

**SOIL RESOURCES IN THE PROJECT AREA**

FOREST SERVICE SOILS										
USFS Map Symbols	Soil Series components and Inclusions	Taxonomic Classifications	Landscape Position and Slope3	Elevation AMSL4 (feet)	Water Erodibility (K Factor)	Wind Erodibility	Salinity	Drainage Class8	Permeability	Erosion Hazards
21A	(component - 50%)	Lithic Ustic Torriorthents	Ridgetops 15 - 60% slopes	7,280 to 8,425	0.15	8	Non-saline	Well drained	Moderately rapid	High
	(component - 30%)	Ustic Torriorthents	Mountainsides 15 - 60% slopes		0.17	8	Non-saline	Well drained	Moderately rapid	Moderate
	(component - 10%)	Rock Outcrops	Intermixed		--	--	--	--	--	--
57	(component - 80%)	Typic Argiustolls	Hillsides 10 - 40% slopes	7,400 to 8,200	0.28	6	Non-saline	Well drained	Moderately slow	Slight to Moderate
58	(component - 50%)	Lithic Ustorthents	Ridgetops 25 - 60 % slopes	7,300 to 8,400	0.15	8	Non-saline	Well drained	Moderately rapid	High
	(component - 30%)	Typic Ustorthents	Mountainsides 25 - 60% slopes		0.20	8	Non-saline	Well drained	Moderately rapid	Moderate to high
69	(component - 50%)	Cumulic Haplustolls	Riparian Areas 0 - 8% slopes	6,880 to 7,360	0.32	6	Non-saline	Well drained	Moderate	None to slight
	(component - 30%)	Fluvaquentic Haplustolls	Riparian Areas 0 - 8% slopes		0.37	6	Non-saline	Moderately well drained	Moderately slow	None
73	(component - 50%)	Ustic Haplocryalfs	Mountainsides 25 - 60% slopes	6,950 to 8,257	0.28	6	Non-saline	Well drained	Moderate	Moderate
	(component - 25%)	Ustic Eutrochrepts	Mountainsides 25 - 60% slopes		0.24	5	Non-saline	Somewhat excessively	Rapid	Moderate to high
74	(component - 50%)	Ustic Haplargids	Mountainsides 25 - 60% slopes	6,995 to 8,250	0.28	6	Non-saline	Well drained	Moderately slow	Moderate
	(component - 25%)	Typic Haplustalfs	Mountainsides 15 - 60% slopes		0.32	6	Non-saline	Well drained	Moderately slow	Moderate
	(component - 15%)	Lithic Ustic Haplargids	Ridgetops 15 - 60% slopes		0.17	6	Non-saline	Well drained	Moderate	Moderate to high

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77	(component - 65%)	Ustic Haplocryalfs	Hillsides 8 - 25% slopes	7,250 to	0.28	6	Non-saline	Well drained	Moderately slow	Slight
	(component - 25%)	Ustollic Haplocryalfs	Hillsides 8 - 25% slopes	8,000	0.28	6	Non-saline	Well drained	Moderately slow	Slight
78	Undifferentiated Group	Typic Ustorthents & Rubblelands	Hillsides and Mountainsides (very steep)	6,925 to 7,850	0.20	6 / 8	Non-saline	Variable	Moderate	Slight to high
Gerst-Travessilla-Chupadera Association 1 to 15% slopes 254	Gerst Series	Ustic Torriorthents	sides of mesas, benches, terraces, and canyons; mountain and hill slopes 3-70% slopes	5,500-7,500	0.05-0.24	8	non-saline	well drained	moderately slow	severe
	Travessilla Series	Lithic Ustic Torriorthents	mesas, benches, canyon sides; mountain and foot slopes 1-80% slopes	5,500-7,500	0.28	3	non-saline	well drained	moderately rapid	high
	Chupadera	Ustollic Calciorthids	benches and terraces 1-15% slopes	5,600-7,400	0.32	3	non-saline	well drained	moderately rapid	moderate
Gerst-Travessilla-Strych-Rock Outcrop complex, 1 to 30% slopes 255	Gerst Series	Ustic Torriorthents	sides of mesas, benches, terraces, and canyons; mountain and hill slopes 3-70% slopes	5,500-7,500	0.05-0.24	8	non-saline	well drained	moderately slow	severe
	Travessilla Series	Lithic Ustic Torriorthents	mesas, benches, canyon sides; mountain and foot slopes 1-80% slopes	5,500-7,500	0.28	3	non-saline	well drained	moderately rapid	high
	Strych Series	Ustic Haplocalcids	canyon and escarpments sideslopes, generally on toeslopes and south aspects 20-80% slopes	5,500-7,500	0.2	8	non-saline	well drained	moderately rapid	moderate to high

