

Table. Range of variation in landscape structure for Pinyon-Juniper-Oak-Serviceberry 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 <sup>1</sup>		Percentiles of Simulated Distribution							HRV Departure	
		Metric Value	Percentile of HRV	0	5	25	50	75	95	100	CV <sup>2</sup>	Index <sup>3</sup>
<i>Seral Stage Composition</i> <sup>4</sup>												
PLAND	Herb Dominated	0.127	72	0.000	0.000	0.008	0.039	0.163	0.694	1.247	1801	0
	Herbs - Shrubs	0.534	58	0.032	0.094	0.247	0.417	0.744	1.241	1.597	275	
	Shrubs - Trees	0.824	50	0.172	0.354	0.567	0.824	1.069	1.480	1.876	137	
	Tree Dominated	0.546	54	0.004	0.016	0.272	0.496	0.796	1.065	1.320	212	
<i>Class Configuration</i> <sup>5</sup>												
PD	Herb Dominated	0.012	17	0.000	0.001	0.016	0.031	0.048	0.103	0.279	329	83
	Herbs - Shrubs	0.014	0	0.043	0.090	0.119	0.137	0.175	0.297	0.419	151	
	Shrubs - Trees	0.007	0	0.089	0.145	0.204	0.265	0.299	0.345	0.426	76	
	Tree Dominated	0.015	0	0.020	0.093	0.233	0.292	0.348	0.424	0.859	113	
ED	Herb Dominated	0.219	56	0.000	0.001	0.055	0.173	0.442	1.474	2.553	854	42
	Herbs - Shrubs	0.743	19	0.187	0.453	0.800	1.203	1.945	2.453	2.806	166	
	Shrubs - Trees	0.761	0	0.892	1.322	1.890	2.281	2.650	3.001	4.072	74	
	Tree Dominated	0.721	14	0.032	0.155	1.022	1.593	2.343	2.782	2.948	165	
AREA_MN	Herb Dominated	10.823	95	0.000	0.104	0.422	1.195	3.272	11.336	18.456	940	95
	Herbs - Shrubs	36.960	100	0.445	0.758	1.573	2.488	5.037	10.000	14.233	371	
	Shrubs - Trees	111.125	100	0.795	1.293	1.973	3.009	4.804	9.865	20.371	285	
	Tree Dominated	35.849	100	0.086	0.114	1.059	1.759	2.363	3.771	7.995	208	
AREA_AM	Herb Dominated	68.876	85	0.000	0.125	2.269	12.559	38.945	146.334	346.526	1164	56
	Herbs - Shrubs	105.297	72	5.564	11.055	23.951	51.602	114.281	169.385	214.288	307	
	Shrubs - Trees	272.808	100	9.661	22.365	46.485	75.691	124.677	163.147	192.836	186	
	Tree Dominated	107.032	97	0.173	0.543	23.855	40.336	54.778	94.902	148.749	234	
GYRATE_AM	Herb Dominated	497.194	90	0.000	14.125	69.066	169.333	313.795	594.913	971.149	343	65
	Herbs - Shrubs	506.337	78	101.567	144.071	231.475	338.249	491.483	593.364	683.578	133	
	Shrubs - Trees	781.586	100	131.574	205.323	309.862	392.362	496.120	571.812	633.755	93	
	Tree Dominated	509.840	98	17.273	25.936	209.612	297.559	351.497	436.050	562.847	138	
SHAPE_MN	Herb Dominated	1.603	98	1.000	1.050	1.205	1.291	1.400	1.560	1.723	40	98

