

Map Unit Description (Brief, Generated)

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions in this report, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

The Map Unit Description (Brief, Generated) report displays a generated description of the major soils that occur in a map unit. Descriptions of non-soil (miscellaneous areas) and minor map unit components are not included. This description is generated from the underlying soil attribute data.

Additional information about the map units described in this report is available in other Soil Data Mart reports, which give properties of the soils and the limitations, capabilities, and potentials for many uses. Also, the narratives that accompany the Soil Data Mart reports define some of the properties included in the map unit descriptions.

Report—Map Unit Description (Brief, Generated)

El Yunque National Forest, Puerto Rico

Map Unit: CaD—Caguabo gravelly clay loam, 12 to 20 percent slopes

Component: Caguabo (90%)

The Caguabo component makes up 90 percent of the map unit. Slopes are 12 to 20 percent. This component is on ledges, mountains, ridges. The parent material consists of Hato Puerco Formation residuum weathered from mudstone. Depth to a root restrictive layer, bedrock, lithic, is 10 to 20 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is very low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 4 percent. Nonirrigated land capability classification is 7s. This soil does not meet hydric criteria.

Component: Sonadora (7%)

Generated brief soil descriptions are created for major soil components. The Sonadora soil is a minor component.

Component: Zarzal (3%)

Generated brief soil descriptions are created for major soil components. The Zarzal soil is a minor component.

Map Unit: CzE—Cristal-Zarzal complex, 5 to 40 percent slopes

Component: Cristal (55%)

The Cristal component makes up 55 percent of the map unit. Slopes are 5 to 40 percent. This component is on mountain ranges, uplands, mountain slopes, coves. The parent material consists of clayey colluvium derived from volcanic rock over silty and clayey residuum weathered from volcanic rock. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is somewhat poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is high. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 15 inches (depth from the mineral surface is 14 inches) during April, May, June, July, August, September, October, November. Organic matter content in the surface horizon is about 80 percent. Below this thin organic horizon the organic matter content is about 8 percent. Nonirrigated land capability classification is 6w. This soil does not meet hydric criteria.

Component: Zarzal (40%)

The Zarzal component makes up 40 percent of the map unit. Slopes are 20 to 40 percent. This component is on mountain ranges on uplands, mountain slopes on uplands. The parent material consists of residuum weathered from volcanic rock. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 65 inches (depth from the mineral surface is 64 inches) during May, June, July, August, September, October. Organic matter content in the surface horizon is about 80 percent. Below this thin organic horizon the organic matter content is about 13 percent. Nonirrigated land capability classification is 7s. This soil does not meet hydric criteria.

Component: Humatas (3%)

Generated brief soil descriptions are created for major soil components. The Humatas soil is a minor component.

Component: Luquillo (2%)

Generated brief soil descriptions are created for major soil components. The Luquillo soil is a minor component.

Map Unit: DwF—Dwarf-El Duque complex, 5 to 60 percent slopes, windswept

Component: Dwarf, windswept (70%)

The Dwarf, windswept component makes up 70 percent of the map unit. Slopes are 5 to 60 percent. This component is on mountains, mountain ranges. The parent material consists of residuum weathered from sandstone. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is high. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 0 inches during January, February, March, April, May, June, July, August, September, October, November, December. Organic matter content in the surface horizon is about 38 percent. Nonirrigated land capability classification is 3w. This soil meets hydric criteria.

Component: El Duque, windswept (20%)

The El Duque, windswept component makes up 20 percent of the map unit. Slopes are 5 to 60 percent. This component is on mountains, mountain ranges. The parent material consists of residuum weathered from volcanic rock. Depth to a root restrictive layer, bedrock, paralithic, is 10 to 40 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 0 inches during January, February, March, April, May, June, July, August, September, October, November, December. Organic matter content in the surface horizon is about 38 percent. Below this thin organic horizon the organic matter content is about 20 percent. Nonirrigated land capability classification is 6w. This soil meets hydric criteria.