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Cabba-Strych-Badland complex, 3 to 70 percent slopes 261	Cabba Series	Typic Ustorthents	benches, canyon rims, steep canyon sides 3-70% slopes	5,000-8,200	0.17	8	non-saline	well drained	moderately permeable	moderate
	Strych Series	Ustic Haplocalcids	canyon and escarpments sideslopes, generally on toeslopes and south aspects 20-80% slopes	5,000-8,200	0.2	8	non-saline	well drained	moderately rapid	moderate to high
Moffat fine sandy loam, 1 to 6 percent slopes 522	Moffat Series	Typic Haplocalcids	alluvial fans and benches 1-6% slopes	5,400-5,600	0.24	3	non-saline	well drained	moderately rapid	moderate
Strych very stony loam, dry, 3 to 30 percent slopes 534	Strych Series	Ustic Haplocalcids	canyon and escarpments sideslopes, generally on toeslopes and south aspects 20-80% slopes	5,400-6,400	0.2	8	non-saline	well drained	moderately rapid	moderate to high
Gerst-Strych-Badland complex, 3 to 50 percent slopes 569	Gerst Series	Ustic Torriorthents	sides of mesas, benches, terraces, and canyons; mountain and hill slopes 3-70% slopes	6,100-7,200	0.05-0.24	8	non-saline	well drained	moderately slow	severe
	Strych Series	Ustic Haplocalcids	canyon and escarpments sideslopes, generally on toeslopes and south aspects 20-80% slopes	6,100-7,200	0.2	8	non-saline	well drained	moderately rapid	moderate to high
Hernandez-Chupadera complex, 1 to 8 percent slopes AKC2	Hernandez Series	Ustollic Calciorrhids	fan terraces 1-8% slopes	5,600-7,400	0.28	4L	non-saline	well drained	moderate	moderate
	Chupadera Series	Ustollic Calciorrhids	benches and terraces 1-15% slopes	5,600-7,400	0.32	3	non-saline	well drained	moderately rapid	moderate
Beebe loamy fine sand, 1 to 3 percent slopes BeB	Beebe Series	Typic Torrifluvents	alluvial fans and flood plains 0-6% slopes	4,000-6,500	0.49	2	moderate to very strongly	well drained	rapid	high

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Badland-Rubbleland-Rock Outcrop complex, 50 to 80 percent slopes BY	N/A*	N/A*	N/A*	N/A*	N/A*	N/A*	N/A*	N/A*	N/A*	N/A*
Chipeta-Badland complex, 3 to 20 percent slopes CBF2	Chipeta Series	Typic Torriorthents	hills 1-20% slopes	5,400-6,100	0.43	4L	moderate to strong	well drained	slow	very high
Shupert-Winetti complex, 1 to 8 percent slopes CIC	Shupert Series	Typic Ustifluvents	narrow valley and canyon floors 1-8% slopes	4,600-7,200	0.24	8	non-saline	well drained	slow	moderate
	Winetti Series	Typic Ustifluvents	narrow valley and canyon floors 1-8% slopes	4,600-7,200	0.2	8	non-saline	well drained	moderately rapid	slight
Persayo-Greybull-Utaline complex, 5 to 15 percent slopes COD2	Persayo Series	Typic Torriorthents	hillslopes 1-30% slopes	5,400-5,700	0.10-0.37	4L-8	slightly to strongly	well drained	moderately permeable	moderate
	Greybull Series	Typic Torriorthents	foot slopes of shale hills 3 to 8% slopes	5,400-5,700	0.37	4L	non-saline	well drained	moderately slow	moderate
	Utaline Series	Typic Haplocalcids	mesas, high terraces, and fan remnants 1-25% slopes	5,400-5,700	0.28	8	non-saline	well drained	moderate	moderate to high
Comodore-Datino Variant complex, 40 to 60 percent slopes DHG2	Comodore Series	Lithic Haploborolls	mountain slopes 50-70% slopes	6,800-8,100	0.10	8	non-saline	well drained	moderate	high
	Datino Variant	Typic Haploborolls	mountain slopes 15-80% slopes	6,800-8,100	0.02	8	non-saline	well drained	moderate	high
Ferron silt loam, 0 to 3 percent slopes Fr	Ferron Series	Typic Fluvaquents	alluvial fans and alluvial valley bottoms 0-3% slopes	5,400-5,700	0.49	8	slight to strong	poorly drained	moderate	slight

