MLRA	34	34	34	34	39	39	47	47	48A	48A	48A	48A	48A	48A	48A	48A	Mean	Total	% composition
ECOLNUM	039XY142(	048XY142(	048AY142	036XY350	036XY350(	036XY350	048XY142(	048XY142(	039XY142(	039XY141(	039XY142(	039XY142(	048XY142(	048XY142(	048XY142(	048XY142(	CO		
ECOLNAME	LOAMY MEL	LOAMY MEL	LOAMY MEL	LOAMY MEL	LOAMY MEL	LOAMY MEL	LOAMY MEL	LOAMY MEL	LOAMY MEL	LOAMY MEL	LOAMY MEL	LOAMY MEL	LOAMY MEL	LOAMY MEL	LOAMY MEL	LOAMY MEL	MESA TOP PJ		
PSU	040103R	040702R	051302B	060801P	030201R	030201R	020702R	020702R	021001R	031101R	041002G	050201P	050201P	051003G	060302B	060302B			
POINT	1	2	2	3	1	2	1	2	1	2	2	1	2	1	1	2			
SITE	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1			
plant dry weight:																	plant group sorted by mean		
Pinus edulis Engelm.	43.74	2.06	432.34	19.26	20.79	13.68	0	0	12.21	0	28.1	16.44	197.27	0	10.73	8.31	50.30813	39.84802	HERBACEOUS
Juniperus osteosperma (Torr.) Li	9.77	4.12	52.22	6.7	15.64	2.67	39.06	15.32	0	1.04	11.81	72.96	38.01	0	20.63	21.77	19.4825	15.43168	plant symb
Opuntia polyacantha Haw.	0	0	0	0	0	0	0	0	0	0	0	60.17	3.27	0	0	0.28	3.9825	3.154455	GRASSES, GRASSSLIKE
Poa nervosa (Hook.) Vasey	0	0	48.1	0	0	0	0	0	0	0	0	0	0	0	0	0	3.00625	2.381188	POFE
Artemisia tridentata ssp. vaseyar	0.37	0	0	0	3	10.7	0	0	13.09	0	12.32	0	0	0	0	0	2.4675	1.954455	ORHY
Pseudoroegneria spicata (Pursh)	0	0	1.8	5.9	0	0	6.68	1.91	0	0	0	0	20.09	0	0	0	2.27375	1.80099	ELEL5
Perennial Forb	0	30.93	0	0	0	0	0.26	0.81	2.51	0	0	0	0	0	0	0	2.156875	1.708416	STCO4
Achnatherum hymenoides (Roen	0.8	0.2	14.88	0.07	0.47	0	0.18	0.9	0	0	0	15.07	0	0	0	1.02	2.099375	1.662871	FORBS
Machaeranthera grindelioides (Nu	0	30.18	2.4	0	0	0	0	0	0	0	0	0	0	0	0	0	2.03625	1.612871	COWR2
Petradoria pumila (Nutt.) Greene	0	0	0	0	3.68	11.33	0	0	0	0.38	5.31	0	0	0	1.56	10.04	2.01875	1.59901	LUAR3
Amelanchier utahensis Koehne	0	0	32.24	0	0	0	0	0	0	0	0	0	0	0	0	0	2.015	1.59604	SPCO
Hesperostipa comata (Trin. & Ru	0.42	0.04	6	0.32	0	0	0	0	7.89	0	0	16.94	0	0	0	0	1.975625	1.564851	PEST2
Pleuraphis jamesii Torr.	0	0	0	0	0	0	0	0	0	0	0	28.5	0	0	0	0	1.78125	1.410891	PECR5
Heterotheca villosa (Pursh) Shinr	0	0	0	0	0	0	0	0	0	27.31	0	0	0	0	0	0	1.706875	1.35198	ERUM
Koeleria macrantha (Ledeb.) J.A.	3.11	1.71	11.25	0.18	2.92	5.72	0	0	1.04	0.27	0.81	0	0	0	0	0	1.688125	1.337129	PHHO
Opuntia fragilis (Nutt.) Haw.	0.04	0	10.64	0	0	0	0	0	0	0.04	0.52	0	0	0	0	8.45	1.230625	0.974752	COUM
