

Pacific Islands Area

Limiting Soils for Fence Installations

Certified by: Cynthia A. Stiles (Ass't State Soil Scientist, PIA), 6/23/2011

American Samoa

Map

Symbol

Map unit name

- | | |
|----|--|
| 1 | Aua very stony silty clay loam, 15 to 30 percent slopes |
| 2 | Aua very stony silty clay loam, 30 to 60 percent slopes |
| 3 | Fagasa-Ofu silty clays, 30 to 60 percent slopes |
| 4 | Fagasa family-Lithic Hapludolls-Rock outcrop association, very steep |
| 5 | Ilili extremely stony mucky clay loam, 3 to 15 percent slopes |
| 15 | Ofu silty clay, 40 to 70 percent slopes |
| 18 | Ofu variant-Rock outcrop complex, 40 to 70 percent slopes |
| 21 | Oloava silty clay loam, 40 to 100 percent slopes |
| 26 | Puapua-Rock outcrop complex, 40 to 100 percent slopes |
| 27 | Rock outcrop-Hydrandepts-Dystrandepts association, very steep |
| 28 | Sogi-Puapua clay loams, 0 to 6 percent slopes |
| 29 | Sogi-Puapua clay loams, 6 to 20 percent slopes |
| 30 | Sogi-Puapua clay loams, 20 to 40 percent slopes |
| 32 | Tafuna extremely stony muck, 3 to 15 percent slopes |

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Territory of Guam

Map

Symbol

Map unit name

| | |
|----|---|
| 2 | Agfayan clay, 30 to 60 percent slopes |
| 5 | Agfayan-Rock outcrop complex, 30 to 60 percent slopes |
| 6 | Agfayan-Akina association, extremely steep |
| 7 | Agfayan-Akina-Rock outcrop association, extremely steep |
| 11 | Akina slity clay, 30 to 60 percent slopes |
| 12 | Akina-Agfayan association, steep |
| 16 | Akina-Atate silty clays, 30 to 60 percent slopes |
| 17 | Akina-Atate association, steep |
| 20 | Akina-Badland complex, 30 to 60 percent slopes |
| 21 | Akina-Badland association, steep |
| 25 | Guam cobbly clay loam, 3 to 7 percent slopes |
| 26 | Guam cobbly clay loam, 7 to 15 percent slopes |
| 27 | Guam-Saipan complex, 0 to 7 percent slopes |
| 28 | Guam-Urban land complex, 0 to 3 percent slopes |
| 29 | Guam-Yigo complex, 0 to 7 percent slopes |
| 36 | Pulantat clay, 30 to 60 percent slopes |
| 43 | Ritidian-Rock outcrop complex, 3 to 15 percent slopes |
| 44 | Ritidian-Rock outcrop complex, 15 to 60 percent slopes |
| 45 | Rock outcrop-Ritidian complex, 60 to 99 percent slopes |

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CNMI - Islands of Aguijan, Rota, Saipan, and Tinian

Map

Symbol

Map unit name

| | |
|----|---|
| 1 | Agfayan variant-Rock outcrop complex, 15 to 30 percent slopes |
| 2 | Agfayan variant-Rock outcrop complex, 30 to 60 percent slopes |
| 4 | Akina-Badland complex, 30 to 60 percent slopes |
| 5 | Banaderu clay loam, 3 to 5 percent slopes |
| 6 | Banaderu clay loam, 3 to 5 percent slopes |
| 7 | Banaderu-Rock outcrop complex, 5 to 15 percent slopes |
| 8 | Banaderu-Rock outcrop complex, 15 to 30 percent slopes |
| 10 | Chinen clay loam, 0 to 5 percent slopes |
| 11 | Chinen clay loam, 5 to 15 percent slopes |
| 12 | Chinen clay loam, 15 to 30 percent slopes |
| 13 | Chinen very gravelly sandy loam, 0 to 5 percent slopes |
| 14 | Chinen very gravelly sandy loam, 5 to 15 percent slopes |
| 15 | Chinen-Rock outcrop complex, 3 to 15 percent slopes |
| 16 | Chinen-Rock outcrop complex, 15 to 30 percent slopes |
| 17 | Chinen-Urban land complex, 0 to 5 percent slopes |
| 18 | Chinen-Urban land complex, 5 to 15 percent slopes |
| 19 | Dandan-Chinen complex, 0 to 5 percent slopes |
| 20 | Dandan-Chinen complex, 5 to 15 percent slopes |
| 21 | Dandan-Chinen-Pits complex, 0 to 5 percent slopes |
| 22 | Dandan-Chinen-Pits complex, 5 to 15 percent slopes |
| 33 | Laolao clay, 30 to 60 percent slopes |
| 34 | Luta cobbly clay loam, 0 to 5 percent slopes |
| 35 | Luta cobbly clay loam, 5 to 15 percent slopes |
| 36 | Luta cobbly clay loam, moist, 0 to 5 percent slopes |
| 37 | Luta cobbly clay loam, moist, 5 to 15 percent slopes |
| 38 | Luta-Rock outcrop complex, 0 to 5 percent slopes |
| 39 | Luta-Rock outcrop complex, 5 to 15 percent slopes |
| 40 | Luta-Rock outcrop complex, 15 to 30 percent slopes |
| 42 | Rock outcrop-Takpochao complex, 60 to 99 percent slopes |
| 50 | Takpochao-Rock outcrop complex, 3 to 15 percent slopes |
| 51 | Takpochao-Rock outcrop complex, 15 to 30 percent slopes |
| 52 | Takpochao-Rock outcrop complex, 30 to 60 percent slopes |
| 53 | Takpochao variant-Shioya complex, 1 to 10 percent slopes |

