

Major Land Resource Area 042A

Trans-Pecos Mountains, Plateaus, and Basins

Accessed: 06/20/2026

Ecological site group keys

MLRA 42A

I. Additional water

A. Perennial water ... 042AESG09 – Riparian

B. Ephemeral water

1 Subsurface EC>4 ... 042AESG10 – Saline Bottoms

2 Subsurface EC<4

i. Sand >50% & clay <25% for surface and subsurface ... 042AESG13 – Sandy Bottoms

ii. Sand <50% or clay >25% for surface and subsurface ... 042AESG01 – Bottoms

II. Uplands

A. >75% bedrock outcrop ... 042AESG08 – Outcrops

B. <75% bedrock outcrop

1 Surface SAR>8 ... 042AESG11 – Saline Hills

2 Surface SAR<8

i. Gypsum >5% surface or >10% subsurface ... 042AESG06 – Gypsum

ii. Gypsum <5% surface and <10% subsurface

a. Subsurface EC>8 or surface EC>4 ... 042AESG11 – Saline Hills

b. Subsurface EC<8 & surface EC<4

1) EC>1.5 surface or >2 subsurface ... 042AESG12 – Saline Uplands

2) EC<1.5 surface & <2 subsurface

a) Slope >35% & >40% surface rock ... 042AESG02 – Breaks

b) Slope <35% or <40% surface rock

(1) Depth <30cm ... 042AESG16 – Very Shallow

(2) Depth 30-55 cm ... 042AESG15 – Shallow

(3) Depth >55cm

(a) Rock >30% surface or >30% subsurface ... 042AESG04 – Deep Rocky

(b) Rock <30% surface & <30% subsurface

(1) Clay >30% surface or >35% subsurface ... 042AESG03 – Clay Uplands

(2) Clay <30% surface & <35% subsurface

(a) Sand >75% or texture is loamy sand or sandier in surface & subsurface ... 042AESG14

– Sandy Uplands

(b) Sand <75% & texture is sandy loam or finer in surface & subsurface

(1) Clay <20% or texture is sandy loam or sandier in surface ... 042AESG07 –

Loamy Uplands

(2) Clay >20% & texture is sandy clay loam or finer in surface ... 042AESG05 –

Finer Uplands

National Park Service

I. Additional water

A. Perennial water - 041XESG09

B. Ephemeral water

1 Subsurface EC >4 - 040XESG10 Saline Bottoms

2 Subsurface EC <4

i. Sand >50% & clay <25% for surface and subsurface - 040XESG13 Sandy Bottoms

ii. Sand <50% or clay >25% for surface and subsurface - 040XESG01 Bottoms

II. Uplands

A. Surface SAR >8 - 041XESG62 Thornscrub Saline Hills

B. Surface SAR <8

1 Gypsum >5% surface or >10% subsurface

i. Elevation - <2500 ft - 083BESG54 Gypsum Desert

ii. Elevation - 2500-3700 ft ... 042AESG33 – Gypsum Thornscrub

iii. Elevation - 3700-4500 ft - 042BESG55 Gypsum Semi-Desert Grassland

iv. Elevation - 4500-6000 ft ... 042AESG69 – Gypsum Madrean Woodland

2 Gypsum <5% surface or <10% subsurface

i. Subsurface EC >8 or surface EC >4 - 041XESG62 - Thornscrub Saline Hills

ii. Subsurface EC <8 and surface EC <4

a. EC >1.5 surface or >2 subsurface

1) Elevation - <2500 ft - 040XESG58 Desert Saline Uplands

2) Elevation - 2500-3700 ft - 041XESG39 Thornscrub Saline Uplands

3) Elevation - 3700-4500 ft - 041XESG65 Semi-Desert Grassland Saline Uplands

4) 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

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 ft - 040XESG51 Desert Clay Uplands
- (2) Elevation - 2500-3700 ft - 040XESG21 Thornscrub Clay Uplands
- (3) Elevation - 3700-4500 ft - 041XESG22 Semi-Desert Grassland Clay Uplands
- (4) Elevation - 4500-6000 ft - 038XESG23 Madrean Woodland Clay Uplands
- (5) 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

(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