Component: Palm (5%)

Generated brief soil descriptions are created for major soil components. The Palm soil is a minor component.

Component: Guayabota (4%)

Generated brief soil descriptions are created for major soil components. The Guayabota soil is a minor component.

Component: Rock outcrop (1%)

Generated brief soil descriptions are created for major soil components. The Rock outcrop soil is a minor component.

Map Unit: GuF—Guayabota-Yunque complex, 20 to 60 percent slopes

Component: Guayabota (70%)

The Guayabota component makes up 70 percent of the map unit. Slopes are 20 to 60 percent. This component is on mountain ranges, mountains. The parent material consists of residuum weathered from volcanic rock. Depth to a root restrictive layer, bedrock, paralithic, is 40 to 64 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 0 inches during January, February, March, April, May, June, July, August, September, October, November, December. Organic matter content in the surface horizon is about 17 percent. Nonirrigated land capability classification is 7w. This soil meets hydric criteria.

Component: Yunque (25%)

The Yunque component makes up 25 percent of the map unit. Slopes are 20 to 60 percent. This component is on mountain slopes, mountain ranges. The parent material consists of residuum weathered from volcanic rock. Depth to a root restrictive layer, plinthite, inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is high. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 0 inches during June, July, August, September, October. Organic matter content in the surface horizon is about 80 percent. Below this thin organic horizon the organic matter content is about 8 percent. Nonirrigated land capability classification is 7w. This soil does not meet hydric criteria.

Component: Moteado (2%)

Generated brief soil descriptions are created for major soil components. The Moteado soil is a minor component.

Component: Rock outcrop (1%)

Generated brief soil descriptions are created for major soil components. The Rock outcrop soil is a minor component.

Component: Los Guineos (1%)

Generated brief soil descriptions are created for major soil components. The Los Guineos soil is a minor component.

Component: Palm (1%)

Generated brief soil descriptions are created for major soil components. The Palm soil is a minor component.

Map Unit: HmE—Humatas-Zarzal complex, 5 to 40 percent slopes

Component: Humatas (50%)

The Humatas component makes up 50 percent of the map unit. Slopes are 5 to 40 percent. This component is on mountain slopes, ridges, uplands. The parent material consists of residuum weathered from igneous rock. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is high. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 65 inches (depth from the mineral surface is 64 inches) during May, June, July, August, September, October. Organic matter content in the surface horizon is about 80 percent. Below this thin organic horizon the organic matter content is about 8 percent. Nonirrigated land capability classification is 4e. This soil does not meet hydric criteria.

Component: Zarzal (45%)

The Zarzal component makes up 45 percent of the map unit. Slopes are 20 to 40 percent. This component is on mountain ranges on uplands, mountain slopes on uplands. The parent material consists of residuum weathered from volcanic rock. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 65 inches (depth from the mineral surface is 64 inches) during May, June, July, August, September, October. Organic matter content in the surface horizon is about 80 percent. Below this thin organic horizon the organic matter content is about 13 percent. Nonirrigated land capability classification is 7s. This soil does not meet hydric criteria.

Component: Cristal (5%)

Generated brief soil descriptions are created for major soil components. The Cristal soil is a minor component.

Map Unit: HtF2—Humatas clay, 40 to 60 percent slopes

Component: Humatas (85%)

The Humatas component makes up 85 percent of the map unit. Slopes are 40 to 60 percent. This component is on mountain slopes, hillslopes, mountains, hills. The parent material consists of clayey residuum weathered from volcanic rock. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is high. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 8 percent. Nonirrigated land capability classification is 6e. This soil does not meet hydric criteria.

Component: Consumo (10%)

Generated brief soil descriptions are created for major soil components. The Consumo soil is a minor component.

Component: Alonso (5%)

Generated brief soil descriptions are created for major soil components. The Alonso soil is a minor component.