Arabis fendleri (S. Wats.) Greene	0	0	18	0	0	0	0	0	0	0	0	0	0	0	0	0	1.125	0.891089	PEPU7
Stenotus acaulis (Nutt.) Nutt.	17.66	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.10375	0.874257	PPFF
Pascopyrum smithii (Rydb.) A. L	0	0	0	0	0	0	13.64	0	2.65	1.07	0	0	0	0	0	0	1.085	0.859406	SHRUBS AND HALF-SHRUBS
Festuca arizonica Vasey	8.1	0	0	0	1.84	7.24	0	0	0	0	0	0	0	0	0	0	1.07375	0.850495	ARTRV
Lygodesmia D. Don	0	0	0	0.24	0.54	0	7.79	6.11	1.89	0	0	0	0	0	0	0	1.035625	0.820297	ARNO4
Leymus salinus (M.E. Jones) A.	0	0	0	0	0	0	0	0	0	10.45	0	0	4	0	0	0	0.903125	0.715347	CHNU2
Lappula occidentalis (S. Wats.) C	0	0	0	0	0	0	0	0	0	0	0	0	12.8	0	0	0	0.8	0.633663	YUBA
Cordylanthus wrightii Gray	0.67	0	0	0	7.89	3.15	0	0	0	0	0	0	0	0	0	0	0.731875	0.579703	PUTR2
Phlox hoodii Richards.	0	0.04	0	1.57	0	0	1.19	2.95	0	0	0	0	5.84	0	0	0	0.724375	0.573762	CEMO2
Agropyron cristatum (L.) Gaertn.	0	0	0	0	0	0	0	0	0	10.71	0	0	0	0	0	0	0.669375	0.530198	TREES
Chenopodium album L.	0	0	8	0	0	0	0	0	0	0.13	0	0	1.5	0	0	0	0.601875	0.476733	PIED
Balsamorhiza sagittata (Pursh) N	0	0	0	0	2.05	7.37	0	0	0	0	0	0	0	0	0	0	0.58875	0.466337	JUOS
Artemisia tridentata ssp. wyoming	0	4.73	0.07	0	0	0	2.61	0.12	0	0	0	0	0	0	0	1.43	0.56	0.443564	
Crepis acuminata Nutt.	0	0	0	8.72	0	0	0	0	0	0	0	0	0	0	0	0	0.545	0.431683	
Purshia tridentata (Pursh) DC.	5.39	0	0	0	0	3.29	0	0	0	0	0	0	0	0	0	0	0.5425	0.429703	
Bromus tectorum L.	0	0	5.5	0	0	0	0.8	0.72	0	0	0.03	1.5	0	0	0	0	0.534375	0.423267	
Eriogonum racemosum Nutt.	0	0	0	0	0.64	6.51	0	0	0	0.97	0	0	0	0	0	0	0.5075	0.40198	
Salix vestita Pursh	0	0	0	0	0	0	3.98	3.77	0	0	0	0	0	0	0	0	0.484375	0.383663	
Cercocarpus montanus Raf.	0	0	2.72	0	0	0	0	0	0	0	0	0	0	0	4.88	0	0.475	0.376238	
Quercus gambelii Nutt.	0	0	2.79	0	0	0	0	0	0	4.59	0	0	0	0	0	0	0.46125	0.365347	
Tetraneuris torreyana (Nutt.) Gre	0.51	0	0	0	0	0	0	0	0	0	0.44	0	0	0	2.5	3.66	0.444375	0.35198	
Elymus elymoides (Raf.) Swezey	0.14	0	0.6	0	0.59	2.34	0.55	0	0	0	0.44	1.2	0.56	0	0.32	0	0.42125	0.333663	
Symphoricarpos albus (L.) Blake	0	0.03	0	0.03	0	0	0	0	6.51	0	0	0	0	0	0	0	0.410625	0.325248	
Astragalus convallarius Greene	0	0	0	0	0	0	0	0	0	0	0	5.6	0.94	0	0	0	0.40875	0.323762	
Lupinus L.	0	0	0	0	0	0	0	0	6.44	0	0	0	0	0	0	0	0.4025	0.318812	
Artemisia arbuscula Nutt.	0	0	0	0	0.76	0	0	0	0	0.1	2.71	0	0	0	0	2.59	0.385	0.30495	
Astragalus lentiginosus Dougl. ex	2.15	0	0	0	0	3.99	0	0	0	0	0	0	0	0	0	0	0.38375	0.30396	
Artemisia nova A. Nels.	5.65	0	0	0	0	0	0	0	0	0	0.03	0	0	0	0	0	0.355	0.281188	
