

Table. Range of variation in landscape structure for Pinyon-Juniper-Oak-Serviceberry Woodland (9,780 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 Composition</i> ⁴												
PLAND	Herb Dominated	0.050	50	0.000	0.000	0.016	0.050	0.125	0.370	0.628	746	24
	Herbs - Shrubs	0.280	44	0.060	0.100	0.198	0.310	0.469	0.660	0.824	181	
	Shrubs - Trees	0.355	22	0.151	0.237	0.382	0.484	0.629	0.809	0.999	118	
	Tree Dominated	0.469	96	0.007	0.021	0.120	0.187	0.311	0.462	0.569	236	
<i>Class Configuration</i> ⁵												
PD	Herb Dominated	0.006	9	0.000	0.001	0.017	0.024	0.032	0.058	0.146	237	91
	Herbs - Shrubs	0.007	0	0.043	0.060	0.076	0.089	0.113	0.154	0.256	105	
	Shrubs - Trees	0.004	0	0.066	0.089	0.117	0.139	0.158	0.184	0.232	68	
	Tree Dominated	0.008	0	0.016	0.064	0.118	0.142	0.180	0.247	0.447	129	
ED	Herb Dominated	0.103	33	0.000	0.001	0.075	0.164	0.352	0.707	1.010	429	45
	Herbs - Shrubs	0.383	5	0.250	0.379	0.621	0.858	1.066	1.302	1.593	108	
	Shrubs - Trees	0.351	0	0.542	0.770	1.032	1.253	1.412	1.625	1.958	68	
	Tree Dominated	0.495	29	0.033	0.173	0.464	0.703	0.952	1.303	1.544	161	
AREA_MN	Herb Dominated	8.461	92	0.000	0.156	0.744	1.862	4.342	10.908	18.842	577	92
	Herbs - Shrubs	37.635	100	0.845	1.145	1.931	2.970	5.222	8.950	15.310	263	
	Shrubs - Trees	88.469	100	0.989	1.531	2.413	3.439	5.017	8.324	15.203	198	
	Tree Dominated	56.830	100	0.098	0.158	0.851	1.310	2.063	3.172	4.453	230	
AREA_AM	Herb Dominated	54.520	68	0.000	0.219	5.550	23.227	75.758	175.939	236.295	757	50
	Herbs - Shrubs	102.426	60	9.298	19.702	42.705	83.949	129.249	174.289	210.728	184	
	Shrubs - Trees	227.173	100	15.522	41.382	80.004	113.483	140.041	168.044	198.083	112	
	Tree Dominated	217.055	100	0.427	2.033	23.903	43.435	68.985	111.952	139.639	253	
GYRATE_AM	Herb Dominated	415.202	75	0.000	20.176	119.321	235.440	413.631	621.559	762.389	255	50
	Herbs - Shrubs	483.343	65	139.525	206.245	306.552	420.616	516.623	602.238	673.639	94	
	Shrubs - Trees	715.991	100	180.582	286.552	390.873	461.309	531.603	584.047	620.768	64	
	Tree Dominated	701.639	100	21.961	48.100	215.634	306.592	366.375	468.654	536.360	137	
SHAPE_MN	Herb Dominated	1.647	99	1.000	1.083	1.240	1.317	1.408	1.558	1.844	36	99

