

Table. Percent similarity between watersheds in the range of variation in landscape structure under the simulated HRV disturbance scenario on the San Juan National Forest, Colorado. Percent similarity was computed as the range of values (given here as the 5-95<sup>th</sup> percentiles of the simulated distribution) common to both landscapes (watersheds) divided by the total range of values across both landscapes, multiplied by 100 to convert to a percentage. Percent similarity approaches 100% as landscapes become increasingly similar in behavior and indicates that landscape context is not important. Conversely, percent similarity approaches 0% as landscape become increasingly unique or idiosyncratic in behavior and indicates that landscape context is important. Missing values indicate the absence of a particular land cover type in one or both of the corresponding landscapes.

Landscape Metric	District						Percent Similarity			
	Hermosa		Piedra		Narraguinep		Hermosa-Piedra	Hermosa-Narrag.	Piedra-Narrag.	Average
	5 <sup>th</sup> Percentile	95 <sup>th</sup> Percentile	5 <sup>th</sup> Percentile	95 <sup>th</sup> Percentile	5 <sup>th</sup> Percentile	95 <sup>th</sup> Percentile				
<i>Landscape Composition</i> <sup>1</sup>										
PJ: Herb Dominated	-	-	-	-	0.000	0.675	-	-	-	-
PJ: Herbs - Shrubs	-	-	-	-	0.028	1.354	-	-	-	-
PJ: Shrubs - Trees	-	-	-	-	0.137	1.482	-	-	-	-
PJ: Tree Dominated	-	-	-	-	0.011	1.014	-	-	-	-
PJS: Herb Dominated	0.000	0.274	-	-	0.000	0.681	-	40	-	40
PJS: Herbs - Shrubs	0.000	0.387	-	-	0.016	1.583	-	23	-	23
PJS: Shrubs - Trees	0.005	0.396	-	-	0.169	2.060	-	11	-	11
PJS: Tree Dominated	0.000	0.191	-	-	0.008	1.570	-	12	-	12
PJOS: Herb Dominated	-	-	-	-	0.000	2.052	-	-	-	-
PJOS: Herbs - Shrubs	-	-	-	-	0.087	3.720	-	-	-	-
PJOS: Shrubs - Trees	-	-	-	-	0.327	4.012	-	-	-	-
PJOS: Tree Dominated	-	-	-	-	0.022	2.431	-	-	-	-
MTS: Herbs - Shrubs	0.071	2.643	0.235	4.729	1.240	23.198	52	6	15	24
MTS: Early Shrub Dominated	0.103	2.706	0.490	5.197	0.998	21.501	44	8	20	24
MTS: Late Shrub Dominated	0.677	3.255	3.287	9.520	0.812	18.509	0	14	35	16
PPO: Stand Initiation	0.007	0.066	0.108	0.359	1.638	4.014	0	0	0	0
PPO: Stem Exclusion	0.014	0.092	0.163	0.422	2.131	4.460	0	0	0	0
PPO: Understory Reinitiation	0.009	0.078	0.123	0.339	1.584	3.278	0	0	0	0
PPO: Shifting Mosaic	0.000	0.253	0.027	1.124	0.078	11.907	20	1	9	10
PPO: Fire Maintained Open Canopy	0.117	0.412	0.675	2.074	15.286	28.603	0	0	0	0
PPOA: Stand Initiation	0.006	0.120	0.019	0.234	0.075	0.711	45	6	23	25
PPOA: Stem Exclusion	0.063	0.216	0.143	0.421	0.415	1.221	20	0	1	7
PPOA: Understory Reinitiation	0.048	0.290	0.237	0.598	0.494	1.374	10	0	9	6
PPOA: Shifting Mosaic	0.028	0.880	0.085	1.578	0.006	4.056	51	21	37	36
PPOA: Fire Maintained Open Canopy	0.393	1.378	0.805	2.449	3.885	8.839	28	0	0	9
WMC: Stand Initiation	0.037	0.420	0.039	0.336	0.020	0.235	77	49	62	63
WMC: Stem Exclusion	0.221	0.632	0.195	0.598	0.119	0.371	86	29	37	51