Elytrigia intermedia (Host) Nevsk	0	0	0	0	0	0	0	0	0	5.44	0	0	0	0	0	0	0.34	0.269307	
Chrysothamnus depressus Nutt.	1.38	0	0	0	0.41	3.54	0	0	0	0	0	0.01	0	0	0	0	0.33375	0.264356	
Carex filifolia Nutt.	0	0	0	0	0	0	0.15	0	5.08	0	0	0	0	0	0	0	0.326875	0.258911	
Opuntia pulchella Engelm.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0.3125	0.247525	
Chrysothamnus greenei (Gray) C	2.51	0	0	0	0	2	0	0	0	0	0.23	0	0	0	0	0	0.29625	0.234653	
Aster L.	0	0	0	0	0	2.29	0	0	0	2.33	0	0	0	0	0	0	0.28875	0.228713	
Penstemon Schmidel	0	0.09	0	0	0.88	3.65	0	0	0	0	0	0	0	0	0	0	0.28875	0.228713	
Amelanchier alnifolia (Nutt.) Nutt.	0	0	0	0	0	3.2	0	0	0.67	0.28	0	0	0	0	0	0	0.259375	0.205446	
Poa secunda J. Presl	0	0.02	0.5	0.02	0	0	0	0	0.45	3.1	0	0	0	0	0	0	0.255625	0.202475	
Trifolium gymnocarpon Nutt.	0	0	0	0	0	0	0	0	0	0	0	0	3.2	0	0.67	0.12	0.249375	0.197525	
Senecio L.	0	0	3.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0.24375	0.193069	
Sphaeralcea coccinea (Nutt.) Ryc	0.38	0	3.2	0	0	0	0.12	0	0	0	0.15	0	0	0	0	0	0.240625	0.190594	
Atriplex confertifolia (Torr. & Fren	0	0	0	0	0	0	0	3.82	0	0	0	0	0	0	0	0	0.23875	0.189109	
Haploesthes greggii Gray	0	0	0	0	0	0	0	3.52	0	0	0	0	0	0	0	0	0.22	0.174257	
Poa fendleriana (Steud.) Vasey	0	0	0	0	0	0	0	0	2.22	0	0	0	0	0	0.68	0.61	0.219375	0.173762	
Mnesithea granularis (L.) Koning	0	0	0	0	0	0	3.2	0	0	0	0	0	0	0	0	0	0.2	0.158416	
Eriogonum umbellatum Torr.	2.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.29	0.186875	0.14802	
Astragalus L.	0	0	0	0	0	0	0.92	1.53	0	0	0	0	0.4	0	0	0	0.178125	0.141089	
Elymus trachycaulus (Link) Gould	0	2.84	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1775	0.140594	
Annual Forb	0.04	1.01	0	0	0	0	0	0	0.16	0	0	0.3	0	0	1.13	0	0.165	0.130693	
Cymopterus Raf.	0	0	0	2.22	0	0	0	0	0	0	0	0	0	0	0	0.41	0.164375	0.130198	
Machaeranthera canescens (Pur	0	0	0	0	0	0	0	0	0	0	0	2.5	0	0	0	0	0.15625	0.123762	
Polygonum douglasii Greene	0	0	2.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0.15	0.118812	
Guajacum sanctum L.	0	0	0	0	0	0	0.73	1.59	0	0	0	0	0	0	0	0	0.145	0.114851	
Ribes L.	0	0	0	0	0	0	0	0	2.3	0	0	0	0	0	0	0	0.14375	0.113861	
Penstemon humilis Nutt. ex Gray	0	0	0	0	0.33	1.73	0	0	0	0	0	0	0	0	0	0	0.12875	0.10198	
Erigeron eatonii Gray	0	0	0.8	0	0	1.25	0	0	0	0	0	0	0	0	0	0	0.128125	0.101485	
Carex pityophila Mackenzie	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0.125	0.09901	
