

Table. Range of variation in landscape structure for Pinyon-Juniper Woodland (5,023 ha) 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 Composition⁴</i>												
PLAND	Herb Dominated	0.029	45	0.000	0.000	0.012	0.035	0.076	0.167	0.285	474	62
	Herbs - Shrubs	0.288	88	0.034	0.065	0.117	0.173	0.237	0.343	0.410	161	
	Shrubs - Trees	0.035	0	0.083	0.126	0.192	0.252	0.316	0.410	0.487	112	
	Tree Dominated	0.241	99	0.006	0.017	0.062	0.095	0.134	0.191	0.261	183	
<i>Class Configuration⁵</i>												
PD	Herb Dominated	0.005	9	0.000	0.001	0.017	0.024	0.032	0.050	0.106	206	91
	Herbs - Shrubs	0.013	0	0.037	0.058	0.068	0.077	0.090	0.127	0.177	90	
	Shrubs - Trees	0.002	0	0.065	0.076	0.093	0.104	0.113	0.127	0.162	49	
	Tree Dominated	0.012	0	0.021	0.057	0.087	0.101	0.118	0.189	0.269	131	
ED	Herb Dominated	0.075	27	0.000	0.001	0.069	0.152	0.261	0.456	0.767	300	25
	Herbs - Shrubs	0.460	25	0.169	0.313	0.457	0.611	0.769	0.935	1.086	102	
	Shrubs - Trees	0.065	0	0.362	0.509	0.682	0.809	0.944	1.083	1.230	71	
	Tree Dominated	0.414	49	0.047	0.166	0.311	0.417	0.522	0.679	0.964	123	
AREA_MN	Herb Dominated	6.454	98	0.063	0.146	0.629	1.270	2.398	4.810	11.173	367	98
	Herbs - Shrubs	22.431	100	0.517	0.886	1.438	1.987	2.938	4.796	6.636	197	
	Shrubs - Trees	20.978	100	0.823	1.159	1.710	2.354	3.224	5.303	7.543	176	
	Tree Dominated	19.605	100	0.117	0.187	0.599	1.018	1.346	1.732	2.239	152	
AREA_AM	Herb Dominated	11.564	48	0.063	0.204	3.851	12.443	29.520	91.486	180.620	734	47
	Herbs - Shrubs	228.398	100	3.019	9.056	19.573	30.512	66.690	106.380	156.451	319	
	Shrubs - Trees	34.762	27	8.287	18.444	33.420	53.334	81.780	121.760	154.109	194	
	Tree Dominated	57.992	97	0.516	1.456	11.884	17.418	27.112	50.469	79.193	281	
GYRATE_AM	Herb Dominated	172.750	46	12.500	18.689	101.575	187.630	273.405	476.994	638.073	244	49
	Herbs - Shrubs	902.107	100	84.144	152.671	218.643	284.290	383.386	507.664	594.582	125	
	Shrubs - Trees	336.629	48	129.033	190.022	262.740	339.584	417.078	521.953	607.415	98	
	Tree Dominated	397.620	99	27.306	44.643	153.735	191.988	234.347	319.001	419.208	143	
SHAPE_MN	Herb Dominated	1.677	100	1.000	1.050	1.247	1.326	1.396	1.520	1.683	35	100
	Herbs - Shrubs	1.960	100	1.220	1.275	1.324	1.367	1.423	1.516	1.668	18	

