

Major Land Resource Area 039X Mogollon Transition North

Accessed: 06/22/2026

Ecological site keys

MLRA 39

I. 17" to 22" p.z.

A. Forestland

1 Slopes generally less than or equal to 15%

i. Soils Shallow or Very Shallow

a. Soil surface stony loam to very cobbly loam. Subsurface cobbly clay loam to very cobbly clay. Soil is shallow to basalt bedrock ... F039XA133AZ – Basalt Upland 17-22" p.z. (PIPO)

b. Soil surface very flaggy loam. Subsurface very flaggy loam. Soil is shallow to limestone bedrock and is slightly effervescent throughout ... F039XA134AZ – Limestone Upland 17-22" p.z. (PIPO)

ii. Soils Moderately Deep or Deeper

a. Soil surface loam. Subsurface clay loam, clay and/or sandy clay loam. Soil non-effervescent throughout the profile ... F039XA111AZ – Loamy Upland 17-22" p.z. (PIPO)

b. Soil surface loam, generally gravelly or very gravelly. Subsurface loam, clay loam, and/or clay, often gravelly. Soil surface littered with cinders ... F039XA132AZ – Cinder Upland 17-22" p.z. (QUGA, PIPO)

2 Slopes generally greater than 15%. Soils Shallow or Very Shallow. Soil surface very stony loam. Subsurface clay loam and/or clay, generally cobbly. Soil is non-effervescent and shallow to basalt bedrock ... F039XA135AZ – Basalt Hills 17-22" p.z. (PIPO, QUGA)

B. Rangeland

1 Occurs in a bottom position (receives run-in moisture from surrounding ecological sites) and/or is Subirrigated

i. Flooded at least rarely

a. Soil surface clay, about 3 inches thick. Subsurface clay, silty clay and/or silt loam ... R039XA129AZ – Clay Bottom 17-22"

b. Soil surface loam, about 3 inches thick. Subsurface clay loam, clay, and/or sandy clay, generally gravelly or very gravelly ... R039XA130AZ – Loamy Bottom 17-22" p.z.

c. Soil surface sandy loam to clay loam, 2 to 15 inches thick. Subsurface fine sandy loam to clay ... R039XA108AZ – Meadow 17-22" p.z.

ii. Soil Subirrigated

a. Soil surface cobbly loam. Subsurface clay loam, generally very cobbly or extremely cobbly ... R039XA137AZ – Loamy Upland 17-22" p.z. Subirrigated

- b. Soil surface loam. Subsurface loam and/or clay loam, generally very stony or extremely stony. A water table is found at 0 to 5 inches from the soil surface ... R039XA131AZ – Loamy Bottom 17-22" p.z. Subirrigated
- c. Soil surface sandy loam to clay, 2 to 15 inches thick. Subsurface fine sandy loam to clay. Water table is at or near the soil surface ... R039XA109AZ – Wet Meadow 22-30" p.z.

2 Uplands (does not receive additional run-in moisture)

i. Slopes generally equal to or less than 15 percent

a. Soils very shallow or shallow. Soil surface fine sandy loam, cobbly sandy loam, cobbly loam, sandy loam, or loam, about five inches thick. Subsurface loam, sandy clay loam, and/or clay loam with greater than 50 percent rock fragments. Soil is shallow to hard tuff ... R039XA105AZ – Shallow Loamy 17-22" p.z.

b. Soils moderately deep and deep

1) Soil surface silt loam to gravelly clay loam, two to three inches thick. Subsurface stony clay to clay ...

R039XA103AZ – Clayey Upland 17-22" p.z.

2) Soil surface is loam, generally gravelly, cobbly, or very stony. Subsurface is clay loam, clay and/or loam, generally gravelly, very gravelly, and/or cobbly ... R039XA138AZ – Clay Loam Upland 17-22 p.z.

3) Soil surface stony clay loam, cobbly silt loam, or cobbly clay loam, 2 to 5 inches thick ... R039XA106AZ – Stony Upland 17-22" p.z.

4) Soil surface gravelly loam, cobbly loam, or gravelly silt loam, 4 to 10 inches thick. Subsurface gravelly clay loam to cobbly clay loam ... R039XA104AZ – Loamy Upland 17-22" p.z.

ii. Slopes generally greater than 15 percent. Soils moderately deep or deeper. Soil surface gravelly loam or gravelly silt loam, 8 to 16 inches thick. Subsurface is cinders ... R039XA107AZ – Cinder Hills 17-22" p.z.

II. 22" to 30" p.z. Rangeland. Uplands (does not receive additional run-in moisture). Slopes generally less than or equal to 15%

A. Soils Shallow or Very Shallow. Soil surface fine sandy loam, cobbly sandy loam, cobbly loam, sandy loam, or loam, about five inches thick. Subsurface loam, sandy clay loam, and/or clay loam with greater than 50 percent rock fragments. Soil is shallow to hard tuff ... R039XA122AZ – Shallow Loamy 22-30" p.z.

B. Soils moderately deep and deep. Soil surface sandy loam about 3 inches thick. Subsurface loam to clay loam ... R039XA121AZ – Loamy Upland 22-30" p.z.