

# APPENDIX D

## MAJOR SOILS WITHIN THE REGION OF INFLUENCE

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### MELLOR-UPDIKE-GODECKE

The Mellor-Updike-Godecke map unit is found mainly in valleys in the western part of Southern Washoe County. The dominant soil series (Mellor, Updike, and Godecke) are all very deep soils that are located in low lake terraces or alluvial fans and usually located on slopes ranging from 0-2 percent.

Mellor soils are moderately well drained, comprised of a medium textured surface layer, and a moderately fine textured subsoil. The soils are formed in alluvium from mixed rock sources. Updike soils comprise a medium textured surface layer and a fine textured subsoil. The soils are formed in valley fill material from mixed but predominantly granodiorite sources. Godecke soils comprise a moderately coarse textured surface layer and a moderately fine textured subsoil. The soils are formed in alluvium derived from mixed rock.

### HAYBOURNE-WEDERTZ-MOTTSVILLE

The Haybourne-Wedertz-Motts map unit is mostly found in the central valleys of Southern Washoe County. The dominant soil series (Haybourne, Wedertz, and Motts) are very deep soils that are located in alluvial fans or terraces, and usually located on slopes ranging from 0-15 percent.

Haybourne soils are generally well drained, with a coarse textured surface layer, moderately coarse textured subsoil, and a coarse to moderately coarse textured substratum. The soils are formed in mixed alluvium derived from granitic rocks. Wedertz soils are generally well drained, with a moderately coarse to coarse textured surface layer, a moderately fine textured subsoil, and comprised of weak silica cementation below the subsoil. The soils are derived from mixed rock sources. Mottsville soils are excessively drained and coarse textured throughout the layers. The soils are formed in alluvium and derived mainly from granodiorite.

### **RENO-GALEPPI-CHALCO**

The Reno-Galeppi-Chalco map unit is mostly found in the higher parts of the central and western valleys and along the Truckee River drainage system in Southern Washoe County. The dominant soil series (Reno, Galeppi, and Chalco) are generally well drained and located in alluvial fans, terraces, or pediments (gently sloping rock surfaces) with slopes ranging from 2-50 percent.

Reno soils are moderately deep, with a coarse textured surface layer and fine textured subsoil. The soils are often formed in fluvial sediment and alluvium, and derived from mixed rock sources. Galeppi soils are very deep, with a moderately coarse textured surface layer, moderately fine textured subsoil, and are usually comprised of weak silica cementation in the substratum. The soils are formed in alluvium derived mainly from granitic and sedimentary rocks. Chalco soils are shallow over bedrock, with a medium to moderately fine textured surface layer, and are comprised of weak silica cementation in the substratum. The soils are formed in pedisements derived from mixed rock.

### **OEST-ORR-LEVIATHAN**

The Oest-Orr-Leviathan map unit is mostly found in western valleys and along the terraces of the Truckee River in Southern Washoe County. The dominant soil series (Oest, Orr, and Leviathan) are generally very deep and well drained. The soils are formed in alluvium derived from mixed rock. The soils are often found in terraces or alluvial fans with slopes ranging from 0-50 percent.

Oest soils are composed of a moderately coarse to medium textured surface layer, moderately fine textured subsoil, and moderately coarse to coarse textured substratum. The soils are very gravelly throughout. Orr soils are composed of a moderately coarse textured surface layer, moderately fine textured subsoil, and varying textures in the substratum. Leviathan soils are composed of a moderately coarse textured surface layer, moderately fine textured subsoil, and are gravelly or very cobbly throughout.

### **ACRELANE- GRAUFELS-GLENBROOK**

The Acrelane-Graufels-Glenbrook map unit is found mostly in the western and central foothills and low mountain ranges of Southern Washoe County. The dominant soil series (Acrelane, Graufels, and Glenbrook) are often found in foothills or low mountainous uplands. The soils range in slope from 4-70 percent.

Acrelane soils are shallow over granitic bedrock and well drained. The soils consist of a moderately coarse textured surface layer, moderately fine textured subsoil, and are gravelly throughout. The soils form in residuum derived from granodiorite. Graufels soils are moderately deep, excessively drained, and coarse textured throughout. The soils form in residuum derived mainly from granitic rocks. Glenbrook soils are shallow over granitic bedrock, excessively drained, and coarse

textured throughout. The soils form in material weathered from granite and granodiorite.

### **INDIANO-FLEX-KOONTZ**

The Indiano-Flex-Koontz map unit is found mostly in the western and central parts of Southern Washoe County on hills and low mountains. The dominant soil series (Indiano, Flex, and Koontz) are well drained and range in slope from 8-50 percent.

Indiano soils are moderately deep over altered volcanic rocks. The soils consist of a coarse to medium textured surface layer and moderately fine textured subsoil. The soils are formed in residuum mainly of metavolcanic and volcanic rock. Flex soils are shallow over weathered metavolcanic rock. The soils consist of a moderately coarse textured surface layer, moderately fine textured subsoil, and are gravelly throughout. The soils are formed in residuum mainly of altered andesite and metamorphic rock. Koontz soils are shallow over weathered metavolcanic rock. The soils have a medium textured surface layer and a moderately fine textured subsoil. The soils are formed in residuum of altered igneous and metavolcanic rocks.

### **XMAN-DUCO-OLD CAMP**

The Xman-Duco-Old Camp map unit is found mostly in the central foothills and low mountain ranges of Southern Washoe County. The dominant soil series (Xman, Duco, and Old Camp) are shallow and well drained with slopes ranging from 4-50 percent.

Xman soils have a moderately coarse to medium textured surface layer and finely textured subsoil. The soils are also very gravelly to cobbly throughout. The soils are formed in residuum derived mainly from altered volcanic rocks. Duco soils consist of a moderately coarse textured surface layer and moderately fine textured subsoil. The soils are very gravelly to cobbly throughout. The soils are formed in residuum mainly of rhyolite. Old Camp soils have a moderately coarse textured surface layer a very cobbly, moderately fine textured subsoil. The soils are formed in residuum mainly of basic igneous rocks.