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Glenberg-Pherson-Colorow Complex, 0 to 15 percent slopes GLC	Glenberg Series	Ustic Torrifuvents	flood plains, valley floors, and low terraces 1-6% slopes	5,000-7,000	0.32	2	non-saline	well drained	moderately rapid	moderate
	Pherson Series	Ustic Torrifuvents	drainageways 2-15% slopes	5,000-7,000	0.25-0.34	4	non-saline	well drained	moderately rapid	slight
	Colorow Series	Oxyaquic Torrifuvents	floodplains, fans, low terraces 0-4% slopes	5,000-7,000	0.32	2	non-saline	moderately well drained	moderately rapid	moderate
Ravola-Gullied Land-Libbings-Hunting (saline) complex, 0 to 10 percent slopes Gu	Ravola Series	Typic Torrifuvents	alluvial fans and narrow valley floors 1-6% slopes	5,300-6,000	0.49	4L	non- to moderate	well drained	moderately permeable	moderate
	Gullied Land Series	N/A*	N/A*	5,300-6,000	N/A*	N/A*	N/A*	N/A*	N/A*	N/A*
	Libbings Series	Gypsic Aquisalids	foot slopes or shale hills 0-3% slopes	5,300-6,000	0.43	4L	strongly saline	poorly drained	slow	moderate
	Hunting Series	Aquic Torrifuvents	alluvial fans and valley floors 1-3% slopes	5,300-6,000	0.43	4L	slight to strong	somewhat poorly drained	moderate	slight
Hunting loam, 1 to 3 percent slopes Hn	Hunting Series	Hunting Series	Aquic Torrifuvents	alluvial fans and valley floors 1-3% slopes	5,400-5,700	0.43	4L	slight to strong	somewhat poorly drained	moderate
Persayo-Greybull complex, 3 to 8 percent slopes KAC	Persayo Series	Typic Torriorthents	hillslopes 1-30% slopes	5,400-5,700	0.10-0.37	4L-8	slightly to strongly	well drained	moderately permeable	moderate
	Greybull Series	Typic Torriorthents	foot slopes of shale hills 3 to 8% slopes	5,400-5,700	0.37	4L	non-saline	well drained	moderately slow	moderate
Podo-Rock Outcrop complex, 50 to 70 percent slopes KXH	Podo Series	Lithic Ustorthents	canyon slopes 30-80% slopes	5,200-8,900	0.15	8	non-saline	well drained	moderately rapid	moderate

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Minchey-Clifsand complex, 0-30 percent slopes MsB	Minchey Series	Typic Haplocalcids	benches and mesas 1-3% slopes	5,500-6,000	0.37	4L	non-saline	well drained	moderate	moderate
	Clifsand Series	Typic Haplocalcids	mesas and benches 3-10% slopes	5,500-6,000	0.28	8	non-saline	well drained	rapid	moderate to high
Podo-Cabba-Doney Family complex, 2 to 70 percent slopes MUE	Podo Series	Lithic Ustorthents	canyon slopes 30-80% slopes	5,900-9,000	0.15	8	non-saline	well drained	moderately rapid	moderate
	Cabba Series	Typic Ustorthents	benches, canyon rims, steep canyon sides 3-70% slopes	5,900-9,000	0.17	8	non-saline	well drained	moderately permeable	moderate
	Doney Family Series	Typic Haplocryalfs	mountain sideslope, generally north aspect or in draws 20-80% slopes	5,900-9,000	0.2	8	non-saline	well drained	moderate	moderate
Lazear-Pinon-Gerst complex, 5 to 30 percent slopes NFE	Lazear Series	Lithic Ustic Torriorthents	ridges and edges of mesas 0-35% slopes	5,200-8,000	0.2-0.28	4L	non-saline	well drained	moderately permeable	severe
	Pinon Series	Lithic Ustollic Calciorthids	knolls, ridges, mesas and hillslopes 1-30% slopes	5,200-8,000	0.2-2.8	4L	non-saline	well drained	moderately slow	N/A*
	Gerst Series	Ustic Torriorthents	sides of mesas, benches, terraces, and canyons; mountain and hill slopes 3-70% slopes	5,200-8,000	0.05-0.24	8	non-saline	well drained	moderately slow	severe
Gerst-Lazear-Badland complex, 2 to 65 percent slopes NNE2	Gerst Series	Ustic Torriorthents	sides of mesas, benches, terraces, and canyons; mountain and hill slopes 3-70% slopes	5,200-8,000	0.05-0.24	8	non-saline	well drained	moderately slow	severe
	Lazear Series	Lithic Ustic Torriorthents	ridges and edges of mesas 0-35% slopes	5,200-8,000	0.2-0.28	4L	non-saline	well drained	moderately permeable	severe
Haverdad loam, alkali, 0 to 3 percent slopes OCA2	Haverdad Series	Ustic Torrifluvents	alluvial fans, fan terraces, and valley floors 1-8% slopes	5,600-6,200	0.32	4L	non-saline	well drained	moderately permeable	moderate

