

Table. Range of variation in landscape structure for Pinyon-Juniper Sagebrush Woodland under the simulated HRV disturbance scenario on the Dolores 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	Herb Dominated	0.039	64	0.000	0.000	0.004	0.019	0.078	0.384	1.123	1995	47
	Herbs - Shrubs	0.924	97	0.026	0.047	0.126	0.267	0.427	0.812	1.314	287	
	Shrubs - Trees	0.080	0	0.160	0.277	0.481	0.651	0.841	1.405	1.635	173	
	Tree Dominated	0.698	45	0.004	0.021	0.389	0.717	0.905	1.072	1.324	147	
<i>Class Configuration</i> ⁵												
PD	Herb Dominated	0.007	17	0.000	0.000	0.011	0.020	0.036	0.072	0.161	365	83
	Herbs - Shrubs	0.022	0	0.052	0.073	0.096	0.115	0.145	0.420	0.549	302	
	Shrubs - Trees	0.004	0	0.065	0.114	0.178	0.212	0.243	0.311	0.465	93	
	Tree Dominated	0.011	0	0.014	0.118	0.216	0.257	0.294	0.440	0.815	126	
ED	Herb Dominated	0.101	53	0.000	0.001	0.032	0.092	0.283	0.790	2.133	858	37
	Herbs - Shrubs	0.780	50	0.178	0.283	0.527	0.782	1.189	1.945	2.501	212	
	Shrubs - Trees	0.133	0	0.932	1.208	1.640	1.933	2.218	2.547	3.449	69	
	Tree Dominated	0.780	13	0.031	0.203	1.257	1.799	2.175	2.413	2.674	123	
AREA_MN	Herb Dominated	5.846	88	0.000	0.092	0.354	0.887	2.430	8.169	19.029	911	87
	Herbs - Shrubs	41.546	100	0.292	0.490	0.930	1.828	3.382	7.180	11.037	366	
	Shrubs - Trees	22.743	99	0.643	1.120	2.043	2.922	4.300	12.306	24.237	383	
	Tree Dominated	66.276	100	0.088	0.139	1.516	2.809	3.494	5.058	8.014	175	
AREA_AM	Herb Dominated	18.767	70	0.000	0.104	1.201	6.421	24.893	165.319	600.291	2573	25
	Herbs - Shrubs	600.696	100	1.491	4.438	14.825	57.697	129.259	296.478	510.286	506	
	Shrubs - Trees	75.674	38	5.978	9.694	44.584	98.025	209.383	444.156	585.756	443	
	Tree Dominated	296.096	50	0.175	1.547	60.181	298.006	359.253	426.320	514.253	143	
GYRATE_AM	Herb Dominated	213.117	69	0.000	12.500	51.490	126.646	270.366	662.450	1162.477	513	29
	Herbs - Shrubs	1114.889	100	61.047	96.348	183.957	332.735	502.632	741.582	1004.232	194	
	Shrubs - Trees	400.352	44	105.657	143.227	285.046	432.641	634.985	959.730	1079.614	189	
	Tree Dominated	883.997	79	16.980	41.102	335.827	785.117	865.477	975.963	1068.571	119	
SHAPE_MN	Herb Dominated	1.726	100	1.000	1.044	1.190	1.274	1.390	1.531	1.710	38	100