Map Unit: IcA—Icacos loam, occasionally flooded

Component: Icacos, occasionally flooded (90%)

The Icacos, occasionally flooded component makes up 90 percent of the map unit. Slopes are 0 to 5 percent. This component is on mountain valleys, mountain ranges. The parent material consists of alluvium derived from diorite. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is high. Shrink-swell potential is low. This soil is frequently flooded. It is not ponded. A seasonal zone of water saturation is at 0 inches during January, February, March, April, May, June, July, August, September, October, November, December. Organic matter content in the surface horizon is about 8 percent. Nonirrigated land capability classification is 3w. This soil meets hydric criteria.

Component: Picacho (4%)

Generated brief soil descriptions are created for major soil components. The Picacho soil is a minor component.

Component: Utuado (4%)

Generated brief soil descriptions are created for major soil components. The Utuado soil is a minor component.

Component: Ciales (2%)

Generated brief soil descriptions are created for major soil components. The Ciales soil is a minor component.

Map Unit: LuB—Luquillo-El Verde complex, 0 to 5 percent slopes, occasionally flooded

Component: Luquillo (50%)

The Luquillo component makes up 50 percent of the map unit. Slopes are 0 to 5 percent. This component is on alluvial plains, flood plains. The parent material consists of Unconsolidated quaternary terrace and/or Bouldery alluvium derived from volcanic sandstone. Depth to a root restrictive layer, abrupt textural change, is 40 to 59 inches. The natural drainage class is somewhat poorly drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is moderate. This soil is occasionally flooded. It is rarely ponded. A seasonal zone of water saturation is at 8 inches during May, June, July, August, September, October, November. Organic matter content in the surface horizon is about 8 percent. Nonirrigated land capability classification is 6w. This soil does not meet hydric criteria.

Component: El Verde (40%)

The El Verde component makes up 40 percent of the map unit. Slopes are 0 to 5 percent. This component is on flood plains, alluvial plains. The parent material consists of Unconsolidated quaternary terrace and/or Bouldery alluvium derived from volcanic sandstone. Depth to a root restrictive layer, abrupt textural change, is 11 to 20 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is low. This soil is occasionally flooded. It is not ponded. A seasonal zone of water saturation is at 18 inches during May, June, July, August, September, October, November. Organic matter content in the surface horizon is about 8 percent. Nonirrigated land capability classification is 6w. This soil does not meet hydric criteria.

Component: Cristal (5%)

Generated brief soil descriptions are created for major soil components. The Cristal soil is a minor component.

Component: Zarzal (5%)

Generated brief soil descriptions are created for major soil components. The Zarzal soil is a minor component.

Map Unit: PaG—Palm-Yunque complex, 40 to 90 percent slopes, extremely stony

Component: Palm (70%)

The Palm component makes up 70 percent of the map unit. Slopes are 40 to 90 percent. This component is on mountain slopes, mountain ranges. The parent material consists of colluvium derived from volcanic rock and/or residuum weathered from volcanic rock. Depth to a root restrictive layer, bedrock, paralithic, is 21 to 40 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 0 inches during January, February, March, April, May, June, July, August, September, October, November, December. Organic matter content in the surface horizon is about 23 percent. Nonirrigated land capability classification is 7w. This soil meets hydric criteria.

Component: Yunque, extremely stony (20%)

The Yunque, extremely stony component makes up 20 percent of the map unit. Slopes are 40 to 90 percent. This component is on mountain slopes, mountain ranges. The parent material consists of residuum weathered from volcanic rock. Depth to a root restrictive layer, plinthite, inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is high. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 0 inches during June, July, August, September, October. Organic matter content in the surface horizon is about 80 percent. Below this thin organic horizon the organic matter content is about 8 percent. Nonirrigated land capability classification is 7w. This soil does not meet hydric criteria.

Component: Moteado (5%)

Generated brief soil descriptions are created for major soil components. The Moteado soil is a minor component.

Component: Guayabota (3%)

Generated brief soil descriptions are created for major soil components. The Guayabota soil is a minor component.

Component: Los Guineos (2%)

Generated brief soil descriptions are created for major soil components. The Los Guineos soil is a minor component.

