

Late Holocene (Surficial Deposits)

- af** Artificial Fill
- Qsu** Undifferentiated Surficial Deposits; includes colluvium, slope wash, talus deposits, and other surface deposits
- Qls** Landslide Deposits; may include debris flows and older landslides
- Qw** Alluvial Wash Deposits
- Qf** Alluvial Fan Deposits
- Qa** Alluvial Valley Deposits
- Qt** Terrace Deposits; includes marine and stream terrace
- Qe** Eolian and Dune Deposits

Holocene to Late Pleistocene (Surficial Deposits)

- Qyw** Young Alluvial Wash Deposits
- Qyf** Young Alluvial Fan Deposits
- Qye** Young Eolian and Dune Deposits
- Qyt** Young Terrace Deposits
- Qya** Young Alluvial Valley Deposits
- Qyl** Young Lacustrine, Playa and Estuarine (Paralic)

Late to Middle Pleistocene (Surficial Deposits)

- Qol** Old Lacustrine, Playa and Estuarine (Paralic) Deposits
- Qow** Old Alluvial Wash Deposits
- Qof** Old Alluvial Fan Deposits

Middle to Early Pleistocene (Surficial Deposits)

- Qvof** Very Old Alluvial Fan Deposits

Tertiary (Bedrock)

- Tss** Coarse-grained Tertiary age formations of sedimentary origin
- Tv** Tertiary age formations of volcanic origin

Mesozoic and Older (Bedrock)

- gr** Granitic and other intrusive crystalline rocks of all ages
- pkm** Cretaceous and Pre-Cretaceous metamorphic formations of sedimentary and volcanic origin

Source: Bureau of Land Management, CalTrans, TRA, Kern County, California Department of Parks and Recreation, USGS, 1996 Probabilistic Seismic Hazard Assessment for the State of California.

- State Route
- Other Local Roads
- Proposed Parcel Acquisition
- Fault
- Local Roads
- 4WD & OHV Routes
- Potential Future Acquisition
- Pacific Crest Trail
- US Forest Service
- California State Parks

