

# Major Land Resource Area 042C Central New Mexico Highlands

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## Ecological site group keys

### Key to the Ecological Site Groups of MLRA 42C

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**I. Site receives significant additional moisture—either from run-on or throughflow. Site occurs on a floodplain or in a swale or playa bottom.**

A. [Criteria] ... GX042C01ESG01 – Run-On

**II. Site does not receive significant additional moisture—either from run-on or throughflow. Site does not occur on a floodplain or in a swale or playa bottom.**

A. Soils contain visible masses of gypsum in the upper 100 cm.

1 [Criteria] ... GX042C01ESG02 – Gypsum

B. Soils lack visible masses of gypsum in the upper 100 cm.

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

i. [Criteria] ... GX042C01ESG03 – Shallow

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

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

a. [Criteria] ... GX042C01ESG04 – Sandy

ii. Soil texture is finer than fine sandy loam at the surface, and/or at least one horizon with <50% sand occurs in the upper 100 cm.

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

1) [Criteria] ... GX042C01ESG05 – Limy

b. Soils fail to meet one or both of the following criteria: 1) soil at the surface reacts strongly or violently to 1N HCl. 2) ?5% calcareous or carbonate-coated fragments at the surface.

1) [Criteria] ...

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## National Park Service

**I. Additional water**

A. Perennial water - 041XESG09 Riparian

B. Ephemeral water

1 Subsurface EC >4 - 040XESG10 Saline Bottoms

2 Subsurface EC <4 - 040XESG01 Bottoms

## II. Uplands

### A. Surface SAR >8

- 1 Elevation - 2500-3700 ft - 041XESG62 Thornscrub Saline Hills
- 2 Elevation - 3700-4500 ft - 042BESG63 Semi-Desert Grassland Saline Hills
- 3 Elevation - 4500-6000 ft - 042BESG38 Madrean Woodland Saline Hills
- 4 Elevation - >6000 ft - 070BESG64 Temperate Forest Saline Hills

### B. Surface SAR <8

#### 1 Gypsum >5% surface or >10% subsurface

- i. Elevation - 2500-3700 ft - 042AESG33 Gypsum Thornscrub
- ii. Elevation - 3700-4500 ft - 042BESG55 Gypsum Semi-Desert Grassland
- iii. Elevation - 4500-6000 ft - 042AESG69 Gypsum Madrean Woodland
- iv. Elevation - >6000 ft - 070BESG70 Gypsum Temperate Forest

#### 2 Gypsum <5% surface or <10% subsurface

##### i. Subsurface EC >8 or surface EC >4

- a. Elevation - 2500-3700 ft - 041XESG62 Thornscrub Saline Hills
- b. Elevation - 3700-4500 ft - 042BESG63 Semi-Desert Grassland Saline Hills
- c. Elevation - 4500-6000 ft - 042BESG38 Madrean Woodland Saline Hills
- d. Elevation - >6000 ft - 070BESG64 Temperate Forest Saline Hills

##### ii. Subsurface EC <8 and surface EC <4

###### a. EC >1.5 surface or >2 subsurface

- 1) Elevation - 2500-3700 ft - 041XESG39 Thornscrub Saline Uplands
- 2) Elevation - 3700-4500 ft - 041XESG65 Semi-Desert Grassland Saline Uplands
- 3) Elevation - 4500-6000 ft - 042BESG66 Madrean Woodland Saline Uplands

###### b. EC <1.5 surface and <2 subsurface

###### 1) Slope >35% & >40% surface rock

- a) Elevation - 2500-3700 ft - 040XESG17 Thornscrub Breaks
- b) Elevation - 3700-4500 ft - 038XESG18 Semi-Desert Grassland Breaks
- c) Elevation - 4500-6000 ft - 038XESG19 Madrean Woodland Breaks
- d) Elevation - >6000 ft ... 042CESG20 – Temperate Forest Breaks

###### 2) Slope <35% or <40% surface rock

###### a) Depth <30cm

- (1) Elevation - <2500 ft - 040XESG61 Very Shallow Desert
- (2) Elevation - 2500-3700 ft - 040XESG46 Very Shallow Thornscrub
- (3) Elevation - 3700-4500 ft - 042AESG47 Very Shallow Semi-Desert Grassland
- (4) Elevation - 4500-6000 ft - 042AESG48 Very Shallow Madrean Woodland
- (5) Elevation - >6000 ft - 070BESG49 Very Shallow Temperate Forest

###### b) Depth: 30-55cm

- (1) Elevation - <2500 ft - 040XESG60 Shallow Desert
- (2) Elevation - 2500-3700 ft - 040XESG42 Shallow Thornscrub
- (3) Elevation - 3700-4500 ft - 042AESG43 Shallow Semi-Desert Grassland
- (4) Elevation - 4500-6000 ft - 038XESG44 Shallow Madrean Woodland
- (5) Elevation - >6000 ft - 070BESG45 Shallow Temperate Forest

###### c) Depth >55cm

- (1) **Rock >30% surface or >30% subsurface**
  - (a) **Elevation - 2500-3700 ft - 040XESG25 Deep Rocky Thornscrub**
  - (b) **Elevation - 3700-4500 ft - 042AESG26 Deep Rocky Semi-Desert Grassland**
  - (c) **Elevation - 4500-6000 ft - 042BESG27 Deep Rocky Madrean Woodland**
  - (d) **Elevation - >6000 ft - 070BESG28 Deep Rocky Temperate Forest**
- (2) **Rock <30% surface and <30% subsurface**
  - (a) **Clay >30% surface or >35% subsurface**
    - (1) **Elevation - 2500-3700 ft - 040XESG21 Thornscrub Clay Uplands**
    - (2) **Elevation - 3700-4500 ft - 041XESG22 Semi-Desert Grassland Clay Uplands**
    - (3) **Elevation - 4500-6000 ft - 038XESG23 Madrean Woodland Clay Uplands**
    - (4) **Elevation - >6000 ft - 038XESG24 Temperate Forest Clay Uplands**
  - (b) **Clay <30% surface and <35% subsurface**
    - (1) **Sand >75% or texture is loamy sand or sandier in surface & subsurface**
      - (a) **Elevation - 2500-3700 ft ... 042CESG40 – Thornscrub Sandy Uplands**
      - (b) **Elevation - 3700-4500 ft - 042BESG41 Semi-Desert Grassland Sandy Uplands**
      - (c) **Elevation - 4500-6000 ft - 042BESG68 Madrean Woodland Sandy Uplands**
    - (2) **Sand <75% or texture is sandy loam or finer in surface & subsurface**
      - (a) **Clay <20 % or texture is sandy loam or sandier in surface**
        - (1) **Elevation - 2500-3700 ft - 040XESG34 Thornscrub Loamy Uplands**
        - (2) **Elevation - 3700 4500 ft - 041XESG35 Semi-Desert Grassland Loamy Uplands**
        - (3) **Elevation - 4500-6000 ft - 042BESG36 Madrean Woodland Loamy Uplands**
        - (4) **Elevation - >6000 ft - 070BESG37 Temperate Forest Loamy Uplands**
      - (b) **Clay >20% or texture is finer than sandy loam in surface**
        - (1) **Elevation - 2500-3700 ft - 042AESG29 Thornscrub Finer Uplands**
        - (2) **Elevation - 3700-4500 ft - 041XESG30 Semi-Desert Grassland Finer Uplands**
        - (3) **Elevation - 4500-6000 ft - 070BESG31 Madrean Woodland Finer Uplands**
        - (4) **Elevation - >6000 ft - 070BESG32 Temperate Forest Finer Uplands**