	Herbs - Shrubs	2.031	100	1.172	1.227	1.285	1.336	1.421	1.545	1.697	24	
	Shrubs - Trees	2.390	100	1.200	1.243	1.343	1.398	1.460	1.561	1.927	23	
	Tree Dominated	2.008	100	1.015	1.047	1.198	1.245	1.291	1.346	1.444	24	
SHAPE_AM	Herb Dominated	2.594	56	1.000	1.101	1.816	2.451	3.161	4.294	6.874	130	0
	Herbs - Shrubs	3.136	47	1.736	2.138	2.757	3.170	3.725	4.167	4.948	64	
	Shrubs - Trees	3.293	46	2.319	2.570	2.997	3.352	3.710	4.257	4.981	50	
	Tree Dominated	2.761	37	1.096	1.222	2.532	3.002	3.299	3.783	4.894	85	
CPLAND	Herb Dominated	0.087	71	0.000	0.000	0.003	0.022	0.112	0.552	0.992	2487	0
	Herbs - Shrubs	0.499	60	0.027	0.078	0.214	0.377	0.682	1.144	1.457	282	
	Shrubs - Trees	0.780	54	0.157	0.316	0.516	0.758	0.983	1.346	1.717	136	
	Tree Dominated	0.430	54	0.002	0.010	0.205	0.380	0.645	0.859	1.101	223	
CORE_MN	Herb Dominated	7.429	92	0.000	0.000	0.149	0.735	2.365	8.935	15.045	1216	92
	Herbs - Shrubs	34.536	100	0.389	0.631	1.374	2.264	4.617	9.283	13.193	382	
	Shrubs - Trees	105.217	100	0.722	1.160	1.784	2.771	4.340	8.908	18.642	280	
	Tree Dominated	28.284	100	0.055	0.087	0.779	1.397	1.901	3.051	6.673	212	
CORE_AM	Herb Dominated	50.594	82	0.000	0.000	1.026	8.315	30.316	126.283	304.987	1519	53
	Herbs - Shrubs	100.190	71	4.765	9.868	21.661	48.421	109.452	161.062	200.837	312	
	Shrubs - Trees	262.033	100	8.694	20.699	42.514	71.995	118.313	155.354	182.783	187	
	Tree Dominated	88.023	95	0.121	0.391	18.857	32.817	45.769	84.188	132.647	255	
CAI_MN	Herb Dominated	55.559	99	0.000	0.000	11.976	19.444	29.856	47.014	64.582	242	71
	Herbs - Shrubs	86.281	99	61.271	67.205	73.332	76.802	80.035	84.302	88.213	22	
	Shrubs - Trees	88.059	96	75.231	79.558	82.389	84.250	85.445	87.830	89.988	10	
	Tree Dominated	71.171	23	26.689	56.198	71.595	75.377	78.228	80.407	89.191	32	
CAI_AM	Herb Dominated	68.643	69	0.000	0.000	33.980	59.892	72.153	81.221	85.608	136	44
	Herbs - Shrubs	93.442	94	71.831	81.754	86.945	89.853	91.977	93.680	95.785	13	
	Shrubs - Trees	94.684	100	86.368	88.058	90.260	91.444	92.453	93.709	94.293	6	
	Tree Dominated	78.896	56	45.621	68.720	75.195	78.485	80.940	83.953	93.505	19	
PROX_MN	Herb Dominated	29.408	77	0.000	0.000	1.722	7.380	27.263	107.159	201.726	1452	32
	Herbs - Shrubs	9.608	20	1.085	3.185	11.966	21.433	49.036	97.940	185.043	442	
	Shrubs - Trees	220.255	100	2.776	8.243	15.235	29.055	51.754	87.425	142.048	273	
	Tree Dominated	19.244	38	0.131	0.457	10.317	24.914	45.860	84.932	178.575	339	
PROX_AM	Herb Dominated	22.818	74	0.000	0.000	1.453	6.410	23.766	199.767	597.211	3116	33

	Herbs - Shrubs	10.450	17	0.563	3.036	16.001	34.582	96.806	299.075	555.875	856	
	Shrubs - Trees	304.140	99	3.152	10.779	22.553	48.522	127.112	260.026	378.023	514	
	Tree Dominated	17.523	24	0.134	0.541	21.129	39.211	54.439	144.238	264.665	366	
CWED	Herb Dominated	0.068	66	0.000	0.000	0.013	0.040	0.101	0.312	0.523	779	30
	Herbs - Shrubs	0.154	44	0.025	0.060	0.119	0.171	0.254	0.363	0.448	177	
	Shrubs - Trees	0.169	4	0.101	0.174	0.276	0.361	0.438	0.541	0.721	102	
	Tree Dominated	0.210	16	0.008	0.035	0.247	0.379	0.546	0.649	0.693	162	
TECI	Herb Dominated	28.581	97	16.748	18.962	21.028	23.038	25.184	28.129	32.500	40	97
	Herbs - Shrubs	20.683	100	5.742	9.694	12.905	14.569	15.792	17.567	19.617	54	
	Shrubs - Trees	21.774	100	9.503	10.611	13.961	15.984	17.705	18.918	20.046	52	
	Tree Dominated	28.681	100	20.181	22.074	22.747	23.396	24.071	25.356	28.775	14	
CLUMPY	Herb Dominated	0.895	95	-1.000	0.365	0.598	0.757	0.848	0.896	1.000	70	95
	Herbs - Shrubs	0.918	100	0.599	0.689	0.765	0.824	0.865	0.888	0.906	24	
	Shrubs - Trees	0.946	100	0.676	0.737	0.786	0.820	0.857	0.894	0.914	19	
	Tree Dominated	0.922	100	0.148	0.238	0.753	0.798	0.821	0.849	0.878	77	
IJI	Herb Dominated	67.320	99	7.006	35.691	47.138	52.885	58.011	63.810	67.762	53	98
	Herbs - Shrubs	68.087	100	35.696	46.341	52.312	56.093	59.065	62.840	65.462	29	
	Shrubs - Trees	64.694	98	40.602	43.727	47.613	51.823	56.670	63.106	69.966	37	
	Tree Dominated	69.143	100	19.962	23.783	42.252	46.858	50.486	54.366	58.181	65	

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**Summary Indices<sup>6</sup>:**

<i>Seral-Stage Departure Index</i>	0
<i>Class Configuration Departure Index</i>	60
<i>Cover Type Departure Index</i>	30

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<sup>1</sup>Some 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.

<sup>2</sup>CV = coefficient of variation in the simulated distribution, computed as the difference between the 5 and 95<sup>th</sup> percentiles divided by the median and multiplied by 100 to convert to a percentage. n/d = not defined (division by zero).

<sup>3</sup>HRV 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<sup>th</sup> percentile range of variation, where a 0 represents no departure (i.e., within the 25-75<sup>th</sup> percentiles of variation) and 100 represents complete departure (i.e., outside the 0-100<sup>th</sup> percentiles of variation).

<sup>4</sup>Landscape 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.

<sup>5</sup>Landscape 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.

<sup>6</sup>Seral-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.