Map Unit: PcE—Picacho-Ciales complex, 5 to 40 percent slopes

Component: Picacho (60%)

The Picacho component makes up 60 percent of the map unit. Slopes are 5 to 40 percent. This component is on mountains, mountain ranges. The parent material consists of colluvium derived from diorite and/or residuum weathered from diorite. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 0 inches during January, February, March, April, May, June, July, August, September, October, November, December. Organic matter content in the surface horizon is about 80 percent. Below this thin organic horizon the organic matter content is about 9 percent. Nonirrigated land capability classification is 6w. This soil meets hydric criteria.

Component: Ciales (30%)

The Ciales component makes up 30 percent of the map unit. Slopes are 5 to 40 percent. This component is on mountain slopes, mountain ranges. The parent material consists of colluvium derived from diorite and/or residuum weathered from diorite. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 0 inches during January, February, March, April, May, June, July, August, September, October, December. Organic matter content in the surface horizon is about 28 percent. Nonirrigated land capability classification is 6w. This soil meets hydric criteria.

Component: Utuado (7%)

Generated brief soil descriptions are created for major soil components. The Utuado soil is a minor component.

Component: Icacos, occasionally flooded (2%)

Generated brief soil descriptions are created for major soil components. The Icacos soil is a minor component.

Component: Rock outcrop (1%)

Generated brief soil descriptions are created for major soil components. The Rock outcrop soil is a minor component.

Map Unit: PdF—Pandura-Very stony land complex, 40 to 60 percent slopes

Component: Pandura (70%)

The Pandura component makes up 70 percent of the map unit. Slopes are 40 to 60 percent. This component is on mountain slopes on mountain ranges. The parent material consists of weathered materials. Depth to a root restrictive layer, bedrock, paralithic, is 12 to 20 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is very low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 3 percent. Nonirrigated land capability classification is 7e. This soil does not meet hydric criteria.

Component: Very stony land (30%)

Generated brief soil descriptions are created for major soil components. The Very stony land is a miscellaneous area.

Map Unit: PiE—Picacho-Utuado complex, 5 to 40 percent slopes

Component: Picacho (50%)

The Picacho component makes up 50 percent of the map unit. Slopes are 5 to 40 percent. This component is on mountains, mountain ranges. The parent material consists of colluvium derived from diorite and/or residuum weathered from diorite. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 0 inches during January, February, March, April, May, June, July, August, September, October, November, December. Organic matter content in the surface horizon is about 80 percent. Below this thin organic horizon the organic matter content is about 9 percent. Nonirrigated land capability classification is 6w. This soil meets hydric criteria.

Component: Utuado (35%)

The Utuado component makes up 35 percent of the map unit. Slopes are 5 to 40 percent. This component is on mountains, mountain ranges. The parent material consists of colluvium derived from diorite and/or residuum weathered from diorite. Depth to a root restrictive layer, bedrock, paralithic, is 12 to 27 inches. The natural drainage class is somewhat poorly drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 0 inches during June, July, August, September, October. Organic matter content in the surface horizon is about 80 percent. Below this thin organic horizon the organic matter content is about 9 percent. Nonirrigated land capability classification is 6w. This soil does not meet hydric criteria.

Component: Ciales (10%)

Generated brief soil descriptions are created for major soil components. The Ciales soil is a minor component.

Component: Icacos, occasionally flooded (3%)

Generated brief soil descriptions are created for major soil components. The Icacos soil is a minor component.

Component: Rock outcrop (2%)

Generated brief soil descriptions are created for major soil components. The Rock outcrop soil is a minor component.

Map Unit: PiG—Picacho-Utuado complex, 40 to 90 percent slopes**Component: Picacho (60%)**

The Picacho component makes up 60 percent of the map unit. Slopes are 40 to 90 percent. This component is on mountains, mountain ranges. The parent material consists of colluvium derived from diorite and/or residuum weathered from diorite. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 0 inches during January, February, March, April, May, June, July, August, September, October, November, December. Organic matter content in the surface horizon is about 80 percent. Below this thin organic horizon the organic matter content is about 9 percent. Nonirrigated land capability classification is 6w. This soil meets hydric criteria.