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Island of Hawaii

Map

Symbol

Map unit name

| | |
|------|---|
| ApD | Alapai extremely stony silty clay loam, 10 to 20 percent slopes |
| ASD | Apakuie very stony very fine sandy loam, 12 to 20 percent slopes |
| HCD | Hanipoe very stony loam, 12 to 20 percent slopes |
| HeC | Hawi extremely stony silty clay, 6 to 12 percent slopes |
| HFD | Hanipoe very rocky silt loam, 6 to 20 percent slopes |
| HHC | Heake very rocky sandy loam, 6 to 12 percent slopes |
| HKC | Heake extremely rocky sandy loam, 0 to 10 percent slopes |
| HIC | Hilea silty clay loam, 6 to 12 percent slopes |
| HRD | Honaunau extremely rocky silty clay loam, 6 to 20 percent slopes |
| HUD | Honuauulu very stony silty clay loam, 6 to 20 percent slopes |
| HVD | Honuauulu extremely stony silty clay loam, 12 to 20 percent slope |
| KBC | Kaalualu extremely stony loamy sand, 2 to 12 percent slopes |
| KDD | Kainaliu very stony silty clay loam, 12 to 20 percent slopes |
| KEC | Kainaliu extremely stony silty clay loam, 12 to 20 percent slopes |
| KKC | Kamaoa extremely stony loam, 6 to 12 percent slopes |
| KMD | Kapapala very rocky loam, 6 to 20 percent slopes |
| KNC | Kawaihae extremely stony very fine sandy loam, 6 to 12 percent slopes |
| KOC | Kawaihae very rocky very fine sandy loam, 6 to 12 percent slopes |
| KRD | Kealakekua very stony silty clay loam, 6 to 20 percent slopes |
| KSD | Kealakekua extremely stony silty clay loam, 12 to 20 percent slopes |
| KYC | Kikoni extremely stony very fine sandy loam, 6 to 12% slopes |
| LUC | Laumaia extremely stony silt loam, 6 to 12 percent slopes |
| MKC | Mahukona very stony silty clay loam, 6 to 12 percent slopes |
| MND | Manahaa extremely stony silt loam, 6 to 20 percent slopes |
| MT | Mixed alluvial land |
| NhD | Naalehu very rocky silty clay loam, 6 to 20 percent slopes |
| OID | Olaa extremely stony silty clay loam, 0 to 20 percent slopes |
| OSD | Ohia extremely stony silty clay loam, 0 to 20 percent slopes |
| PeC | Panaewa very rocky silty clay loam, 0 to 10 percent slopes |
| POD | Piihonua extremely stony silty clay loam, 6 to 20 percent slopes |
| PSC | Puukala extremely stony silt loam, 6 to 12 percent slopes |
| PTC | Puukala very rocky silt loam, 6 to 12 percent slopes |
| PVD | Puu Pa extremely stony very fine sandy loam, 6 to 20 percent slopes |
| PVF3 | Puu Pa extremely stony very fine sandy loam, 70 to 100 percent slopes, severely eroded |
| rAR | Amalu-Rough broken land association |
| RB | Rough broken land |

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Island of Hawaii – Cont.

