.182	43	33
	Mid seral	78.980	100	53.045	61.534	65.685	68.883	71.071	73.907	75.343	18	
	Late seral	80.437	67	72.551	75.551	78.337	79.824	80.865	81.845	83.589	8	
PROX_MN	Early seral	145.696	72	1.849	13.360	34.096	68.411	157.519	382.991	817.055	540	16
	Mid seral	50.291	13	21.761	40.174	75.718	117.017	171.940	354.148	572.986	268	
	Late seral	44.688	36	10.577	24.578	39.423	49.911	60.226	74.328	86.362	100	
PROX_AM	Early seral	217.195	45	1.892	33.534	106.939	282.479	717.206	1828.924	4445.240	636	33
	Mid seral	66.178	0	57.116	114.320	277.325	478.697	834.436	1826.699	3698.951	358	
	Late seral	89.216	49	20.471	34.941	62.343	91.327	122.587	172.466	201.661	151	
CWED	Early seral	0.609	2	0.272	0.888	1.539	2.035	2.614	3.482	4.492	128	93
	Mid seral	1.013	0	1.559	2.172	2.829	3.217	3.673	4.329	4.775	67	
	Late seral	0.813	96	0.480	0.566	0.660	0.712	0.756	0.804	0.879	33	
TECI	Early seral	40.995	63	36.524	38.052	39.388	40.506	41.421	42.652	44.565	11	28
	Mid seral	30.836	96	29.078	29.508	29.900	30.173	30.427	30.807	31.249	4	
	Late seral	30.964	71	27.751	28.315	29.245	30.240	31.079	32.834	34.305	15	
CLUMPY	Early seral	0.876	79	0.724	0.795	0.838	0.856	0.874	0.889	0.907	11	72
	Mid seral	0.921	100	0.787	0.827	0.847	0.860	0.870	0.883	0.892	7	
	Late seral	0.921	100	0.885	0.897	0.905	0.908	0.911	0.915	0.919	2	

IJI	Early seral	52.189	0	55.908	60.828	64.104	65.672	67.434	69.365	71.544	13	61
	Mid seral	66.447	72	57.344	60.790	63.223	65.039	66.613	69.075	70.861	13	
	Late seral	61.199	4	59.451	61.341	63.399	65.011	66.266	67.816	69.742	10	

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

<i>Seral-Stage Departure Index</i>	88
<i>Class Configuration Departure Index</i>	54
<i>Cover Type Departure Index</i>	71

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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 = interspersed 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.