	Herbs - Shrubs	1.809	100	1.149	1.202	1.258	1.301	1.365	1.463	1.599	20	
	Shrubs - Trees	1.966	100	1.202	1.310	1.384	1.458	1.501	1.581	1.771	19	
	Tree Dominated	2.128	100	1.026	1.049	1.211	1.262	1.292	1.355	1.453	24	
SHAPE_AM	Herb Dominated	2.159	46	1.000	1.094	1.693	2.220	2.839	4.581	7.092	157	12
	Herbs - Shrubs	3.388	56	1.698	1.933	2.457	3.143	4.009	4.893	6.486	94	
	Shrubs - Trees	2.849	13	2.178	2.446	3.182	3.742	4.250	7.387	9.806	132	
	Tree Dominated	4.548	32	1.085	1.345	3.246	5.728	6.350	7.745	9.729	112	
CPLAND	Herb Dominated	0.022	65	0.000	0.000	0.001	0.008	0.052	0.278	0.887	3286	47
	Herbs - Shrubs	0.851	97	0.020	0.033	0.103	0.233	0.388	0.737	1.203	302	
	Shrubs - Trees	0.073	0	0.148	0.241	0.434	0.592	0.777	1.284	1.489	176	
	Tree Dominated	0.575	48	0.001	0.014	0.301	0.587	0.740	0.884	1.103	148	
CORE_MN	Herb Dominated	3.294	86	0.000	0.000	0.076	0.367	1.321	6.626	15.817	1808	85
	Herbs - Shrubs	38.258	100	0.216	0.379	0.792	1.596	3.082	6.362	10.065	375	
	Shrubs - Trees	20.778	99	0.558	1.001	1.884	2.664	3.919	11.214	22.109	383	
	Tree Dominated	54.579	100	0.043	0.089	1.153	2.276	2.816	4.163	6.695	179	
CORE_AM	Herb Dominated	11.511	67	0.000	0.000	0.355	3.871	18.401	145.377	529.931	3755	25
	Herbs - Shrubs	567.447	100	0.955	3.799	12.216	54.686	121.951	284.076	495.012	513	
	Shrubs - Trees	69.339	37	5.426	8.606	41.780	92.546	199.548	419.819	560.106	444	
	Tree Dominated	249.794	48	0.048	0.760	52.549	257.041	310.300	369.279	445.488	143	
CAI_MN	Herb Dominated	43.338	97	0.000	0.000	6.610	14.613	24.597	38.594	53.001	264	38
	Herbs - Shrubs	76.602	51	61.772	66.649	72.472	76.521	80.765	85.674	89.115	25	
	Shrubs - Trees	84.451	67	66.327	74.256	81.011	82.882	84.923	86.819	88.665	15	
	Tree Dominated	61.221	9	18.259	53.292	69.874	73.683	76.124	80.648	85.847	37	
CAI_AM	Herb Dominated	56.352	66	0.000	0.000	20.660	42.958	63.713	79.491	88.544	185	14
	Herbs - Shrubs	92.085	89	58.715	73.824	82.774	87.880	90.175	92.942	95.174	22	
	Shrubs - Trees	91.359	61	82.588	87.918	90.263	91.137	91.933	93.008	94.247	6	
	Tree Dominated	82.351	74	27.815	65.839	77.009	80.505	82.475	83.705	87.493	22	
PROX_MN	Herb Dominated	0.053	9	0.000	0.000	1.124	4.587	17.931	128.878	435.580	2810	66
	Herbs - Shrubs	314.098	100	0.935	2.185	6.553	17.606	46.982	125.368	270.913	700	
	Shrubs - Trees	0.007	0	3.066	7.197	20.691	42.564	74.726	250.885	482.049	573	
	Tree Dominated	50.029	27	0.203	0.545	30.908	247.939	314.175	401.105	500.239	162	
PROX_AM	Herb Dominated	0.050	10	0.000	0.000	0.858	4.999	19.727	219.304	596.343	4387	43

	Herbs - Shrubs	59.307	54	0.746	2.570	9.839	48.436	138.085	315.568	556.826	646	
	Shrubs - Trees	0.004	0	3.713	7.535	45.755	113.090	181.369	245.850	279.274	211	
	Tree Dominated	43.767	22	0.210	1.125	53.725	103.396	160.797	253.446	390.029	244	
CWED	Herb Dominated	0.031	56	0.000	0.000	0.008	0.024	0.067	0.191	0.463	806	40
	Herbs - Shrubs	0.191	84	0.022	0.040	0.076	0.111	0.165	0.259	0.364	198	
	Shrubs - Trees	0.023	0	0.111	0.188	0.273	0.328	0.393	0.447	0.585	79	
	Tree Dominated	0.247	19	0.010	0.050	0.320	0.452	0.535	0.586	0.638	119	
TECI	Herb Dominated	28.517	82	15.000	18.420	21.816	25.000	27.318	31.308	36.557	52	57
	Herbs - Shrubs	22.390	100	3.527	8.847	12.576	14.589	16.615	18.120	21.159	64	
	Shrubs - Trees	17.474	60	7.885	9.665	15.842	17.140	18.157	19.490	20.346	57	
	Tree Dominated	30.347	100	21.603	22.568	23.499	24.094	24.871	26.171	32.941	15	
CLUMPY	Herb Dominated	0.847	80	-1.000	0.332	0.565	0.724	0.831	0.900	1.000	79	76
	Herbs - Shrubs	0.947	100	0.475	0.586	0.711	0.801	0.853	0.887	0.918	38	
	Shrubs - Trees	0.912	96	0.621	0.671	0.762	0.811	0.850	0.908	0.930	29	
	Tree Dominated	0.932	100	0.138	0.336	0.782	0.834	0.851	0.872	0.893	64	
IJI	Herb Dominated	61.447	97	0.000	34.416	45.834	49.967	54.347	60.540	63.692	52	80
	Herbs - Shrubs	65.261	100	21.545	40.159	48.217	51.490	54.360	58.383	62.104	35	
	Shrubs - Trees	51.365	83	30.253	35.408	39.632	43.501	48.791	57.470	62.557	51	
	Tree Dominated	63.305	100	14.316	20.776	37.719	41.391	45.637	50.127	54.316	71	

Summary Indices⁶:

<i>Seral-Stage Departure Index</i>	47
<i>Class Configuration Departure Index</i>	52
<i>Cover Type Departure Index</i>	50

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 = 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.