WMC: Understory Reinitiation	0.338	0.800	0.297	0.821	0.172	0.404	88	11	16	38
WMC: Shifting Mosaic	0.031	2.041	0.288	2.604	0.029	0.878	68	42	23	44
WMC: Fire Maintained Open Canopy	0.799	2.856	0.724	3.043	0.493	1.359	89	24	25	46
WMCA: Stand Initiation	0.111	1.125	0.040	0.382	0.019	0.285	25	16	67	36
WMCA: Stem Exclusion	0.397	1.467	0.106	0.517	0.072	0.394	9	0	65	25
WMCA: Understory Reinitiation	0.871	2.246	0.310	0.884	0.135	0.454	1	0	19	7
WMCA: Shifting Mosaic	0.291	5.410	0.214	2.233	0.006	0.752	37	9	24	23
WMCA: Fire Maintained Open Canopy	1.673	6.754	0.590	2.530	0.411	1.281	14	0	33	16
CMC: Stand Initiation	0.060	2.068	0.048	1.737	-	-	83	-	-	83
CMC: Stem Exclusion	0.369	2.695	0.394	2.926	-	-	90	-	-	90
CMC: Understory Reinitiation	0.496	2.675	0.392	2.960	-	-	85	-	-	85
CMC: Shifting Mosaic	0.374	1.638	0.887	3.361	-	-	25	-	-	25
CMCA: Stand Initiation	0.068	5.035	0.041	3.804	0.000	0.020	75	0	0	25
CMCA: Stem Exclusion	0.511	9.346	0.303	5.477	0.000	0.021	55	0	0	18
CMCA: Understory Reinitiation	2.763	12.320	1.835	7.908	0.000	0.017	49	0	0	16
CMCA: Shifting Mosaic	1.389	9.739	0.858	6.891	0.000	0.004	62	0	0	21
ASP: Stand Initiation	0.006	1.883	0.000	0.192	0.018	0.556	10	29	31	23
ASP: Stem Exclusion	0.021	2.046	0.001	0.191	0.017	0.477	8	23	36	22
ASP: Understory Reinitiation	0.046	1.817	0.001	0.174	0.024	0.335	7	16	45	23
ASP: Shifting Mosaic	0.558	2.720	0.054	0.275	0.032	0.361	0	0	67	22
SF: Stand Initiation	1.089	13.312	0.557	12.562	0.000	0.031	90	0	0	30
SF: Stem Exclusion	1.065	17.268	0.693	15.250	0.000	0.031	86	0	0	29
SF: Understory Reinitiation	2.430	19.571	1.244	16.763	0.000	0.024	78	0	0	26
SF: Shifting Mosaic	2.105	16.831	3.055	22.102	0.000	0.013	69	0	0	23
SFA: Stand Initiation	0.016	5.258	0.001	0.791	-	-	15	-	-	15
SFA: Stem Exclusion	0.289	11.308	0.023	1.506	-	-	11	-	-	11
SFA: Understory Reinitiation	1.967	14.511	0.411	2.135	-	-	1	-	-	1
SFA: Shifting Mosaic	1.351	9.211	0.180	1.729	-	-	4	-	-	4
MS: Herbs - Shrubs	0.007	0.140	0.035	0.348	0.707	2.803	31	0	0	10
MS: Shrubs - Herbs	0.004	0.137	0.045	0.357	0.084	2.181	26	2	13	14
						<b>Average</b>	<b>38</b>	<b>10</b>	<b>19</b>	<b>22</b>
<i>Landscape Configuration<sup>2</sup></i>										
Patch density	23.076	40.933	19.294	36.237	31.267	50.901	61	35	16	37
Edge density	105.616	147.239	95.724	135.809	116.731	156.108	59	60	32	50
Mean patch size	2.443	4.334	2.760	5.183	1.965	3.198	57	32	14	34
Area-weighted mean patch size	115.737	367.951	360.977	1059.936	255.999	711.044	1	19	44	21
Correlation length	473.192	737.281	689.672	1127.024	752.993	1163.572	7	0	79	29
Mean shape index	1.299	1.375	1.316	1.400	1.282	1.319	59	21	3	27
Area-weighted mean shape index	3.477	4.479	4.123	5.684	4.987	7.747	16	0	19	12
Mean core area	1.770	3.315	1.907	3.678	1.375	2.351	74	30	19	41

Area-weighted mean core area	99.871	322.522	305.552	868.356	211.300	591.388	2	23	44	23	
Mean core area index	32.716	66.158	30.494	52.350	37.276	51.972	55	44	67	55	
Area-weighted mean core area index	69.199	80.651	65.761	72.031	67.737	75.028	19	45	46	37	
Mean proximity index	33.344	62.564	46.011	157.318	56.442	178.530	13	4	76	31	
Area-weighted mean proximity index	87.002	302.238	165.183	606.147	200.345	667.576	26	18	81	42	
Contrast-weighted edge density	21.616	34.263	28.640	37.081	28.418	37.290	36	37	95	56	
Total edge contrast index	16.755	26.724	23.541	30.589	20.578	25.682	23	51	21	32	
Contagion	48.872	53.923	51.166	55.521	52.911	60.031	41	9	29	27	
Interspersion & juxtaposition index	61.365	69.625	63.873	72.136	55.081	62.581	53	8	0	21	
Simpson's diversity index	0.910	0.948	0.892	0.923	0.850	0.916	24	6	33	21	
Simpson's evenness index	0.927	0.966	0.910	0.942	0.867	0.935	27	7	32	22	
							<b>Average</b>	<b>34</b>	<b>24</b>	<b>39</b>	<b>33</b>

<sup>1</sup>Landscape composition represents the distribution of area among patch types (in this case, unique combinations of cover type and seral stage). Only dynamic patch types (i.e., those that change in area over time in response to disturbance and succession) are included here; static patch types (i.e., those that we treated as constant over time, such as water, barren, etc.) are excluded since they cannot exhibit any variability. PJ = pinyon-juniper woodland; PJS = pinyon-juniper sagebrush woodland; PJOS = pinyon-juniper oak-serviceberry woodland; MTS = mountain shrubland; PPO = ponderosa pine oak forest; PPOA = ponderosa pine oak-aspen forest; WMC = warm, dry mixed-conifer forest; WMCA = warm, dry mixed-conifer with aspen forest; CMC = cool, moist mixed-conifer forest; CMCA = cool, moist mixed conifer with aspen forest; ASP = pure aspen forest; SF = spruce-fir forest; SFA = spruce-fir with aspen forest; MS = mesic sagebrush.

<sup>2</sup>Landscape configuration represents the spatial character, distribution, and arrangement of patches (across all patch types). The landscape metrics listed here are described in detail in the FRAGSTATS methods section. Note, Simpson's diversity and evenness indices are actually landscape composition metrics but are included here for organizational purposes.