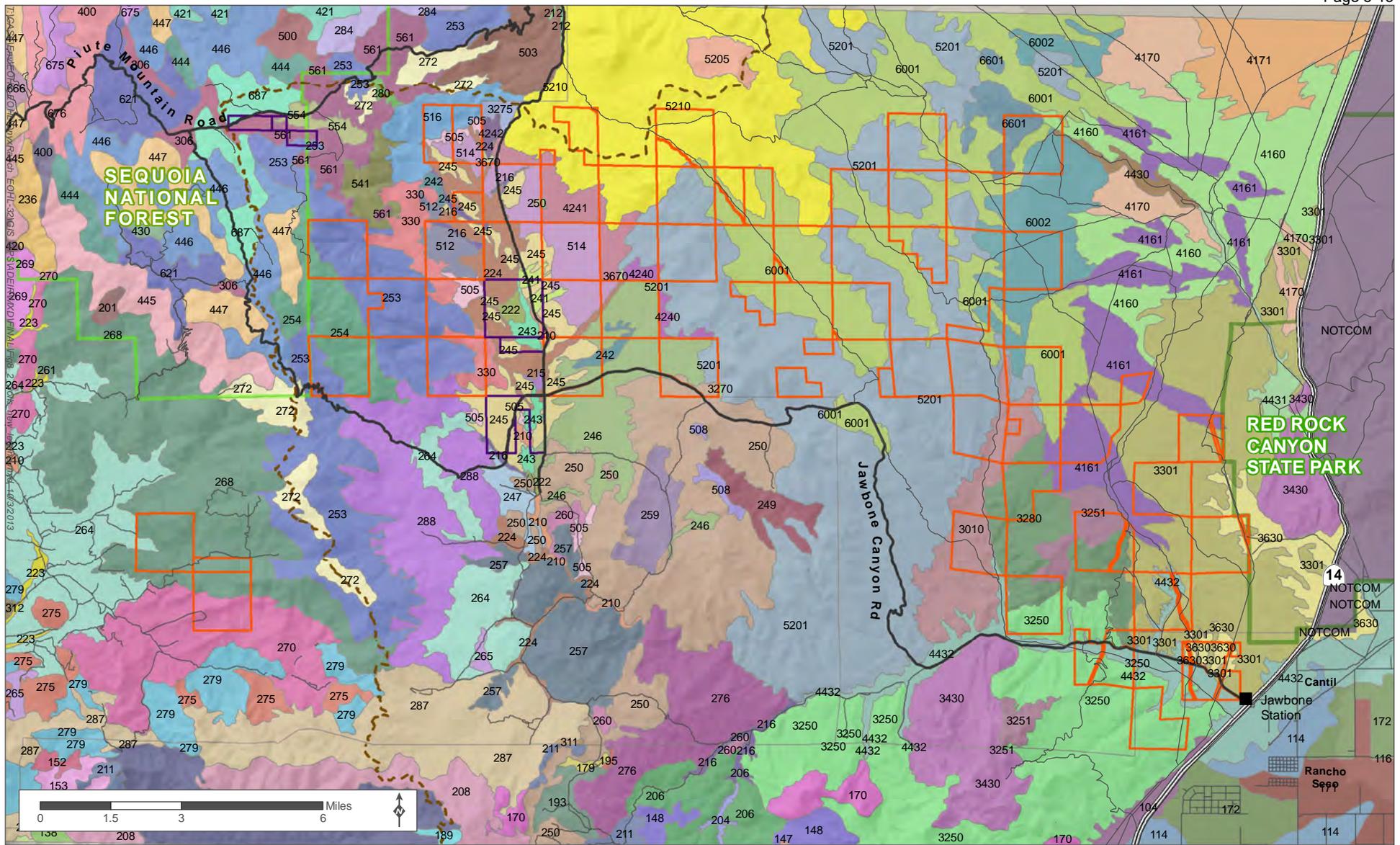
References

Geologic Compilation of Quaternary Surficial Deposits in Southern California, Cuddeback Lake 30' x 60' Quadrangle, 2010, A Project for the Department of Water Resources by the California Geological Survey, scale 1:100,000

Geologic Map of Quaternary Surficial Deposits in Southern California, Tehachapi 30' x 60' Quadrangle, 2011, A Project for the Department of Water Resources by the California Geological Survey, scale 1:100,000



Figure 8-1 Geologic Features
Eastern Kern County Property Acquisition Final EIR



Source: Bureau of Land Management, CalTrans, TRA, Kern County, California Department of Parks and Recreation

References

U.S. Department of Agriculture, Natural Resources Conservation Service, 09/01/2009, Soil Survey Geographic (SSURGO) database for Kern County, Northeastern Part and Southeastern Part of Tulare County, California, ca668, SoilDataMart.nrcs.usda.gov/

U.S. Department of Agriculture, Natural Resources Conservation Service, 02/08/2006, Soil Survey Geographic (SSURGO) database for Kern County, California, Southeastern Part, ca670, SoilDataMart.nrcs.usda.gov/

U.S. Department of Agriculture, Natural Resources Conservation Service, 07/12/2007, Partial Soil Survey Geographic (SSURGO) database for Mojave Desert Area, California, Northwest Part, ca682, SoilDataMart.nrcs.usda.gov/

U.S. Department of Agriculture, Natural Resources Conservation Service, 04/14/2008, Soil Survey Geographic (SSURGO) database for Sequoia National Forest Parts of Fresno, Kern and Tulare Counties, California, ca760, SoilDataMart.nrcs.usda.gov/

- Visitor Center
- ══ State Route
- Local Roads
- Other Local Roads
- 4WD & OHV Routes
- Pacific Crest Trail (USFS, 2008)
- ▭ Proposed Parcel Acquisition
- ▭ Potential Future Acquisition
- ▭ US Forest Service
- ▭ California State Parks
- # Soil Survey MUSYM