Component: Utuado (35%)

The Utuado component makes up 35 percent of the map unit. Slopes are 40 to 90 percent. This component is on mountains, mountain ranges. The parent material consists of colluvium derived from diorite and/or residuum weathered from diorite. Depth to a root restrictive layer, bedrock, paralithic, is 12 to 27 inches. The natural drainage class is somewhat poorly drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 0 inches during June, July, August, September, October. Organic matter content in the surface horizon is about 80 percent. Below this thin organic horizon the organic matter content is about 9 percent. Nonirrigated land capability classification is 6w. This soil does not meet hydric criteria.

Component: Ciales (3%)

Generated brief soil descriptions are created for major soil components. The Ciales soil is a minor component.

Component: Rock outcrop (1%)

Generated brief soil descriptions are created for major soil components. The Rock outcrop soil is a minor component.

Component: Icacos, occasionally flooded (1%)

Generated brief soil descriptions are created for major soil components. The Icacos soil is a minor component.

Map Unit: PrF—Prieto very cobbly clay loam, 20 to 60 percent slopes**Component:** Prieto (90%)

The Prieto component makes up 90 percent of the map unit. Slopes are 20 to 60 percent. This component is on drainageways on mountain slopes on mountain ranges, coves. The parent material consists of colluvium derived from volcanic rock and/or residuum weathered from volcanic rock. Depth to a root restrictive layer, bedrock, paralithic, is 30 to 39 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 0 inches during June, July, August, September, October. Organic matter content in the surface horizon is about 14 percent. Nonirrigated land capability classification is 7w. This soil meets hydric criteria.

Component: Cristal (5%)

Generated brief soil descriptions are created for major soil components. The Cristal soil is a minor component.

Component: Zarzal (5%)

Generated brief soil descriptions are created for major soil components. The Zarzal soil is a minor component.

Map Unit: SoE—Sonadora-Caguabo complex, 20 to 40 percent slopes**Component:** Sonadora (70%)

The Sonadora component makes up 70 percent of the map unit. Slopes are 20 to 40 percent. This component is on mountain slopes on uplands, low hills. The parent material consists of Hato Puerco Formation residuum weathered from mudstone. Depth to a root restrictive layer, bedrock, paralithic, is 20 to 40 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 5 percent. Nonirrigated land capability classification is 7s. This soil does not meet hydric criteria.

Component: Caguabo (15%)

The Caguabo component makes up 15 percent of the map unit. Slopes are 20 to 40 percent. This component is on ledges, mountains, ridges. The parent material consists of Hato Puerco Formation residuum weathered from mudstone. Depth to a root restrictive layer, bedrock, lithic, is 10 to 20 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is very low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 4 percent. Nonirrigated land capability classification is 7s. This soil does not meet hydric criteria.

Component: Cristal (10%)

Generated brief soil descriptions are created for major soil components. The Cristal soil is a minor component.

Component: Zarzal (5%)

Generated brief soil descriptions are created for major soil components. The Zarzal soil is a minor component.

Map Unit: SoG—Sonadora-Caguabo complex, 40 to 90 percent slopes

Component: Sonadora (70%)

The Sonadora component makes up 70 percent of the map unit. Slopes are 40 to 90 percent. This component is on low hills, mountain slopes on uplands. The parent material consists of Hato Puerco Formation residuum weathered from mudstone. Depth to a root restrictive layer, bedrock, paralithic, is 20 to 40 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 5 percent. Nonirrigated land capability classification is 7s. This soil does not meet hydric criteria.

Component: Caguabo (15%)

The Caguabo component makes up 15 percent of the map unit. Slopes are 40 to 90 percent. This component is on ledges, mountains, ridges. The parent material consists of Hato Puerco Formation residuum weathered from mudstone. Depth to a root restrictive layer, bedrock, lithic, is 10 to 20 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is very low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 4 percent. Nonirrigated land capability classification is 7s. This soil does not meet hydric criteria.