Chrysothamnus viscidiflorus (Ho	0	0.55	0	0	0	0	0	0	1.45	0	0	0	0	0	0	0	0.125	0.09901	
Penstemon harringtonii Penl.	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0.125	0.09901	
Lepidium L.	0	0	0	0.65	0	0	0.16	1	0	0	0	0	0	0	0	0	0.113125	0.089604	
Verbascum thapsus L.	0	0	0	0	0	0	0	0	0	1.64	0	0	0	0	0	0	0.1025	0.081188	
Onopordum acanthium L.	0	0	0	0	0	0	0	0	0	1.52	0	0	0	0	0	0	0.095	0.075248	
Physaria rollinsii Mulligan	0	0	0	0	0	0	0	0	0	0	0	1.5	0	0	0	0	0.09375	0.074257	
Erigenia Nutt.	0	0	0	0	0	0	0	0	0	1.47	0	0	0	0	0	0	0.091875	0.072772	
Thamnosma montana Torr. & Fre	0	0	1.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0.075	0.059406	
Festuca L.	0	0	0	0	0	0	0	0	0	0	1.16	0	0	0	0	0	0.0725	0.057426	
Piptatherum micranthum (Trin. &	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.13	0	0.070625	0.055941	
Eriogonum Michx.	0	0	0	0.04	0	0	0.58	0	0.41	0	0	0	0	0	0	0	0.064375	0.05099	
Coreopsis auriculata L.	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0625	0.049505	
Cheilanthes villosa Davenport ex	0	0	0	0	0	0	0.56	0.35	0	0	0	0	0	0	0	0	0.056875	0.04505	
Croton ciliatoglandulifer Ortega	0	0.85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.053125	0.042079	
Gilia haydenii Gray	0	0	0	0	0	0	0	0	0	0.04	0.37	0	0	0	0.2	0.22	0.051875	0.041089	
Bouteloua gracilis (Willd. ex Kunt	0	0	0	0	0	0.68	0	0	0	0	0	0	0	0	0	0.14	0.05125	0.040594	
Astragalus mollissimus Torr.	0	0	0	0	0	0.8	0	0	0	0	0	0	0	0	0	0	0.05	0.039604	
Pedicularis canadensis L.	0	0	0.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0.05	0.039604	
Arenaria L.	0	0	0	0	0	0.73	0	0	0	0	0	0	0	0	0	0	0.045625	0.036139	
Taraxacum officinale G.H. Webe	0	0	0.6	0	0	0	0	0	0.12	0	0	0	0	0	0	0	0.045	0.035644	
Phlox longifolia Nutt.	0	0.45	0	0.26	0	0	0	0	0	0	0	0	0	0	0	0	0.044375	0.035149	
Pediocactus simpsonii (Engelm.)	0.04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.64	0.0425	0.033663	
Descurainia pinnata (Walt.) Britt.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.25	0.36	0.038125	0.030198	
Symphoricarpos rotundifolius Gra	0	0	0.54	0	0	0	0	0	0	0	0	0	0	0	0	0	0.03375	0.026733	
Tragopogon dubius Scop.	0	0	0	0	0	0	0	0	0	0.51	0	0	0	0	0	0	0.031875	0.025248	
Senecio neomexicanus Gray	0	0	0	0	0	0	0	0	0	0	0	0	0.5	0	0	0	0.03125	0.024752	
Penstemon linarioides Gray	0	0	0	0	0	0	0	0	0	0	0.48	0	0	0	0	0	0.03	0.023762	
Chrysothamnus nauseosus ssp.	0.46	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.02875	0.022772	