Figure 8-2 Soil Survey

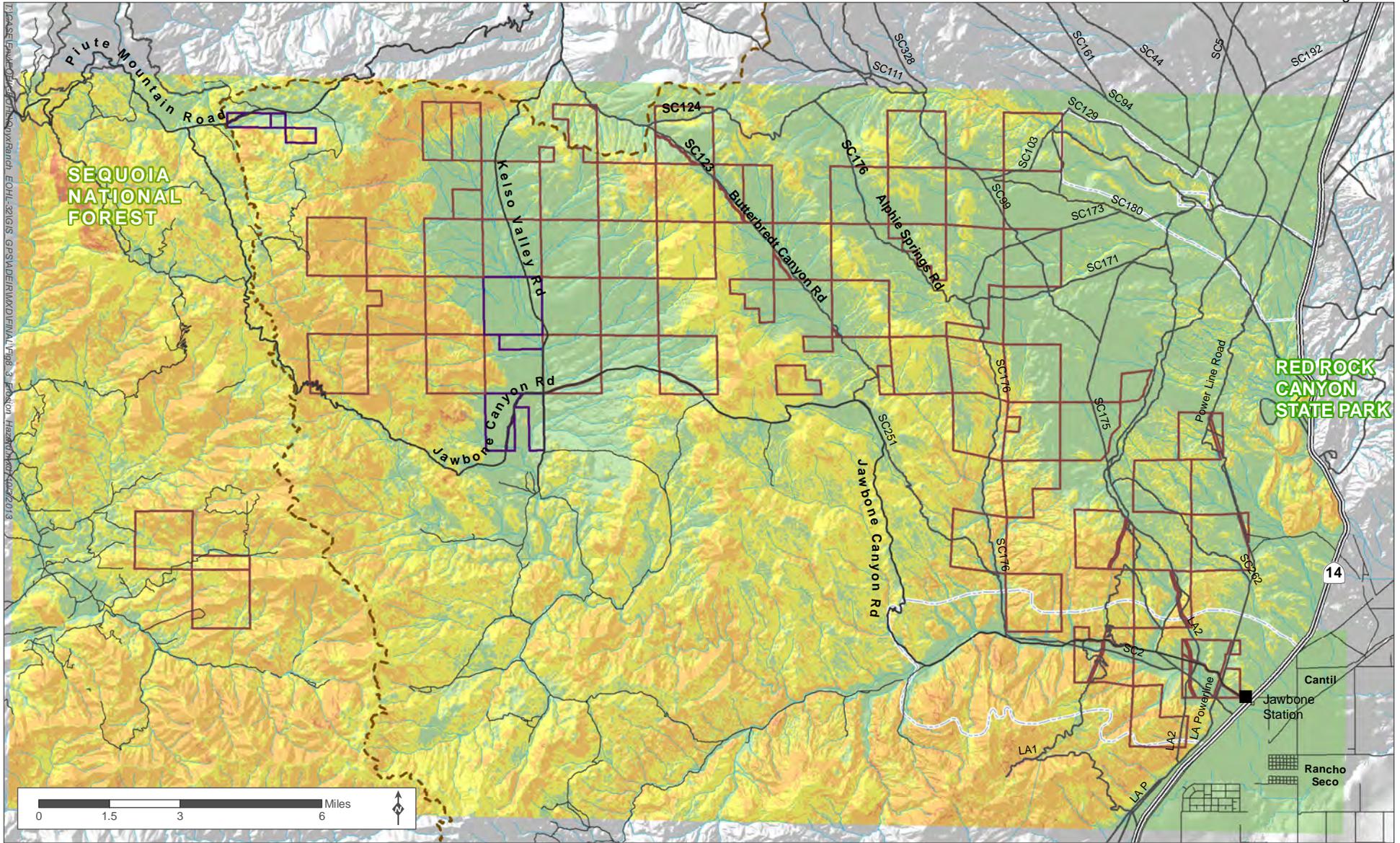
Eastern Kern County Property Acquisition Final EIR