Component: Cristal (10%)

Generated brief soil descriptions are created for major soil components. The Cristal soil is a minor component.

Component: Zarzal (5%)

Generated brief soil descriptions are created for major soil components. The Zarzal soil is a minor component.

Map Unit: YnG—Yunque cobbly clay, 40 to 90 percent slopes, extremely stony

Component: Yunque, extremely stony (75%)

The Yunque, extremely stony component makes up 75 percent of the map unit. Slopes are 40 to 90 percent. This component is on mountain slopes, mountain ranges. The parent material consists of residuum weathered from volcanic rock. Depth to a root restrictive layer, plinthite, inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is high. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 0 inches during June, July, August, September, October. Organic matter content in the surface horizon is about 80 percent. Below this thin organic horizon the organic matter content is about 8 percent. Nonirrigated land capability classification is 7w. This soil does not meet hydric criteria.

Component: Moteado (8%)

Generated brief soil descriptions are created for major soil components. The Moteado soil is a minor component.

Component: Palm (8%)

Generated brief soil descriptions are created for major soil components. The Palm soil is a minor component.

Component: Los Guineos (7%)

Generated brief soil descriptions are created for major soil components. The Los Guineos soil is a minor component.

Component: Rock outcrop (2%)

Generated brief soil descriptions are created for major soil components. The Rock outcrop soil is a minor component.

Map Unit: YqE—Yunque-Los Guineos-Moteado complex, 5 to 40 percent slopes

Component: Yunque, extremely stony (50%)

The Yunque, extremely stony component makes up 50 percent of the map unit. Slopes are 5 to 40 percent. This component is on mountain slopes, mountain ranges. The parent material consists of residuum weathered from volcanic rock. Depth to a root restrictive layer, plinthite, inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is high. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 0 inches during June, July, August, September, October. Organic matter content in the surface horizon is about 80 percent. Below this thin organic horizon the organic matter content is about 8 percent. Nonirrigated land capability classification is 7w. This soil does not meet hydric criteria.

Component: Los Guineos (25%)

The Los Guineos component makes up 25 percent of the map unit. Slopes are 5 to 40 percent. This component is on ridges, mountain slopes, hillslopes, uplands. The parent material consists of residuum weathered from volcanic rock. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is high. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 65 inches (depth from the mineral surface is 64 inches) during May, June, July, August, September, October. Organic matter content in the surface horizon is about 80 percent. Below this thin organic horizon the organic matter content is about 13 percent. Nonirrigated land capability classification is 7e. This soil does not meet hydric criteria.

Component: Moteado (20%)

The Moteado component makes up 20 percent of the map unit. Slopes are 5 to 40 percent. This component is on mountain slopes, mountain ranges. The parent material consists of residuum weathered from sandstone. Depth to a root restrictive layer, bedrock, lithic, inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is high. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 0 inches during January, February, March, April, May, June, July, August, September, October, November, December. Organic matter content in the surface horizon is about 80 percent. Below this thin organic horizon the organic matter content is about 9 percent. Nonirrigated land capability classification is 7w. This soil meets hydric criteria.

Component: Palm (3%)

Generated brief soil descriptions are created for major soil components. The Palm soil is a minor component.

Component: Rock outcrop (1%)

Generated brief soil descriptions are created for major soil components. The Rock outcrop soil is a minor component.

Component: Guayabota (1%)

Generated brief soil descriptions are created for major soil components. The Guayabota soil is a minor component.

Map Unit: YuF—Yunque-Moteado complex, 20 to 60 percent slopes**Component: Yunque (50%)**

The Yunque component makes up 50 percent of the map unit. Slopes are 20 to 60 percent. This component is on mountain slopes, mountain ranges. The parent material consists of residuum weathered from volcanic rock. Depth to a root restrictive layer, plinthite, inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is high. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 0 inches during June, July, August, September, October. Organic matter content in the surface horizon is about 80 percent. Below this thin organic horizon the organic matter content is about 8 percent. Nonirrigated land capability classification is 7w. This soil does not meet hydric criteria.

