

Table. Range of variation in landscape structure for pinyon-juniper woodlands, inclusive of all PJ types, 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<sup>4</sup></i>												
PLAND	Early seral	0.257	80	0.015	0.056	0.106	0.154	0.220	0.339	0.489	184	27
	Mid seral	0.926	10	0.384	0.784	1.245	1.683	2.212	3.345	4.039	152	
	Late seral	1.519	56	0.004	0.017	0.826	1.374	1.854	2.419	2.779	175	
<i>Class Configuration<sup>5</sup></i>												
PD	Early seral	0.026	48	0.006	0.014	0.020	0.027	0.035	0.046	0.052	118	50
	Mid seral	0.011	0	0.076	0.092	0.130	0.158	0.182	0.220	0.250	81	
	Late seral	0.033	13	0.003	0.009	0.085	0.116	0.136	0.168	0.207	137	
ED	Early seral	0.536	66	0.065	0.189	0.319	0.433	0.608	0.800	1.033	141	35
	Mid seral	0.889	0	1.460	2.112	2.984	3.529	4.028	4.551	5.136	69	
	Late seral	1.791	24	0.022	0.072	1.871	2.755	3.703	4.344	4.525	155	
AREA_MN	Early seral	9.830	97	1.639	2.894	4.372	5.781	7.404	9.335	11.466	111	95
	Mid seral	84.766	100	3.026	4.364	7.200	10.132	15.859	34.306	52.439	296	
	Late seral	45.790	100	0.986	1.420	6.649	10.936	14.443	21.246	32.012	181	
AREA_AM	Early seral	46.452	91	3.422	8.181	14.257	21.499	34.439	53.961	80.523	213	21
	Mid seral	278.098	63	17.289	31.637	111.888	210.030	391.147	609.941	683.667	275	
	Late seral	230.321	29	1.301	4.177	116.252	348.178	452.007	531.869	626.336	152	
GYRATE_AM	Early seral	334.550	89	85.125	153.193	197.897	242.126	293.719	368.968	443.709	89	18
	Mid seral	797.931	74	167.487	250.348	434.590	599.462	811.203	1057.350	1125.909	135	
	Late seral	719.605	35	52.275	82.268	526.662	784.650	914.946	1009.308	1092.163	118	
SHAPE_MN	Early seral	1.745	23	1.533	1.690	1.747	1.784	1.828	1.879	2.030	11	68
	Mid seral	2.190	100	1.569	1.718	1.823	1.906	1.971	2.057	2.136	18	
	Late seral	2.059	99	1.394	1.513	1.702	1.792	1.840	1.936	2.078	24	
SHAPE_AM	Early seral	2.400	56	1.742	2.013	2.160	2.366	2.519	2.969	3.334	40	10
	Mid seral	3.324	24	2.293	2.702	3.344	3.720	4.165	5.922	6.670	87	

	Late seral	3.592	19	1.500	1.749	4.193	5.814	6.423	7.248	8.523	95	
CPLAND	Early seral	0.158	82	0.005	0.024	0.053	0.084	0.133	0.205	0.305	216	26
	Mid seral	0.875	12	0.352	0.701	1.126	1.533	2.012	3.000	3.668	150	
	Late seral	1.139	55	0.001	0.008	0.553	1.021	1.429	1.916	2.230	187	
CORE_MN	Early seral	6.060	96	0.580	1.304	2.236	3.186	4.324	5.808	7.697	141	95
	Mid seral	80.058	100	2.748	3.909	6.523	9.151	14.456	31.074	47.715	297	
	Late seral	34.335	100	0.153	0.692	4.524	8.235	11.093	16.425	25.916	191	
CORE_AM	Early seral	31.850	92	1.006	3.984	8.827	13.278	23.582	35.063	51.542	234	23
	Mid seral	265.805	63	16.165	29.262	105.673	197.521	375.670	573.115	645.287	275	
	Late seral	180.115	29	0.245	2.168	93.060	297.273	387.061	452.672	529.398	152	
CAI_MN	Early seral	44.446	89	16.981	26.734	32.499	36.346	39.938	48.355	61.365	59	50
	Mid seral	87.878	99	71.179	75.979	81.526	84.174	85.528	86.891	88.481	13	
	Late seral	53.876	57	8.099	23.817	41.307	51.387	58.818	68.605	82.621	87	
CAI_AM	Early seral	61.644	88	28.384	42.779	49.553	54.605	58.856	63.006	67.301	37	51
	Mid seral	94.446	100	85.543	88.112	89.880	90.796	91.543	92.676	93.994	5	
	Late seral	74.984	51	10.800	39.278	69.747	74.864	78.326	80.746	84.368	55	
PROX_MN	Early seral	3.644	13	0.731	1.879	5.118	7.294	9.881	14.761	32.067	177	27
	Mid seral	155.705	79	6.633	16.547	38.520	78.754	133.430	320.085	430.944	385	
	Late seral	32.083	21	0.001	1.386	46.849	148.457	203.862	273.323	397.656	183	
PROX_AM	Early seral	1.948	8	0.387	1.187	4.119	6.859	10.804	31.502	56.863	442	33
	Mid seral	290.558	66	6.836	27.945	83.903	187.516	365.762	538.574	998.338	272	
	Late seral	24.302	18	0.001	1.693	70.007	143.260	243.554	448.760	729.484	312	
CWED	Early seral	0.176	73	0.020	0.057	0.096	0.131	0.180	0.247	0.330	145	33
	Mid seral	0.214	0	0.308	0.473	0.699	0.846	0.942	1.085	1.287	72	
	Late seral	0.667	28	0.007	0.024	0.595	0.912	1.137	1.349	1.494	145	
TECI	Early seral	32.196	86	22.430	26.090	28.766	30.527	31.612	33.159	37.348	23	42
	Mid seral	23.591	76	20.913	21.633	22.231	22.755	23.517	26.295	27.993	20	
	Late seral	36.202	94	22.902	27.359	29.541	31.151	33.045	36.495	43.942	29	
CLUMPY	Early seral	0.876	98	0.682	0.756	0.806	0.834	0.852	0.868	0.892	14	96
	Mid seral	0.943	99	0.750	0.783	0.836	0.864	0.897	0.932	0.944	17	

	Late seral	0.927	100	0.614	0.702	0.842	0.867	0.881	0.895	0.914	22	
IJI	Early seral	74.354	100	50.794	57.543	61.019	63.226	65.363	68.056	73.240	17	71
	Mid seral	67.248	80	43.537	47.801	52.988	59.561	65.506	73.131	75.809	43	
	Late seral	67.872	99	20.807	38.229	48.972	53.915	59.542	65.291	70.944	50	

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

<i>Seral-Stage Departure Index</i>	27
<i>Class Configuration Departure Index</i>	47
<i>Cover Type Departure Index</i>	37

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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 = interspersed 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.