

Major Land Resource Area 042B

Southern Rio Grande Rift

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Ecological site keys

LRU 42BB - Desert Shrub

I. LRU 42.BB Desert Shrub. These sites are typically below 5200 ft., including hills below 5300 ft elevation. PZ is 9-10 PZ, Temp. Regime is thermic, Moisture Regime is Typic Aridic.

A. Site basalt flow, basalt hill or cinder cone. Malpais ... R042BB037NM – Malpais, Desert Shrub

B. Site is hypergypsic, soils having >15% gypsum with Gypsic, or a Hypergypsic minerology class

1 Site occurs on hills or mountains- Gyp Hills ... R042BB013NM – Gyp Hills, Desert Shrub

2 Site occurs within basin floor or piedmont slopes

i. Site lacustrine or relict lacustrine

a. Site concave ,0.5% slope, ponds water, and is void of vegetation. Gyp Playa ... R042BB008NM – Gyp Playa, Desert Shrub

b. Site on a pluvial lake plane or playa lake plane and/or 0.5 % slopes with surfacing watertable.

Alkali Flat ... R042BB001NM – Alkali Flat, Desert Shrub

ii. Site an eolian deposit

a. Site is on an active dune field

1) Site located on crest to footslope of dune

a) Dunes are barchan or Transverse. These are very active dunes and typically occur adjacent to gyp source. Gyp Duneland Barren ... R042BB002NM – Gyp Duneland Barren, Desert Shrub

b) Dunes are parabolic in shape. Site typically not adjacent to gypsum source, and occurs downwind from barchan and transverse dunes. Gyp Dune Vegetated ... R042BB003NM – Vegetated Gypsum Dunes, Desert Shrub

2) Site located in the interdune (dune toeslope to lowest point in interdune)

a) Depth to water table < 24 inches, site surface soil will have wind scouring or be slightly indurated. Gyp Interdune Wet ... R042BB004NM – Gyp Interdune (Wet), Desert Shrub

b) Depth to watertable >24 inches. Surface soils may have some wind scouring however will not be indurated, some recent soil deposit is evident. Gyp Interdune Dry ... R042BB005NM – Gyp Interdune (Dry), Desert Shrub

b. Site not in active dune field.

1) gypsum cementation occurs within 50 cm of soil surface. Site cover is dominated with hairy crinkle mat and crypto crust. Gyp Out Crop ... R042BB007NM – Gyp Outcrop, Desert Shrub

2) Soil surface not indurated, cemented gyp when present occurs at > 50cm depth. Gyp Upland ... R042BB006NM – Gyp Upland, Desert Shrub

C. Site not Hypergypsic.

1 Landscape is hills and mountains

i. Site is limestone or of limestone parent material. Limestone Hills ... R042BB021NM – Limestone Hills, Desert Shrub

ii. Site is of igneous parent materials other than basalt, or is sedimentary material other than limestone.

Hills ... R042BB027NM – Hills, Desert Shrub

2 landform is piedmont

i. Site is a drainageway. Draw ... R042BB016NM – Draw, Desert Shrub

ii. Site not a drainageway

a. Site aeolian sand deposit and

1) Sand deposits are > 3 feet thick, sandy textures throughout. Indicator species Giant dropseed, mesa dropseed. Deep Sand ... R042BB011NM – Deep Sand, Desert Shrub

2) Sand deposits are < 3 feet but greater than 20 inches thick. May have a loamy sand surface texture. ... R042BB012NM – Sandy, Desert Shrub

3) Soils are shallow sand deposits less than 20 inches thick, or sandy material is over a contrasting soil texture or other restrictive soil features Shallow sands ... R042BB015NM – Shallow Sandy, Desert Shrub

b. Site alluvial and colluvial

1) Soils have restrictive features within 20 inches of the soil surface. Gravelly ... R042BB010NM – Gravelly, Desert Shrub

2) Soils have less than 15 percent gravel by volume.

a) Water receiving areas, less than 1% slope

(1) Clayey textures throughout, slightly calcareous. Clayey ... R042BB023NM – Clayey, Desert Shrub

(2) Soils are loamy throughout, and are highly calcareous within 6 inches of the soil surface. Limy ... R042BB019NM – Limy, Desert Shrub

b) Water shedding positions. Loamy ... R042BB014NM – Loamy, Desert Shrub

3) Soils have less than 35 percent gravel by volume but greater than 15 percent gravel.

a) Soils are sandy throughout. Gravelly sand ... R042BB024NM – Gravelly Sand, Desert Shrub

b) All other soils. Gravelly Loam ... R042BB035NM – Gravelly Loam, Desert Shrub

4) Soils have greater than 35 percent gravel by volume Very Gravelly ... R042BB010NM – Gravelly, Desert Shrub

3 Landform is basin floor or relict basin floor

i. Eolian Parent Material consisting of sand and loamy sand textures

a. Soil has a restrictive layer within 20 inches ... R042BB015NM – Shallow Sandy, Desert Shrub

b. soil does not have a restrictive layer within 20 inches ... R042BE054NM – Deep Sand, Cool Desert Grassland

ii. Alluvial Parent Material

a. Saline or Alkaline soils, halophyte plants iodine bush, pickleweed or salt tolerant plants such as inland salt grass, alkali sacaton, atriplex spp.

1) Salt concentrations on soil surface

a) Adjacent to water and sub irrigated ... R042BB028NM – Salt Meadow, Desert Shrub

b) Drainageways and flood plains ... R042BB033NM – Salty Bottomland, Desert Shrub

2) No salt concentrations at surface

a) Alluvial Flats - not sub-irrigated and does not pond water ... R042BB036NM – Salt Flats, Desert Shrub

b. Non-Saline

1) Slope 0 to 1 % and not highly calcareous. Dominant species include giant sacaton, tobosa, vine mesquite. ... R042BB018NM – Bottomland, Desert Shrub

2) Slopes 1 .to 1.5 % highly calcareous site dominated by Burrograss ... R042BB019NM – Limy, Desert Shrub

- 3) Soils form in water shedding areas, rises ... R042BB023NM – Clayey, Desert Shrub
- iii. Basalt Parent Material ... R042BB037NM – Malpais, Desert Shrub