| | |
|------|--|
| rCL | Cinder land |
| rHLD | Huikau extremely stony loamy sand, 12 to 20 percent slopes |
| rKAD | Kahaluu extremely rocky muck, 6 to 20 percent slopes |
| rKED | Kaimu extremely stony peat, 7 to 25 percent slopes |
| rKFD | Keaukaha extremely rocky muck, 6 to 20 percent slopes |
| rKGD | Keei extremely rocky muck, 6 to 20 percent slopes |
| rKHD | Kekake extremely rocky muck, 6 to 20 percent slopes |
| rKXD | Kilua extremely stony muck, 6 to 20 percent slopes |
| rKYD | Kona extremely rocky muck, 6 to 20 percent slopes |
| rLLD | Lalau extremely stony muck, 6 to 20 percent slopes |
| rLV | Lava flows, aa |
| rLW | Lava flows, pahoehoe |
| rMAD | Malama extremely stony muck, 3 to 15 percent slopes |
| rMWD | Mawae extremely stony muck, 6 to 20 percent slopes |
| rOPE | Opihikao extremely rocky muck, 3 to 25 percent slopes |
| rPAE | Papai extremely stony muck, 3 to 25 percent slopes |
| rPHB | Puhimau silt loam, 2 to 6 percent slopes |
| rPXE | Puna extremely stony muck, 3 to 25 percent slopes |
| rPYD | Punaluu extremely rocky peat, 6 to 20 percent slopes |
| rRO | Rock land |
| rVS | Very stony land |
| USD | Umikoa extremely stony silt loam, 12 to 20 percent slopes |
| WAC | Waiaha silt loam, 0 to 10 percent slopes |
| WAD | Waiaha silt loam, 10 to 20 percent slopes |
| WHC | Waiaha extremely stony silt loam, 6 to 12 percent slopes |
| WKD | Waiaha very rocky silt loam, 10 to 20 percent slopes |
| WSD | Waimea extremely stony very fine sandy loam, 12 to 20 percent slopes |

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Island of Kauai

Map

Symbol

Map unit name

| | |
|------|--|
| BL | Badland |
| BM | Badland-Mahana complex |
| HMMF | Hihimanu silty clay loam, 40 to 70 percent slopes |
| HNUF | Hulua gravelly silty clay loam, 25 to 70 percent slopes |
| KdF | Kalapa silty clay, 40 to 70 percent slopes |
| KEHF | Kalapa very rocky silty clay, 40 to 70 percent slopes |
| KOYE | Kekaha extremely stony silty clay loam, 0 to 35 percent slopes |
| KSKE | Kokee silty clay loam, 0 to 35 percent slopes |
| KUL | Kolokolo extremely stony clay loam |
| KvB | Koloa stony silty clay, 3 to 8 percent slopes |
| KvC | Koloa stony silty clay, 8 to 15 percent slopes |
| KvD | Koloa stony silty clay, 15 to 25 percent slopes |
| LPE | Lualualei extremely stony clay, 3 to 35 percent slopes |
| MnC | Mamala stony silty clay loam, 0 to 12 percent slopes |
| OMF | Oli silt loam, 30 to 70 percent slopes |
| PGF | Paaiki loam, 35 to 70 percent slopes |
| PHXC | Pakala extremely stony sandy clay loam, 0 to 12 percent slopes |
| rRK | Rock land |
| rRO | Rock outcrop |
| rRR | Rough broken land |
| rRT | Rough mountainous land |
| rRU | Rubble land |
| rWAF | Waialeale mucky silty clay loam, 30 to 70 percent slopes |
| WJF | Waiawa extremely rocky clay, 30 to 80 percent slopes |
| Ws | Waikomo stony silty clay |
| Wt | Waikomo very rocky silty clay |
| Wu | Waikomo extremely rocky silty clay |

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Island of Lanai

Map

Symbol

Map unit name

| | |
|------|-------------------------|
| CR | Coral outcrop |
| rRK | Rock land |
| rRO | Rock outcrop |
| rRR | Rough broken land |
| rRT | Rough mountainous land |
| rSM | Stony alluvial land |
| rSN | Stony blown-out land |
| rVS | Very stony land |
| rVT2 | Very stony land, eroded |