	Shrubs - Trees	2.207	100	1.217	1.266	1.319	1.368	1.424	1.539	1.645	20	
	Tree Dominated	2.021	100	1.046	1.090	1.165	1.221	1.263	1.290	1.338	16	
SHAPE_AM	Herb Dominated	1.870	17	1.000	1.094	2.119	2.559	3.057	3.875	5.100	109	50
	Herbs - Shrubs	4.098	99	2.014	2.378	2.666	3.004	3.379	3.864	4.486	49	
	Shrubs - Trees	2.395	6	2.103	2.347	2.801	3.093	3.467	4.022	4.731	54	
	Tree Dominated	2.511	63	1.242	1.446	2.172	2.372	2.708	3.005	3.538	66	
CPLAND	Herb Dominated	0.016	50	0.000	0.000	0.004	0.016	0.039	0.100	0.182	639	67
	Herbs - Shrubs	0.245	93	0.017	0.043	0.082	0.126	0.174	0.262	0.312	174	
	Shrubs - Trees	0.027	0	0.063	0.102	0.152	0.201	0.253	0.324	0.390	110	
	Tree Dominated	0.201	99	0.004	0.012	0.045	0.073	0.104	0.156	0.215	199	
CORE_MN	Herb Dominated	3.502	98	0.000	0.000	0.205	0.543	1.240	2.874	7.123	529	98
	Herbs - Shrubs	19.061	100	0.266	0.588	0.998	1.432	2.170	3.608	5.016	211	
	Shrubs - Trees	16.571	100	0.646	0.911	1.373	1.889	2.576	4.197	6.042	174	
	Tree Dominated	16.384	100	0.082	0.133	0.439	0.778	1.024	1.383	1.808	161	
CORE_AM	Herb Dominated	7.080	52	0.000	0.000	1.729	6.677	20.620	69.304	137.796	1038	47
	Herbs - Shrubs	207.774	100	2.127	6.777	15.494	24.669	57.035	92.675	136.352	348	
	Shrubs - Trees	28.930	26	6.996	15.937	28.090	46.225	72.263	105.420	135.328	194	
	Tree Dominated	52.033	97	0.270	0.967	8.841	14.575	24.072	44.084	73.963	296	
CAI_MN	Herb Dominated	43.849	100	0.000	0.000	10.493	14.901	20.352	29.997	37.082	201	77
	Herbs - Shrubs	71.897	100	32.591	38.216	44.223	49.130	54.350	59.291	67.715	43	
	Shrubs - Trees	77.518	100	58.589	60.983	64.508	66.872	68.851	71.964	74.476	16	
	Tree Dominated	65.724	23	39.833	56.540	65.944	70.024	73.458	80.077	85.720	34	
CAI_AM	Herb Dominated	54.256	75	0.000	0.000	30.238	44.009	54.234	63.674	71.299	145	47
	Herbs - Shrubs	84.977	100	48.013	62.431	68.712	72.277	75.067	77.866	82.337	21	
	Shrubs - Trees	78.996	33	71.798	76.309	78.512	79.810	80.800	83.229	86.466	9	
	Tree Dominated	83.572	97	48.087	65.034	71.585	75.385	78.643	82.808	88.703	24	
PROX_MN	Herb Dominated	2.271	19	0.000	0.086	3.251	7.553	15.114	45.074	110.677	596	37
	Herbs - Shrubs	27.684	81	2.928	5.089	8.866	14.309	24.188	44.795	86.529	277	
	Shrubs - Trees	0.092	0	3.304	5.987	11.642	19.098	28.882	44.064	65.731	199	
	Tree Dominated	4.844	30	0.387	0.810	4.203	9.745	14.217	23.414	38.097	232	
PROX_AM	Herb Dominated	0.893	12	0.000	0.060	4.294	9.102	19.811	72.046	283.276	791	68
	Herbs - Shrubs	7.910	11	2.770	5.981	12.866	21.687	37.676	104.056	268.297	452	

	Shrubs - Trees	0.113	0	4.150	8.394	18.864	31.816	65.155	145.035	174.610	429	
	Tree Dominated	5.035	10	0.413	1.439	8.244	13.410	23.621	53.400	93.004	387	
CWED	Herb Dominated	0.025	33	0.000	0.000	0.018	0.041	0.072	0.126	0.213	310	25
	Herbs - Shrubs	0.120	58	0.028	0.054	0.083	0.108	0.141	0.180	0.213	117	
	Shrubs - Trees	0.018	0	0.062	0.076	0.109	0.142	0.171	0.213	0.235	96	
	Tree Dominated	0.094	43	0.012	0.040	0.077	0.102	0.125	0.160	0.224	118	
TECI	Herb Dominated	32.563	99	18.571	22.837	25.099	26.559	28.270	30.698	34.687	30	95
	Herbs - Shrubs	25.583	100	11.494	14.186	16.931	18.546	19.826	21.670	24.061	40	
	Shrubs - Trees	26.406	100	11.705	12.687	15.751	17.909	19.287	20.609	22.294	44	
	Tree Dominated	22.229	4	21.103	22.276	23.108	23.780	24.699	26.224	27.387	17	
CLUMPY	Herb Dominated	0.851	95	-1.000	0.396	0.621	0.724	0.801	0.852	0.882	63	95
	Herbs - Shrubs	0.903	100	0.584	0.675	0.742	0.782	0.814	0.842	0.860	21	
	Shrubs - Trees	0.893	100	0.679	0.727	0.776	0.800	0.823	0.848	0.865	15	
	Tree Dominated	0.895	100	0.270	0.401	0.682	0.739	0.765	0.793	0.817	53	
IJI	Herb Dominated	74.336	100	20.038	41.619	57.399	62.090	65.999	70.587	73.165	47	74
	Herbs - Shrubs	67.878	99	49.386	54.517	58.784	61.880	64.230	66.917	69.912	20	
	Shrubs - Trees	63.805	69	49.462	54.698	58.577	61.630	64.377	68.024	71.144	22	
	Tree Dominated	74.193	100	25.815	33.657	46.184	49.967	53.297	57.096	61.875	47	

Summary Indices⁶:

<i>Seral-Stage Departure Index</i>	62
<i>Class Configuration Departure Index</i>	66
<i>Cover Type Departure Index</i>	64

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 95 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 25-75 percentile range of variation, where a 0 represents no departure (i.e., within the 25-75 percentiles of variation) and 100 represents complete departure (i.e., outside the 0-100 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.