Figure 8-2 Soil Survey Legend

Project Area Soils

Map Unit Symbol, Map Unit Name

104:Arizo gravelly loamy sand, 2 to 9 percent slopes	284:Tollhouse-Rock outcrop complex, 30 to 60 percent slopes
105:Arujo sandy loam, 9 to 15 percent slopes	287:Tweedy-Strahle association, 40 to 75 percent slopes
114:Cajon loamy sand, 0 to 5 percent slopes	288:Sorrell-Arujo-Rock outcrop association, 9 to 50 percent slopes
116:Cajon gravelly loamy sand, 0 to 9 percent slopes	289:Erskine-Hyte-Rock outcrop association, 30 to 60 percent slopes
138:Godde-Tollhouse gravelly sandy loams, 30 to 75 percent slopes	3010:Jawbone-Typic Haplargids-Rock outcrop association, 30 to 60 percent slopes
147:Hi Vista sandy loam, 2 to 9 percent slopes	306:Monache variant, drained, warm-Junipero family association, gently sloping
148:Jawbone gravelly loamy sand, 15 to 75 percent slopes	311:Xerorthents-Rock outcrop complex, 30 to 75 percent slopes
152:Nacimiento loam, 30 to 50 percent slopes, eroded	312:Havala sandy loam, 2 to 5 percent slopes
153:Nacimiento loam, 50 to 75 percent slopes, eroded	3250:Jawbone association, 30 to 60 percent slopes
170:Rock outcrop	3251:Jawbone association, 8 to 50 percent slopes
171:Rosamond clay loam	3270:Hoffman-Tips-Pilotwell association, 15 to 50 percent slopes
172:Rosamond clay loam, saline-alkali	3275:Xyno-Rock outcrop-Canebrake association, 30 to 60 percent slopes
179:Tehachapi sandy loam, 2 to 15 percent slopes	3280:Typic Torriorthents-Rock outcrop association, 30 to 60 percent slopes
189:Tweedy sandy loam, 30 to 50 percent slopes	3301:Cutterbank association, 15 to 60 percent slopes
190:Tweedy sandy loam, 50 to 75 percent slopes	330:Kernville-Faycreek-Rock outcrop complex, 30 to 75 percent slopes
193:Walong sandy loam, 15 to 30 percent slopes	3430:Pasopeak-Rock outcrop association, 30 to 75 percent slopes
194:Walong sandy loam, 30 to 50 percent slopes	3630:Koehn coarse sand, 2 to 8 percent slopes
195:Walong-Arujo sandy loams, 15 to 30 percent slopes	3670:Inyo gravelly loamy coarse sand, 0 to 9 percent slopes, occasionally flooded
201:Cieneba-Rock outcrop complex, 15 to 50	400:Rock outcrop
204:Whitewolf loamy sand, cool, 2 to 5 percent slopes	4160:Dovecanyon-Cutterbank association, 4 to 50 percent slopes
205:Xererts-Xerolls complex, steep	4161:Dovecanyon loamy sand, 2 to 8 percent slopes
206:Xeric Torriorthents, very steep	4170:Dovecanyon association, 2 to 8 percent slopes
208:Xerolls-Rock outcrop complex, very steep	4171:Dovecanyon-Koehn association, 2 to 8 percent slopes
210:Kernfork fine sandy loam, 0 to 2 percent slopes, occasionally flooded	420:Rock outcrop-Cieneba complex, 50 to 75 percent slopes
211:Xerorthents-Rock outcrop complex, very steep	421:Rock outcrop-Tollhouse complex, 15 to 30 percent slopes
212:Kernfork fine sandy loam, 0 to 2 percent slopes, frequently flooded	4240:Chollawell gravelly sandy loam, 5 to 15 percent slopes
215:Kelval loamy sand, 0 to 2 percent slopes, occasionally flooded	4241:Chollawell-Inyo complex, 5 to 15 percent slopes
216:Inyo-Riverwash complex, 0 to 5 percent slopes, frequently flooded	4242:Chollawell gravelly loamy coarse sand, 5 to 20 percent slopes
222:Kelval fine sandy loam, 0 to 2 percent slopes, occasionally flooded	430:Rock outcrop-Chawanakee-Chaix complex, 15 to 30 percent slopes
223:Kelval stony sandy loam, 0 to 2 percent slopes, occasionally flooded	4430:Koehn sand, 2 to 8 percent slopes
224:Inyo gravelly loamy coarse sand, 0 to 9 percent slopes, occasionally flooded	4431:Koehn sand, 2 to 4 percent slopes, frequently flooded
236:Livermore family-Rock outcrop complex, 30 to 50 percent slopes	4432:Koehn association, 2 to 4 percent slopes
241:Inyo gravelly loamy coarse sand, 0 to 5 percent slopes	444:Rock outcrop-Brader-Siskiyou families complex, 20 to 60 percent slopes