Yucca glauca Nutt.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.46	0	0.02875	0.022772	
Polygala L.	0	0	0	0	0	0	0	0	0	0.21	0.25	0	0	0	0	0	0.02875	0.022772	
Lesquerella rectipes Woot. & Sta	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.45	0	0.028125	0.022277	
Cryptantha rollinsii I.M. Johnston	0	0	0	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0.025	0.019802	
Thlaspi arvense L.	0	0	0	0	0	0	0	0	0	0	0	0.4	0	0	0	0	0.025	0.019802	
Linum L.	0.38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.02375	0.018812	
Carex L.	0	0	0	0	0	0	0	0	0	0.37	0	0	0	0	0	0	0.023125	0.018317	
Phacelia longipes Torr. ex Gray	0	0	0	0	0	0	0	0	0.32	0	0	0	0	0	0	0	0.02	0.015842	
Astragalus scopulorum Porter	0	0	0	0	0	0	0	0	0	0	0	0.31	0	0	0	0	0.019375	0.015347	
Erigeron divergens Torr. & Gray	0	0	0	0	0	0	0	0	0	0.24	0	0	0	0	0	0	0.015	0.011881	
Chaenactis douglasii (Hook.) Hoo	0	0	0	0	0	0	0	0	0	0.13	0	0	0	0	0	0.07	0.0125	0.009901	
Poa pratensis L.	0	0	0	0	0	0	0	0	0	0.19	0	0	0	0	0	0	0.011875	0.009406	
Pedicularis centranthera Gray	0.18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01125	0.008911	
Physaria vitulifera Rydb.	0.18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01125	0.008911	
Atriplex canescens (Pursh) Nutt.	0	0	0	0	0	0	0	0	0	0	0	0.14	0	0	0	0	0.00875	0.006931	
Krascheninnikovia lanata (Pursh)	0	0.12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0075	0.005941	
Gutierrezia sarothrae (Pursh) Brit	0	0	0	0.04	0	0	0	0	0	0	0	0	0.07	0	0	0	0.006875	0.005446	
Allium geyeri S. Wats.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.06	0.00375	0.00297	
Echinocereus triglochidiatus Eng	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.06	0.00375	0.00297	
Escobaria vivipara (Nutt.) Buckw	0.06	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00375	0.00297	
Ipomopsis aggregata (Pursh) V. C	0	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0	0	0.000625	126.25	0.000495

Expected Composition, per site description

Productivity by canopy class			
plant symb	0-15	15-40	40+
POFE	30-35	20-25	5-10
ORHY	10-15	5-10	0-1
ELEL5	0-5	0-5	0-1
STCO4	5-10	0-5	0-1
COWR2	0-1	1-3	0-1
LUAR3	1-5	1-5	0-1
SPCO	1-3	1-3	0-1
PEST2	1-3	1-2	0-1
PECR5	1-3	1-2	0-1
ERUM	1-3	1-2	0-1
PHHO	0-1	0-2	0-1
COUM	0-1	0-2	0-1
PEPU7	0-1	0-1	0-1
PPFF	0-1	0-1	0-1
ARTRV	0-3	0-5	0-2
ARNO4	0-3	0-5	0-1
CHNU2	0-3	0-5	0-1
YUBA	0-3	0-5	0-1
PUTR2	0-3	0-5	0-1
CEMO2	0-3	0-5	0-1
PIED	0-5	5-20	20-60
JUOS	0-10	10-25	20-60