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Penoyer Variant loam, 1 to 3 percent slopes PeB	Penoyer Variant Series	Typic Torriorthents	alluvial fans and valley floors 1-6% slopes	5,400-6,000	0.43	4L	non- to slightly saline	well drained	moderate	moderate
Penoyer Variant loam, 3 to 6 percent slopes PeC2	Penoyer Variant Series	Typic Torriorthents	alluvial fans and valley floors 1-6% slopes	5,400-5,900	0.43	4L	non- to slightly saline	well drained	moderate	moderate
(Similar to) Penoyer Variant loam, 3 to 6 percent slopes PsC2	Penoyer Variant Series	Typic Torriorthents	alluvial fans and valley floors 1-6% slopes	5,400-5,900	0.43	4L	non- to slightly saline	well drained	moderate	moderate
Ravola-Toddler complex, 1 to 6 percent slopes RIA2	Ravola Series	Typic Torrifluvents	alluvial fans and narrow valley floors 1-6% slopes	4,550-5,800	0.49	4L	non- to moderate	well drained	moderately permeable	moderate
	Toddler Series	Typic Torrifluvents	lake terraces and fans 1-6% slopes	4,550-5,800	0.24	5	strongly saline	well drained	moderate	moderate
Ravola loam, 1 to 3 percent slopes RIB	Ravola Series	Typic Torrifluvents	alluvial fans and narrow valley floors 1-6% slopes	5,400-5,800	0.49	4L	non- to moderate	well drained	moderately permeable	moderate
Ravola loam, 1 to 6 percent slopes, eroded RIC2	Ravola Series	Typic Torrifluvents	alluvial fans and narrow valley floors 1-6% slopes	5,300-6,000	0.49	4L	non- to moderate	well drained	moderately permeable	moderate
Ravola-Slickspots complex, 0 to 10 percent slopes RuB2	Ravola Series	Typic Torrifluvents	alluvial fans and narrow valley floors 1-6% slopes	5,300-5,900	0.49	4L	non- to moderate	well drained	moderately permeable	moderate
Clifsand, 1 to 8 percent slopes SID2	Clifsand Series	Typic Haplocalcids	mesas and benches 3-10% slopes	5,000-6,500	0.28	8	non-saline	well drained	rapid	moderate to high

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Stormitt-Minchey complex, 1 to 10 percent slopes SMD2	Stormitt Series	Ustic Haplocalcids	hillslopes, benches, and mesas 3-30% slopes	5,500-6,000	0.15	8	non-saline	well drained	moderate	medium
	Minchey Series	Typic Haplocalcids	benches and mesas 1-3% slopes	5,500-6,000	0.37	4L	non-saline	well drained	moderate	moderate
Lazear-Pinon-Rock Outcrop complex, 0 to 30 percent slopes THD2	Lazear Series	Lithic Ustic Torriorthents	ridges and edges of mesas 0-35% slopes	5,200-7,200	0.2-0.28	4L	non-saline	well drained	moderately permeable	severe
	Pinon Series	Lithic Ustollic Calciorthids	knolls, ridges, mesas and hillslopes 1-30% slopes	5,200-7,200	0.2-2.8	4L	non-saline	well drained	moderately slow	N/A*
Trook gravelly fine sandy loam, 2 to 6 % slopes TrC	Trook Series	Typic Calciorthids	fan pediments 2-6% slopes	6,000-8,000	0.32	3	non-saline	well drained	moderate to rapid	slight
Green River-Juva Variant complex, 0 to 5 percent slopes TY	Green River	Aquic Ustifluvents	flood plains 0-2% slopes	4,600-5,900	0.43	4L	none to slight	moderately well drained	moderate	slight
	Juva Variant	Typic Torrifuvents	alluvial fans and valley floors 1-5% slopes	4,600-5,900	0.37	3	non-saline	well drained	moderately rapid	slight

\*N/A is not available, the data or information for this soil parameter is not available.

<sup>1</sup>Soil series is an official map unit for mapping and describing soils, either mapped as a single series or combined with other series into associations and complexes.

<sup>2</sup>Soil taxonomy is the establishment of hierarchies of classes that permit us to understand, as fully as possible, the relationship among soils and between soils.

<sup>3</sup>The position in the landforms that the soil series occupies. The slope or grade is expressed in a percentage as an inclination above horizontal (0%).

<sup>4</sup>AMSL is above mean sea level or elevation in feet above seal level (0 feet).

<sup>5</sup>The susceptibility of soil surface to erosion by the action of water.

<sup>6</sup>A set of classes given integer designations for 1 to 8 based on properties of surface horizon that affect susceptibility to wind erosion.

<sup>7</sup>The relative amount of soluble salts in the soil as measured by electrical conductivity.

<sup>8</sup>The relative wetness of the soil under natural conditions as it pertains to wetness due to water table.

<sup>9</sup>The classes are based on the amount of water that would move downward through a saturated in-place soil.

<sup>10</sup>The is the probability that erosion damage may occur as a result of site preparation and construction.