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Island of Maui

Map

Symbol

Map unit name

| | |
|------|---|
| HKLD | Hana very stony silty clay loam, 3 to 25 percent slopes |
| HKMD | Hana extremely stony silty clay loam, 3 to 25 percent slopes |
| HKOC | Hana extremely stony silty clay loam, moderately deep variant, 3 to 15 percent slopes |
| KCXD | Kaimu extremely stony peat, 7 to 25 percent slopes |
| KDVE | Kaipoiioi very rocky loam, 7 to 40 percent slopes |
| KGKC | Kamaole very stony silt loam, 3 to 15 percent slopes |
| KGLC | Kamaole extremely stony silt loam, 3 to 15 percent slopes |
| KLUD | Kaupo very stony silty clay loam, 3 to 25 percent slopes |
| KLVD | Kaupo extremely stony silty clay, 3 to 25 percent slopes |
| KnbD | Keahua very stony silty clay loam, 7 to 25 percent slopes |
| KNXD | Keawakapu extremely stony silty clay loam, 3 to 25 percent slopes |
| KRX | Koele-Rocky complex |
| KxbE | Kula very rocky loam, 12 to 40 percent slopes |
| LMF | Laumaia loam, 40 to 70 percent slopes |
| LNE | Laumaia extremely stony loam, 7 to 40 percent slopes |
| MJD | Makaalae extremely stony silty clay, 7 to 25 percent slopes |
| MWE | Makaalae clay, 7 to 40 percent slopes |
| MXC | Makena loam, stony complex, 3 to 15 percent slopes |
| MYD | Malama extremely stony muck, 3 to 25 percent slopes |
| OAD | Oanapuka very stony silt loam, 7 to 25 percent slopes |
| OED | Oanapuka extremely stony silt loam, 7 to 25 percent slopes |
| OPD | Opihikao extremely rocky muck, 3 to 25 percent slopes |
| PZVE | Puu Pa very stony silt loam, 7 to 40 percent slopes |
| rCI | Cinder land |
| rLW | Lava flows, aa |
| rRK | Rock land |
| rRO | Rock outcrop |
| rRR | Rough broken land |
| rRS | Rough broken and stony land |
| rRT | Rough mountainous land |
| rSM | Stony alluvial land |
| rVS | Very stony land |
| UMF | Uma loamy coarse sand, 40 to 70 percent slopes |
| WdB | Wahikuli very stony silty clay, 3 to 7 percent slopes |

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Island of Maui –Cont.

- WgB Waiakoa very stony silty clay loam, 3 to 7 percent slopes
- WgC Waiakoa very stony silty clay loam, 7 to 15 percent slopes
- WhB Waiakoa extremely stony silty clay loam, 3 to 7 percent slopes
- WhC Waiakoa extremely stony silty clay loam, 7 to 15 percent slopes
- WID2 Waiakoa extremely stony silty clay loam, 3 to 25 percent slopes, eroded
- WxB Wainee very stony silty clay, 3 to 7 percent slopes
- WxC Wainee very stony silty clay, 7 to 15 percent slopes
- WyB Wainee extremely stony silty clay, 3 to 7 percent slopes
- WyC Wainee extremely stony silty clay, 7 to 15 percent slopes

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Island of Molokai

Map

Symbol

Map unit name

| | |
|------|--|
| CO | Colluvial land |
| GL | Gullied land |
| HdC | Haleiwa very stony silty clay loam, 0 to 15 percent slopes |
| KFID | Kalaupapa very rocky silty clay loam, 3 to 25 percent slopes |
| KKTC | Kapuhikani extremely stony clay, 3 to 15 percent slopes |
| KIbC | Kawaihapai very stony clay loam, 0 to 15 percent slopes |
| OMF | Oli silt loam, 30 to 70 percent slopes |
| rRK | Rock land |
| rRO | Rock outcrop |
| rRR | Rough broken land |
| rRT | Rough mountainous land |
| rSM | Stony alluvial land |
| rSO | Stony colluvial land |
| rTO | Tropaquods |
| rVS | Very stony land |
| rVT2 | Very stony land, eroded |

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Island of Oahu

Map

Symbol

Map unit name

| | |
|------|---|
| ALF | Alaeloa silty clay, 40 to 70 percent slopes |
| CR | Coral outcrop |
| HJF2 | Halawa silt loam, 35 to 70 percent slopes, eroded |
| HLMG | Helemano silty clay, 30 to 90 percent slopes |
| KanE | Kaena very stony clay, 10 to 35 percent slopes |
| KHMF | Kaneohe silty clay loam, 30 to 65 percent slopes |
| KHOF | Kaneohe silty clay, 30 to 65 percent slopes |
| KIG | Kapaa silty clay, 40 to 100 percent slopes |
| KIbC | Kawaihapai very stony clay loam, 0 to 15 percent slopes |
| KpF | Kemoo silty clay, 35 to 70 percent slopes |
| KPZ | Kemoo-Badland complex |
| KTKE | Kokokahi very stony clay, 0 to 35 percent slopes |
| LoF | Lolekaa silty clay, 40 to 70 percent slopes |
| LPE | Lualualei extremely stony clay, 3 to 35 percent slopes |
| PeF | Paumalu silty clay, 40 to 70 percent slopes |
| PvC | Pulehu very stony clay loam, 0 to 12 percent slopes |
| PYF | Papaa clay, 35 to 70 percent slopes |
| PZ | Paumalu-Badland complex |
| rCI | Cinder land |
| rRK | Rock land |
| rRO | Rock outcrop |
| rRT | Rough mountainous land |
| rST | Stony land |
| rSY | Stony steep land |
| rTP | Tropohumults-Dystrandeps association |
| TAF | Tantalus silt loam, 40 to 70 percent slopes |
| WmD | Waialua very stony silty clay, 12 to 20 percent slopes |
| WpF | Waikane silty clay, 40 to 70 percent slopes |
| WpF2 | Waikane silty clay, 40 to 70 percent slopes, eroded |