

Major Land Resource Area 042B

Southern Rio Grande Rift

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Ecological site group keys

MLRA 42.2 Ecological Site Group Key

- I. Flooded (low-lying landscape position, evidence of water flow and/or high production, narrow inset fans, bottomlands, river flood plains or meadows; Flooded soils group)
 - A. In a river floodplain ... ESG10 – Riparian
 - B. Not in a river floodplain
 - 1 Level lake plains occupying lowest part of closed depressions in which flood waters persist long enough to prevent perennial vegetation in most areas ... ESG9 – Playas and lakebeds
 - 2 Swales and depressions within upland landforms or at the margins of playas featuring highly productive vegetation ... ESG8 – Bottomlands
- II. Not flooded (hills, convex portions of piedmont slopes, broad basin floors)
 - A. Exposed bedrock absent and few if any cobbles and stones
 - 1 Soil surface texture loamy sand to medium sandy loam, subsoil non gravelly, gypsum absent
 - i. Soil is shallow (< 50 cm) or has a calcic, cambic, or argillic horizon within 1 m, dunes may occur but are separated by areas of finer soil texture ... ESG1 – Sandy
 - ii. Soil is not shallow (\geq 50 cm) and does not have a clear pedogenic horizon, continuous undulating surface or dunes ... ESG2 – Deep sand
 - 2 Soil surface textures are fine sandy loam to clay loam, subsoil non gravelly, gypsum may or may not be present
 - i. Subsoil moderately to strongly saline, often with visible salt accumulation or crusts ... ESG4 – Saline
 - ii. Subsoil not moderately to strongly saline
 - a. Subsoil has a gypsic horizon and/or gypsiferous materials evident at the soil surface ... ESG7 – Gypsic
 - b. Subsoil lacks a gypsic horizon and gypsum not evident at the surface ... ESG3 – Loamy to clayey
 - 3 Soil surface gravelly, soil profile gravelly to skeletal ... ESG5 – Gravelly
 - B. Exposed bedrock present or surface cobbles and stones common
 - 1 Rock at lithic contact is basalt, may be a carbonate layer on top of it ... ESG11 – Malpais
 - 2 Rock at lithic contact is not basalt ... ESG6 – Bedrock and colluvium

Key to Ecological Site Groups for MLRA 70C

- 1a Site occurs on a water-collecting landform such as a swale, drainageway bottom, floodplain, or playa. ...
- 1b Site does not meet the criteria for 1a.
 - 2a Soils contain visible masses of gypsum in the upper 100 cm. ...
 - 2b. Soils lack visible masses of gypsum in the upper 100 cm.
 - 3a Root-restrictive layer occurs within 50 cm of the soil surface. ...

3b Soils are >50 cm to root-restrictive layer.

4a Soil texture is fine sandy loam or coarser at the surface, and sand percentage is ≥ 50 in all horizons in the upper 100 cm. ...

4b Soils do not meet the criteria in 4a.

5a Soils meet both of the following criteria: 1) soil at the surface reacts strongly or violently to 1N HCl. 2) $\geq 5\%$ calcareous or carbonate-coated fragments at the surface. ...

5b All other sites. ...

Ecological Site Group Ke for MLRA 70D

1a. Site occurs on a water-collecting landform such as a floodplain, swale or drainageway bottom. ...

1b. Site does not meet the criteria for 1a.

2a Root-restrictive layer occurs within 50 cm of the soil surface. ...

2b Soils are >50 cm to root-restrictive layer. ...