Decision-tree for MLRA 38.1 New Mexico				Site Descriptions	ESD Name	ESD Number
I. Slopes generally < 15%, no exposed rock, piedmont and basin floor landforms.						
	A. Soils are very shallow to shallow, < 20 cm.					
				1.Soil surface is gravelly sandy loam to very gravelly loam, subsoil is loamy. Aspect is a mixture of desert shrubs, half-shrubs, perennial grasses, suffrutescent forbs and succulents. *Muhlenbergia porteri/Aristida spp./Zinnia acerosa/Larrea Tridentata* are key indicator species.	Limy Upland 12-16" p.z.	R038XA106AZ
				2. Soil surface is cobbley clay to silty clay, subsoil is clayey. Aspect is a shrub, succulent, grass community. *Pleuraphis mutica/Eriogonum wrightii/Opuntia engelmannii* are key indicator species.	Volcanic Upland 12-16" p.z.	R038XA115AZ
	B. Soils are moderately deep to very deep, > 20 cm.					
				1. Soil surface is gravelly sandy loam to very gravelly loam, subsoil is loamy. Aspect is dominated by perennial warm season grasses with a mixture of desert shrubs, half shrubs, succulents and forbs. Bouteloua curtipendula/Bouteloua eriopoda/Calliandra eriophylla/Acacia constricta/Larrea tridentata are key key indicator species.	Limy slopes 12-16" p.z.	R038XA126AZ
				2. Soils are cobbley clay to silty clay loam, subsoil is clayey. Aspect is a grassland. *Pinus edulis/Juniperus osteosperma/Eriogonum wrightii/Acacia greggii / Pleuraphis mutica/Panicum obtusum* are key indicator species.	Clayey Upland 12-16" p.z.	R038XA102AZ
II. Slopes generally > 15%, often revealing exposed rock, soil depth is variable, pediments, hills, mountains, lava flows,						
	A. Soils are very shallow to shallow, < 20 cm.					
		1. Sedimentary parent material.				
				i. Soils are dark colored, loamy textured, and very calcareous. They have formed in residuum and colluvium from limestone and related conglomerates. Surface textures are cobbly sandy loam to very cobbly sandy loam. Aspect is a diverse mixture of desert trees, shrubs, succulents, forbs and grasses. *Parkinsonia/Canotia/Simmondsia chinensis/Fouquieria splendens/Aristida/Marina parryi* are key indicator species.	Limestone Hills 12-16" p.z.	R038XA105AZ
				ii. Soils formed in residuum and slope alluvium resulting from inter-bedded basalt, volcanic ash and lakebed sediments. Surface textures are cobbly sandy loam to gravelly sandy loam. Aspect is a diverse mixture of perennial grasses, suffrutescent forbs, shrubs, succulents and desert trees. *Canotia/Simmondsia chinensis/Eriogonum fasciculatum/Bouteloua eriopoda/Aristida* are key indicator species.	Basalt/Sandstone Hills 12-16" p.z.	R038XA118AZ
		2. Metamorphic parent material.				
				i. Soil formed in residuum and colluvium from schist and related metamorphic parent materials. Surface textures are very gravelly loam to very channery sandy loam. Aspect is a diverse mixture of desert trees, shrubs, succulents, forbs and grasses. *Parkinsonia/Eriogonum fasciculatum/Simmondsia chinensis/Aristida/Selaginella* are key indicator species.	Schist Hills 12-16" p.z.	R038XA114AZ
				ii. Soils formed in residuum and colluvium from andesite, dacite, diorite and related conglomerates and metamorphic parent materials. Surface textures are cobbly sandy loam to gravelly sandy loam. Aspect is a diverse mixture of desert trees, shrubs, succulents, forbs and grasses. *Parkinsonia/Simmondsia chinensis/Eriogonum fasciculatum/Aristida/Achnatherum speciosum are key indicator species.*	Volcanic/Metamorphic Hills 12-16" p.z.	R038XA133AZ
		3. Igneous parent material (Intrusive)				
			i. Intrusive (Intrusive rocks have a coarse grained texture)			

Decision-tree for MLRA 38.1 New Mexico				Site Descriptions	ESD Name	ESD Number
				a. Soil formed in residuum and colluvium from granite, rhyolite, gneiss and related conglomerates. Surface texture is very gravelly loam to gravelly sandy loam. Aspect is a diverse mixture of desert trees, shrubs, succulents, forbs and grasses. *Parkinsonia microphylla/Simmondsia chinensis/eriogonum fasciculatum/Aristida/Achnatherum speciosum* are key indicator species.	Granitic Hills 12-16" p.z.	R038XA104AZ
				b. Soils formed in residuum and colluvium from diabase and granodiorite parent materials. Surface textures are loamy sand to coarse sandy loam. Aspect is is a diverse mixture of desert trees, shrubs, succulents, forbs and grasses. *Parkinsonia/Acacia greggii/Eriogonum wrightii/Bouteloua eriopoda/Muhlenbergia porteri* are key indicator species.	Diabase Hills 12-16" p.z.	R038XA135AZ
			i. Extrusive rocks have a very fine-grained or even glassy texture. Hot gas bubbles are often trapped in the quenched lava, forming a bubbly, vesicular texture. Pumice, obsidian, and basalt are all extrusive igneous rocks			
				a. Soils formed in residuum and slope alluvium from basalt, andesite and related volcanic tuffs and ash. Surface textures are clayloam to clay. Aspect is a diverse mixture of desert trees, shrubs, succulents, forbs and grasses. *Canotia/Parkinsonia/Simmondsia chinensis/Opuntia engelmannii/Pleuraphis mutica/Bouteloua curtipendula* are key indicator species.	Volcanic Hills 12-16" p.z. Clayey	R038XA117AZ
				b. Soil formed in residuum from welded volcanic tuff and ash. Surface textures are sandyloam to loam. Aspect is a mixed shrub, succulent, grass community. Eriogonum wrightii/Bouteloua curtipendula/Hilaria belangeri are key indicator species	Tuff Hills 12-16" p.z.	R038XA136AZ
	B. Soils are moderately deep to very deep, > 20 cm.					
				i. Soil occurs in an upland position. It is on gentle slopes, fan terraces, ridge-tops and mesa tops. Surface textures are gravelly clay loam to very gravelly clay loam. Aspect is warm season perennial grasses with a mixture of desert shrubs, half-shrubs, suffrutescent forbs and succulents. *Opuntia engelmannii/Calliandra eriophylla/Pleuraphis mutica/Hilaria belangeri* are key indicator species.	Clay Loam Upland 12-16" p.z.	R038XA103AZ
				ii. Soil occurs in an upland position; on steep hill slopes and ridges. Surface textures are gravelly loam to very gravelly clay loam. Aspect is perennial warm season grasses with a mixture of desert shrubs, half shrubs, succulents and forbs. *Simmondsia chinensis/Calliandra eriophylla/Pleuraphis mutica/Hilaria belangeri* are key indicator species.	Clayey Slopes 12-16" p.z.	R038XA108AZ