Component: Moteado (30%)

The Moteado component makes up 30 percent of the map unit. Slopes are 20 to 60 percent. This component is on mountain slopes, mountain ranges. The parent material consists of residuum weathered from sandstone. Depth to a root restrictive layer, bedrock, lithic, inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is high. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 0 inches during January, February, March, April, May, June, July, August, September, October, November, December. Organic matter content in the surface horizon is about 80 percent. Below this thin organic horizon the organic matter content is about 9 percent. Nonirrigated land capability classification is 7w. This soil meets hydric criteria.

Component: Los Guineos (10%)

Generated brief soil descriptions are created for major soil components. The Los Guineos soil is a minor component.

Component: Guayabota (5%)

Generated brief soil descriptions are created for major soil components. The Guayabota soil is a minor component.

Component: Palm (5%)

Generated brief soil descriptions are created for major soil components. The Palm soil is a minor component.

Map Unit: ZaG—Zarzal very cobbly clay, 40 to 90 percent slopes**Component: Zarzal, very cobbly clay (80%)**

The Zarzal, very cobbly clay component makes up 80 percent of the map unit. Slopes are 40 to 90 percent. This component is on mountain ranges on uplands, mountain slopes on uplands. The parent material consists of residuum weathered from volcanic rock. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 65 inches (depth from the mineral surface is 64 inches) during May, June, July, August, September, October. Organic matter content in the surface horizon is about 80 percent. Below this thin organic horizon the organic matter content is about 13 percent. Nonirrigated land capability classification is 7s. This soil does not meet hydric criteria.

Component: Cristal (5%)

Generated brief soil descriptions are created for major soil components. The Cristal soil is a minor component.

Component: Humatas (5%)

Generated brief soil descriptions are created for major soil components. The Humatas soil is a minor component.

Component: Luquillo (5%)

Generated brief soil descriptions are created for major soil components. The Luquillo soil is a minor component.

Component: Sonadora (5%)

Generated brief soil descriptions are created for major soil components. The Sonadora soil is a minor component.

Map Unit: ZcF—Zarzal-Cristal complex, 20 to 60 percent slopes**Component: Zarzal (50%)**

The Zarzal component makes up 50 percent of the map unit. Slopes are 20 to 60 percent. This component is on mountain ranges on uplands, mountain slopes on uplands. The parent material consists of residuum weathered from volcanic rock. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 65 inches (depth from the mineral surface is 64 inches) during May, June, July, August, September, October. Organic matter content in the surface horizon is about 80 percent. Below this thin organic horizon the organic matter content is about 13 percent. Nonirrigated land capability classification is 7s. This soil does not meet hydric criteria.

Component: Cristal (25%)

The Cristal component makes up 25 percent of the map unit. Slopes are 20 to 60 percent. This component is on mountain ranges, uplands, mountain slopes, coves. The parent material consists of clayey colluvium derived from volcanic rock over silty and clayey residuum weathered from volcanic rock. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is somewhat poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is high. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 15 inches (depth from the mineral surface is 14 inches) during April, May, June, July, August, September, October, November. Organic matter content in the surface horizon is about 80 percent. Below this thin organic horizon the organic matter content is about 8 percent. Nonirrigated land capability classification is 6w. This soil does not meet hydric criteria.

Component: Sonadora (10%)

Generated brief soil descriptions are created for major soil components. The Sonadora soil is a minor component.

Component: Humatas (8%)

Generated brief soil descriptions are created for major soil components. The Humatas soil is a minor component.

Component: Luquillo (7%)

Generated brief soil descriptions are created for major soil components. The Luquillo soil is a minor component.

Data Source Information

Soil Survey Area: El Yunque National Forest, Puerto Rico
Survey Area Data: Version 6, Sep 29, 2015