

Table. Range of variation in landscape structure for pinyon-juniper woodlands, inclusive of all PJ types, 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							HRV Departure	
		Metric Value	Percentile of HRV	0	5	25	50	75	95	100	CV ²	Index ³
<i>Seral Stage Composition</i> ⁴												
PLAND	Early seral	0.317	79	0.038	0.103	0.165	0.233	0.294	0.399	0.436	127	72
	Mid seral	0.553	0	0.665	0.853	1.213	1.582	1.959	2.607	3.001	111	
	Late seral	1.888	100	0.018	0.036	0.423	0.655	0.952	1.386	1.768	206	
<i>Class Configuration</i> ⁵												
PD	Early seral	0.017	1	0.012	0.020	0.025	0.029	0.033	0.041	0.052	73	94
	Mid seral	0.007	0	0.066	0.087	0.107	0.121	0.136	0.160	0.206	61	
	Late seral	0.023	4	0.009	0.030	0.058	0.084	0.101	0.116	0.142	102	
ED	Early seral	0.534	36	0.148	0.350	0.478	0.606	0.733	0.867	0.956	85	33
	Mid seral	0.566	0	1.680	1.964	2.518	2.883	3.289	3.749	4.235	62	
	Late seral	1.821	66	0.079	0.213	1.020	1.423	2.054	2.722	3.489	176	
AREA_MN	Early seral	18.426	100	2.233	3.726	5.831	7.796	10.301	12.890	17.364	118	100
	Mid seral	75.608	100	4.902	6.454	9.396	12.749	17.688	26.720	35.378	159	
	Late seral	82.468	100	1.130	1.554	5.901	8.450	10.307	13.959	19.684	147	
AREA_AM	Early seral	208.633	100	6.811	14.817	25.514	42.902	82.397	115.347	149.338	234	67
	Mid seral	339.554	35	72.143	121.320	253.469	424.244	674.020	1040.472	1321.799	217	
	Late seral	1252.302	100	2.122	6.549	195.815	306.338	394.742	560.011	1141.159	181	
GYRATE_AM	Early seral	835.641	100	134.159	198.613	260.742	339.862	426.628	532.440	629.012	98	66
	Mid seral	991.545	60	371.153	491.123	691.149	902.373	1164.167	1507.078	1787.773	113	
	Late seral	1740.077	100	63.675	101.849	568.693	747.245	845.422	1043.973	1905.482	126	
SHAPE_MN	Early seral	1.889	31	1.718	1.811	1.880	1.919	1.955	2.016	2.091	11	67
	Mid seral	2.318	100	1.609	1.712	1.816	1.871	1.925	1.996	2.097	15	
	Late seral	2.253	100	1.508	1.597	1.687	1.745	1.783	1.835	1.987	14	
SHAPE_AM	Early seral	3.895	99	2.114	2.377	2.624	2.866	3.128	3.498	4.261	39	54
	Mid seral	3.528	9	2.754	3.377	3.969	4.425	5.133	7.036	7.916	83	
	Late seral	5.397	49	1.688	1.960	4.510	5.424	5.994	7.213	12.375	97	

CPLAND	Early seral	0.203	87	0.011	0.045	0.081	0.123	0.161	0.228	0.248	149	83
	Mid seral	0.499	0	0.561	0.735	1.051	1.381	1.705	2.275	2.617	111	
	Late seral	1.593	100	0.006	0.025	0.315	0.498	0.742	1.120	1.459	220	
CORE_MN	Early seral	11.781	100	0.662	1.687	2.853	4.045	5.546	7.385	9.985	141	100
	Mid seral	68.179	100	4.181	5.474	8.137	11.085	15.482	23.317	30.853	161	
	Late seral	69.615	100	0.454	1.153	4.324	6.489	7.995	10.863	16.612	150	
CORE_AM	Early seral	155.348	100	3.068	7.596	15.181	26.809	59.300	83.986	110.552	285	67
	Mid seral	306.497	34	62.443	106.366	232.493	394.336	625.466	971.172	1232.297	219	
	Late seral	1111.364	100	1.584	4.299	166.563	262.901	347.238	491.816	1030.231	185	
CAI_MN	Early seral	40.164	90	22.071	26.024	29.925	32.366	35.211	45.031	54.240	59	45
	Mid seral	81.523	88	68.097	73.336	76.882	78.469	80.304	82.234	84.683	11	
	Late seral	64.735	81	18.636	36.340	48.003	55.410	62.738	71.121	78.976	63	
CAI_AM	Early seral	63.937	100	29.633	42.100	48.992	52.392	55.228	58.175	61.269	31	96
	Mid seral	90.175	98	83.011	84.397	86.180	86.998	87.783	89.409	91.064	6	
	Late seral	84.415	99	31.564	66.895	73.221	77.129	79.665	82.261	86.036	20	
PROX_MN	Early seral	24.146	70	3.495	7.664	12.237	18.251	27.019	49.179	96.516	227	0
	Mid seral	77.290	31	23.108	38.325	69.939	113.129	183.662	318.775	510.212	248	
	Late seral	97.348	49	1.063	2.743	48.822	97.740	134.306	192.982	314.509	195	
PROX_AM	Early seral	8.764	4	2.655	8.980	16.936	27.445	52.136	114.490	196.042	384	40
	Mid seral	148.788	16	39.440	89.874	179.041	353.295	524.033	843.435	1444.050	213	
	Late seral	192.365	61	1.244	4.068	89.774	162.547	279.543	437.474	1838.000	267	
CWED	Early seral	0.195	44	0.047	0.111	0.157	0.205	0.248	0.302	0.333	93	33
	Mid seral	0.155	0	0.412	0.473	0.625	0.727	0.845	0.982	1.089	70	
	Late seral	0.533	65	0.025	0.053	0.316	0.438	0.614	0.798	0.982	170	
TECI	Early seral	35.868	88	25.561	28.521	31.810	33.677	34.997	36.692	38.889	24	40
	Mid seral	26.768	92	22.576	23.313	23.856	24.559	25.521	27.154	28.541	16	
	Late seral	28.403	33	22.559	25.286	27.915	29.364	30.563	32.434	36.357	24	
CLUMPY	Early seral	0.897	100	0.712	0.773	0.817	0.839	0.859	0.873	0.882	12	100
	Mid seral	0.938	100	0.793	0.837	0.862	0.884	0.899	0.917	0.929	9	
	Late seral	0.939	100	0.612	0.692	0.842	0.857	0.867	0.885	0.895	23	

IJI	Early seral	68.180	93	53.003	57.230	60.863	63.436	65.553	68.377	71.653	18	75
	Mid seral	72.230	88	51.097	57.925	63.381	67.974	70.607	74.146	76.421	24	
	Late seral	69.183	100	23.208	37.792	49.273	53.628	58.218	62.142	65.750	45	

Summary Indices⁶:

<i>Seral-Stage Departure Index</i>	72
<i>Class Configuration Departure Index</i>	64
<i>Cover Type Departure Index</i>	68

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 = interspersation 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.