

Table. Range of variation in landscape structure for pinyon-juniper woodlands, inclusive of all PJ types, 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		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	0.169	63	0.014	0.037	0.078	0.129	0.218	0.279	0.322	188	45
	Mid seral	0.577	16	0.177	0.453	0.740	1.263	1.852	2.347	2.687	150	
	Late seral	1.493	99	0.004	0.011	0.048	0.201	0.616	1.144	1.579	565	
<i>Class Configuration</i> ⁵												
PD	Early seral	0.012	11	0.003	0.009	0.015	0.020	0.023	0.029	0.034	101	56
	Mid seral	0.006	0	0.035	0.051	0.074	0.088	0.109	0.135	0.181	95	
	Late seral	0.020	22	0.003	0.007	0.023	0.047	0.075	0.107	0.146	213	
ED	Early seral	0.323	38	0.050	0.123	0.248	0.378	0.516	0.602	0.634	127	33
	Mid seral	0.570	0	0.613	0.918	1.624	2.303	2.717	3.236	3.952	101	
	Late seral	1.429	74	0.021	0.056	0.230	0.565	1.476	2.259	2.846	390	
AREA_MN	Early seral	14.474	96	1.952	2.787	4.578	6.578	10.261	14.094	15.766	172	95
	Mid seral	93.753	100	3.174	4.860	8.137	13.379	21.086	33.844	49.990	217	
	Late seral	74.366	100	0.775	1.056	1.820	4.796	7.877	14.407	20.214	278	
AREA_AM	Early seral	129.863	100	2.935	7.126	13.758	28.392	37.833	56.571	77.426	174	52
	Mid seral	484.510	68	12.515	48.985	132.176	249.328	537.404	765.774	921.823	287	
	Late seral	335.515	89	1.002	1.682	6.711	74.343	152.202	518.273	730.878	695	
GYRATE_AM	Early seral	974.811	100	96.918	137.967	199.482	265.058	319.963	483.810	651.346	130	96
	Mid seral	1386.024	99	160.184	328.333	546.060	860.804	1038.181	1232.618	1508.113	105	
	Late seral	1045.691	98	42.942	56.895	105.076	382.839	576.527	974.899	1124.239	240	
SHAPE_MN	Early seral	1.805	16	1.581	1.728	1.836	1.906	1.959	2.025	2.105	16	78
	Mid seral	2.496	100	1.532	1.592	1.731	1.836	1.932	2.080	2.220	27	
	Late seral	2.204	100	1.375	1.460	1.576	1.654	1.763	1.851	1.897	24	
SHAPE_AM	Early seral	4.015	100	1.675	2.045	2.294	2.552	2.768	3.120	3.477	42	33
	Mid seral	3.982	57	2.329	2.652	3.359	3.848	4.360	5.787	7.447	81	
	Late seral	3.575	57	1.409	1.571	1.959	3.345	4.413	6.253	7.403	140	

CPLAND	Early seral	0.101	71	0.003	0.015	0.035	0.062	0.114	0.155	0.179	227	43
	Mid seral	0.497	17	0.150	0.378	0.611	1.100	1.584	1.991	2.272	147	
	Late seral	1.269	99	0.001	0.004	0.032	0.159	0.453	0.938	1.352	588	
CORE_MN	Early seral	8.627	100	0.472	1.047	1.963	3.219	5.450	7.828	8.783	211	99
	Mid seral	80.806	100	2.462	3.999	6.787	11.520	17.971	28.634	42.258	214	
	Late seral	63.224	100	0.125	0.394	1.243	3.286	6.127	12.184	17.380	359	
CORE_AM	Early seral	80.869	100	0.765	3.159	6.764	18.362	24.534	35.551	44.484	176	50
	Mid seral	417.403	66	10.460	40.894	114.638	217.819	498.712	711.620	869.386	308	
	Late seral	289.536	87	0.258	0.840	5.143	57.898	141.516	484.617	684.955	836	
CAI_MN	Early seral	35.318	68	17.242	21.479	26.917	31.615	37.164	45.044	56.530	75	17
	Mid seral	80.618	88	63.492	68.437	71.937	75.319	78.205	82.921	86.093	19	
	Late seral	67.799	68	5.405	22.223	44.128	58.677	70.340	83.676	94.668	105	
CAI_AM	Early seral	59.602	99	24.163	34.728	43.186	49.675	53.938	57.206	60.638	45	49
	Mid seral	86.190	78	76.571	80.509	82.703	84.714	85.867	88.602	90.890	10	
	Late seral	85.017	85	13.793	35.867	64.166	75.958	83.129	87.646	93.585	68	
PROX_MN	Early seral	11.374	44	0.094	2.589	6.856	13.177	22.973	39.214	93.671	278	50
	Mid seral	19.838	7	3.754	16.018	42.102	91.082	186.809	272.511	430.389	282	
	Late seral	165.621	94	0.024	0.406	2.735	23.084	54.120	186.046	298.590	804	
PROX_AM	Early seral	7.754	33	0.073	1.532	5.789	12.980	26.187	71.566	143.218	540	59
	Mid seral	3.421	0	2.519	28.350	137.953	392.916	795.820	1169.682	1680.409	290	
	Late seral	586.400	94	0.022	0.394	3.293	32.730	168.701	641.547	1154.543	1959	
CWED	Early seral	0.116	44	0.019	0.040	0.080	0.128	0.185	0.216	0.240	138	33
	Mid seral	0.178	0	0.141	0.255	0.407	0.607	0.760	0.908	1.060	108	
	Late seral	0.391	72	0.005	0.016	0.063	0.169	0.417	0.657	0.830	378	
TECI	Early seral	35.548	75	20.409	28.783	31.748	33.844	35.603	37.347	38.573	25	33
	Mid seral	30.586	100	22.236	23.415	25.081	26.229	27.451	29.429	30.546	23	
	Late seral	26.517	36	21.507	22.517	25.290	28.272	31.297	36.698	39.336	50	
CLUMPY	Early seral	0.889	100	0.681	0.752	0.806	0.837	0.861	0.877	0.884	15	100
	Mid seral	0.942	100	0.752	0.803	0.864	0.895	0.913	0.930	0.936	14	
	Late seral	0.941	100	0.609	0.640	0.733	0.834	0.857	0.889	0.901	30	

IJI	Early seral	62.872	87	40.224	52.782	56.818	59.411	61.347	64.886	68.267	20	47
	Mid seral	64.055	35	49.019	54.497	62.032	65.903	68.644	70.936	73.309	25	
	Late seral	62.766	98	12.420	23.191	38.338	48.451	55.146	60.589	67.229	77	

Summary Indices⁶:

<i>Seral-Stage Departure Index</i>	45
<i>Class Configuration Departure Index</i>	57
<i>Cover Type Departure Index</i>	51

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 = interspersed 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.