242:Inyo gravelly loamy coarse sand, 5 to 15 percent slopes	445:Rock outcrop-Cieneba-Brader family complex, 50 to 75 percent slopes
243:Kernfork loam, saline-sodic, 0 to 2 percent slopes, occasionally flooded	446:Siskiyou-Brader families-Rock outcrop complex, 5 to 30 percent slopes
245:Chollawell gravelly loamy coarse sand, 2 to 5 percent slopes	447:Siskiyou family-Rock outcrop-Brader family complex, 30 to 75 percent slopes
246:Chollawell gravelly loamy coarse sand, 5 to 15 percent slopes	500:Tollhouse-Rock outcrop complex, 10 to 30 percent slopes
247:Inyo-Tips-Rock outcrop complex, 5 to 30 percent slopes	501:Hyte-Erskine-Sorrell association, 30 to 60 percent slopes
249:Hoffman-Rock outcrop complex, 30 to 50 percent slopes	503:Tips-Erskine-Rock outcrop association, 30 to 60 percent slopes
250:Hoffman-Tips-Pilotwell association, 15 to 50 percent slopes	505:Chollawell gravelly loamy coarse sand, 5 to 20 percent slopes
253:Sorrell-Martee-Rock outcrop complex, 30 to 60 percent slopes	508:Pilotwell-Xyno-Rock outcrop association, 30 to 60 percent slopes
254:Martee-Rock outcrop complex, 30 to 60 percent slopes	512:Chollawell gravelly sandy loam, cobbly substratum, 5 to 15 percent slopes
257:Hoffman-Tips-Rock outcrop association, 20 to 45 percent slopes	514:Chollawell-Inyo complex, 5 to 15 percent slopes
259:Cowspring gravelly loamy coarse sand, 15 to 50 percent slopes	516:Xyno-Rock outcrop-Canebrake association, 30 to 60 percent slopes
260:Cowspring-Tips-Rock outcrop complex, 30 to 50 percent slopes	5201:Wingap-Pinyonpeak association, 8 to 30 percent slopes
261:Blasingame-Arujo-Cieneba association, 15 to 45 percent slopes	5205:Scodie-Grandora association, 15 to 60 percent slopes
264:Arujo-Walong-Tunis association, 9 to 30 percent slopes	5210:Grandora-Pinyonpeak association, 8 to 60 percent slopes
265:Arujo sandy loam, 9 to 15 percent slopes	541:Canebrake-Lachim-Rock outcrop complex, 30 to 60 percent slopes
268:Tunis-Tollhouse-Sorrell association, 30 to 75 percent slopes	554:Deerspring fine sandy loam, 0 to 5 percent slopes
269:Tollhouse-Sorrell-Rock outcrop complex, 30 to 60 percent slopes	561:Scodie-Sacatar-Canebrake complex, 5 to 30 percent slopes
270:Locobill-Backcanyon-Sesame complex, 20 to 60 percent slopes	6001:Goldpeak-Pinyonpeak-Wingap complex, 2 to 30 percent slopes
272:Tollhouse-Edmundston-Sorrell association, 15 to 50 percent slopes	6002:Goldpeak gravelly loamy sand, 2 to 8 percent slopes
274:Sesame-Tweedy-Rock outcrop association, 30 to 60 percent slopes	621:Dowe-Chaix-Rock outcrop association, moderately steep
275:Strahle-Sesame-Tweedy association, 30 to 75 percent slopes	6601:Pinyonpeak-Wingap-Rock outcrop association, 8 to 30 percent slopes
276:Tips-Hoffman-Cinco association, 30 to 60 percent slopes	666:Wind River family-Rock outcrop association, moderately steep
279:Strahle-Rock outcrop-Sesame association, 30 to 60 percent slopes	675:Woolstalf-Rock outcrop complex, 10 to 30 percent slopes
280:Tollhouse-Martee-Edmundston association, 30 to 50 percent slopes	676:Woolstalf-Rock outcrop complex, 30 to 50 percent slopes
281:Havala-Walong-Kernfork association, 1 to 20 percent slopes	687:Wind River family-Dome-Rock outcrop association, moderately steep
	NOTCOM:Mapping incomplete



Source: Bureau of Land Management, TRA, Kern County, California Department of Parks and Recreation, CGS

- Visitor Center
 - ══ State Route
 - Local Roads
 - Other Local Roads
 - 4WD & OHV Designated Routes
 - - - Pacific Crest Trail (USFS, 2008)
 - ▭ Proposed Parcel Acquisition
 - ▭ Potential Future Acquisition
 - ▭ Open Area
- Erosion Hazard Rating**
- very high
 - high
 - moderate
 - low



Figure 8-3 Erosion Hazard Rating
 Eastern Kern County Property Acquisition Final EIR