

Table. Range of variation in landscape structure for oak-dominated shrubland under the simulated HRV disturbance scenario on the Pagosa 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 <sup>1</sup>		Percentiles of Simulated Distribution							CV <sup>2</sup>	HRV Departure Index <sup>3</sup>	
		Metric Value	Percentile of HRV	0	5	25	50	75	95	100			
<i>Seral Stage Composition</i> <sup>4</sup>													
PLAND	Early seral	12.915	100	3.236	5.012	6.761	7.900	9.293	11.170	12.949	78	100	
	Late seral	1.836	0	2.039	3.712	5.510	6.915	8.057	9.673	11.239	86		
<i>Class Configuration</i> <sup>5</sup>													
PD	Early seral	0.234	0	0.311	0.343	0.381	0.420	0.464	0.541	0.637	47	100	
	Late seral	0.012	0	0.114	0.172	0.205	0.230	0.250	0.279	0.361	46		
ED	Early seral	12.863	95	5.588	7.796	9.492	10.539	11.443	13.019	15.352	50	89	
	Late seral	1.661	0	3.150	5.667	7.874	9.234	10.432	11.891	13.287	67		
AREA_MN	Early seral	55.201	100	8.068	11.692	14.931	18.178	22.759	29.454	33.519	98	100	
	Late seral	157.178	100	15.236	19.910	25.758	29.727	33.578	38.016	45.351	61		
AREA_AM	Early seral	1277.413	75	164.817	300.717	513.319	854.674	1276.096	1587.048	1831.504	151	47	
	Late seral	1019.378	98	87.158	122.245	241.046	399.892	624.328	872.016	1246.480	187		
GYRATE_AM	Early seral	1509.674	76	496.202	692.588	907.545	1164.431	1501.952	1726.961	1947.077	89	52	
	Late seral	1544.867	100	441.091	527.391	687.032	848.734	1041.307	1264.258	1473.408	87		
SHAPE_MN	Early seral	2.028	100	1.721	1.771	1.799	1.822	1.847	1.885	1.944	6	100	
	Late seral	2.608	100	1.772	1.851	1.948	1.972	1.990	2.017	2.038	8		
SHAPE_AM	Early seral	4.699	63	2.795	3.167	3.767	4.376	5.018	5.588	6.457	55	50	
	Late seral	5.957	100	2.745	3.005	3.454	3.907	4.387	4.864	5.517	48		
CPLAND	Early seral	9.897	99	2.387	3.693	5.074	6.042	7.264	8.828	10.330	85	98	
	Late seral	1.421	0	1.513	2.685	4.151	5.235	6.205	7.427	8.856	91		
CORE_MN	Early seral	42.303	100	5.698	8.702	11.205	13.960	17.641	23.309	26.451	105	100	
	Late seral	121.676	100	11.071	14.575	19.040	22.620	25.946	29.495	36.721	66		
CORE_AM	Early seral	1097.808	74	131.897	255.348	439.962	736.995	1111.492	1391.284	1580.884	154	44	

	Late seral	836.337	97	70.642	98.999	207.093	349.014	556.427	774.889	1109.354	194	
CAI_MN	Early seral	49.988	100	23.092	25.492	29.667	32.264	34.343	37.852	41.964	38	93
	Late seral	51.128	3	49.167	51.443	52.865	53.884	55.832	59.288	68.277	15	
CAI_AM	Early seral	76.634	48	69.995	72.608	74.835	76.744	78.079	79.429	80.649	9	10
	Late seral	77.413	80	70.239	72.010	74.254	75.952	77.138	78.566	80.970	9	
PROX_MN	Early seral	306.694	91	21.041	46.185	92.655	141.728	228.560	346.414	529.664	212	43
	Late seral	65.573	19	29.999	41.339	73.767	117.055	185.134	268.848	330.985	194	
PROX_AM	Early seral	1327.406	88	25.379	87.810	232.245	588.528	1015.784	1497.633	2019.344	240	76
	Late seral	3.690	0	32.197	54.162	101.742	219.649	404.437	815.229	1165.319	346	
CWED	Early seral	5.202	98	1.761	2.628	3.352	3.841	4.250	4.908	5.637	59	96
	Late seral	0.680	0	0.991	1.797	2.498	2.916	3.345	3.883	4.455	72	
TECI	Early seral	39.419	98	30.705	32.478	34.204	35.738	36.920	38.596	40.058	17	95
	Late seral	40.737	100	26.847	28.874	30.470	31.303	32.240	33.427	34.763	15	
CLUMPY	Early seral	0.928	99	0.869	0.892	0.903	0.910	0.918	0.925	0.930	4	98
	Late seral	0.946	100	0.888	0.898	0.904	0.909	0.914	0.918	0.928	2	
IJI	Early seral	70.972	35	64.592	67.960	70.154	72.182	74.047	76.809	79.896	12	0
	Late seral	72.135	44	61.869	67.578	70.637	72.560	74.244	77.143	80.476	13	

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

<i>Seral-Stage Departure Index</i>	100
<i>Class Configuration Departure Index</i>	72
<i>Cover Type Departure Index</i>	86

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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.