	Herbs - Shrubs	2.087	100	1.202	1.258	1.313	1.354	1.415	1.509	1.599	19	
	Shrubs - Trees	2.338	100	1.207	1.256	1.318	1.374	1.422	1.517	1.634	19	
	Tree Dominated	2.104	100	1.042	1.059	1.168	1.211	1.258	1.297	1.334	20	
SHAPE_AM	Herb Dominated	2.435	33	1.000	1.143	2.196	2.831	3.563	4.294	6.235	111	15
	Herbs - Shrubs	2.937	15	2.232	2.670	3.068	3.412	3.787	4.124	4.634	43	
	Shrubs - Trees	3.145	20	2.439	2.791	3.208	3.482	3.831	4.374	5.021	45	
	Tree Dominated	2.901	42	1.171	1.433	2.588	3.031	3.435	4.044	4.663	86	
CPLAND	Herb Dominated	0.031	51	0.000	0.000	0.006	0.030	0.086	0.285	0.491	954	24
	Herbs - Shrubs	0.248	46	0.046	0.080	0.160	0.268	0.404	0.579	0.734	186	
	Shrubs - Trees	0.330	23	0.134	0.209	0.340	0.435	0.565	0.719	0.900	117	
	Tree Dominated	0.409	97	0.005	0.018	0.094	0.149	0.253	0.393	0.487	251	
CORE_MN	Herb Dominated	5.224	87	0.000	0.005	0.339	1.113	2.919	8.536	14.547	766	87
	Herbs - Shrubs	33.319	100	0.627	0.925	1.595	2.520	4.626	7.810	13.546	273	
	Shrubs - Trees	82.143	100	0.874	1.348	2.150	3.042	4.510	7.414	13.694	199	
	Tree Dominated	49.527	100	0.079	0.135	0.699	1.051	1.741	2.621	3.806	237	
CORE_AM	Herb Dominated	39.486	66	0.000	0.010	2.835	16.815	57.023	146.544	199.260	871	50
	Herbs - Shrubs	92.390	60	7.392	16.865	37.861	76.141	120.153	159.586	191.581	187	
	Shrubs - Trees	215.686	100	14.178	36.942	72.576	105.917	128.609	155.872	181.846	112	
	Tree Dominated	198.639	100	0.388	1.943	19.518	36.556	62.676	104.862	126.743	282	
CAI_MN	Herb Dominated	45.532	98	0.000	2.027	14.404	20.568	28.733	40.532	52.616	187	73
	Herbs - Shrubs	83.435	100	47.985	54.314	61.122	66.056	71.304	77.215	83.834	35	
	Shrubs - Trees	87.969	100	72.671	76.248	79.128	81.580	83.286	85.744	87.352	12	
	Tree Dominated	76.609	26	40.240	63.829	76.143	80.224	83.254	86.859	90.592	29	
CAI_AM	Herb Dominated	61.737	54	0.000	2.924	44.392	59.389	70.316	78.136	81.343	127	46
	Herbs - Shrubs	88.531	84	69.923	77.659	82.230	85.351	87.764	89.949	91.741	14	
	Shrubs - Trees	92.850	100	85.573	86.964	88.271	89.275	90.023	91.339	92.340	5	
	Tree Dominated	87.150	87	62.064	75.451	79.155	81.993	85.375	89.257	94.058	17	
PROX_MN	Herb Dominated	18.205	58	0.000	0.001	4.379	13.759	38.712	91.577	172.366	666	44
	Herbs - Shrubs	29.787	53	3.943	8.443	16.468	27.355	47.430	83.021	137.856	273	
	Shrubs - Trees	123.377	99	5.212	11.529	22.859	37.322	52.524	73.782	149.666	167	
	Tree Dominated	75.194	95	0.542	0.810	10.451	22.512	45.859	77.645	115.989	341	
PROX_AM	Herb Dominated	17.868	49	0.000	0.000	5.400	18.458	61.143	371.660	602.025	2014	25

	Herbs - Shrubs	46.665	33	1.174	12.626	32.303	74.685	174.288	410.521	542.434	533	
	Shrubs - Trees	213.926	67	8.203	19.303	54.234	148.038	257.951	362.413	460.695	232	
	Tree Dominated	388.898	100	0.737	1.721	24.879	38.960	59.842	153.746	334.641	390	
CWED	Herb Dominated	0.033	43	0.000	0.000	0.018	0.041	0.088	0.173	0.251	420	29
	Herbs - Shrubs	0.091	19	0.036	0.057	0.098	0.124	0.167	0.220	0.273	131	
	Shrubs - Trees	0.083	2	0.077	0.101	0.153	0.198	0.245	0.290	0.356	95	
	Tree Dominated	0.121	31	0.008	0.036	0.110	0.161	0.217	0.292	0.339	160	
TECI	Herb Dominated	30.303	99	17.500	20.527	22.601	24.051	25.807	28.233	32.222	32	92
	Herbs - Shrubs	23.460	100	7.115	11.804	14.026	15.566	16.980	19.023	21.162	46	
	Shrubs - Trees	23.104	100	8.933	11.649	13.857	15.954	17.820	19.100	20.476	47	
	Tree Dominated	23.993	93	19.936	20.840	21.848	22.502	23.145	24.124	26.067	15	
CLUMPY	Herb Dominated	0.875	84	-1.000	0.444	0.652	0.780	0.855	0.895	1.000	58	84
	Herbs - Shrubs	0.918	100	0.676	0.730	0.791	0.833	0.866	0.894	0.906	20	
	Shrubs - Trees	0.941	100	0.731	0.772	0.812	0.839	0.865	0.891	0.907	14	
	Tree Dominated	0.937	100	0.179	0.374	0.737	0.787	0.813	0.846	0.864	60	
IJI	Herb Dominated	74.038	100	16.093	41.473	54.058	59.338	63.585	69.268	73.825	47	100
	Herbs - Shrubs	70.804	100	37.988	51.017	55.934	59.445	62.229	65.702	68.641	25	
	Shrubs - Trees	71.213	100	46.088	48.897	52.625	56.886	60.600	65.562	71.136	29	
	Tree Dominated	70.480	100	19.694	26.563	41.051	45.676	49.134	53.302	57.062	59	

Summary Indices⁶:

<i>Seral-Stage Departure Index</i>	24
<i>Class Configuration Departure Index</i>	61
<i>Cover Type Departure Index</i>	42

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 = interspersion 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.