

# Major Land Resource Area 048A

## Southern Rocky Mountains

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### Ecological site group keys

#### MLRA 48A ESGs - Curtis strawman

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##### I. Aquic Moisture Regime

###### A. Cryic Temperature Regime

- 1 Mineral Soil - 117 soil components ... ESG048A01 – Aquic Cryic Mineral
- 2 Organic Soil - 43 soil components ... ESG048A02 – Aquic Cryic Organic

###### B. Frigid Temperature Regime - 48 soil components ... ESG048A03 – Aquic Frigid

##### II. Udic Moisture Regime

###### A. Pergelic Temperature Regime - 13 soil components ... ESG048A04 – Udic Pergelic

###### B. Cryic Temperature Regime

- 1 Sandy Surface Texture - 24 soil components ... ESG048A05 – Udic Cryic Sandy
- 2 Loamy Surface Texture
  - i. No coarse fragments on the surface - 764 soil components ... ESG048A06 – Udic Cryic Loamy
  - ii. Gravelly Surface - 450 soil components ... ESG048A07 – Udic Cryic Gravelly
  - iii. Coarse fragments larger than gravel on the surface - 699 soil components ... ESG048A08 – Udic Cryic Stony

###### C. Frigid Temperature Regime - 372 soil components ... ESG048A09 – Udic Frigid

##### III. Ustic Moisture Regime

###### A. Cryic Temperature Regime

- 1 No coarse fragments on the surface - 187 soil components ... ESG048A10 – Ustic Cryic
- 2 Coarse fragments on the surface - 174 soil components ... ESG048A11 – Ustic Cryic Gravelly

###### B. Frigid Temperature Regime

- 1 No coarse fragments on the surface - 497 soil components ... ESG048A12 – Ustic Frigid
- 2 Coarse fragments on the surface - 708 soil components ... ESG048A13 – Ustic Frigid Gravelly

###### C. Mesic Temperature Regime - 87 soil components ... ESG048A14 – Ustic Mesic

##### IV. Aridic Moisture Regime

###### A. Frigid Temperature Regime - 74 soil components ... ESG048A15 – Aridic Frigid

###### B. Mesic Temperature Regime - 38 soil components ... ESG048A16 – Aridic Mesic

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#### MLRA 48A ESGs - Travis strawman

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##### I. Additional water

###### A. Perennial water - 109 soil components ... ESG048A17 – Riparian

###### B. Ephemeral water

- 1 Subsurface EC >4 - 28 soil components ... ESG048A18 – Saline Bottoms

## 2 Subsurface EC <4

- i. Sand >50% & Clay <25% for surface and subsurface - 9 soil components ... ESG048A19 – Sandy Bottoms
- ii. Sand <50% & Clay >25% for surface and subsurface - 89 soil components ... ESG048A20 – Bottoms

## II. Uplands

A. >75% bedrock outcrop - 527 soil components ... ESG048A21 – Outcrops

B. <75% bedrock outcrop

1 Surface SAR >8, or Subsurface EC >8, or Surface EC >4 - 93 soil components ... ESG048A22 – Saline Hills

2 Surface SAR <8, or Subsurface EC <8, or Surface EC <4

i. Gypsum >5% surface or >10% subsurface - 27 soil components ... ESG048A23 – Gypsum

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

a. EC >1.5 surface or >2 subsurface - 42 soil components ... ESG048A24 – Saline Uplands

b. EC <1.5 surface or <2 subsurface

1) slope >35% & >40% surface rock - 34 soil components ... ESG048A25 – Breaks

2) slope <35% or <40% surface rock

a) Depth <30cm - 1211 soil components ... ESG048A26 – Very Shallow

b) depth: 30-55cm - 717 soil components ... ESG048A27 – Shallow

c) depth >55cm

(1) Rock >30% surface or >30% subsurface - 628 soil components ... ESG048A28 – Deep Rocky

(2) Rock <30% surface and <30% subsurface

(a) Clay >30% surface or >35% subsurface - 655 soil components ... ESG048A29 – Clay Uplands

(b) Clay <30% surface and <35% subsurface

(1) sand >75% or texture is Loamy Sand or sandier in surface & subsurface - 21 soil components ... ESG048A30 – Sandy Uplands

(2) sand <75% or texture is Loamy Fine Sand or finer in surface & subsurface

(a) Clay <20% or texture is Sandy Loam or sandier in surface - 993 soil components ... ESG048A31 – Loamy Uplands

(b) Clay >20% or texture is Fine Sandy Loam or finer in surface - 977 soil components ... ESG048A32 – Finer Uplands

## 3rd Iteration

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### I. Additional water

A. Perennial water

1 Mineral soil surface - 68 soil components ... ESG048A33 – Mineral Riparian

2 Organic soil surface - 40 soil components ... ESG048A34 – Organic Riparian

B. Ephemeral water

1 Subsurface EC >4 - 28 soil components ... ESG048A18 – Saline Bottoms

2 Subsurface EC <4 - 98 soil components ... ESG048A20 – Bottoms

### II. Uplands

A. >75% bedrock outcrop - 527 soil components ... ESG048A21 – Outcrops

B. <75% bedrock outcrop

- 1 Surface SAR >8, subsurface EC >8, or surface EC >4, and soil moisture regime udic or ustic - 64 soil components ... ESG048A22 – Saline Hills
- 2 (Gypsum >5% surface or >10% subsurface) OR (surface SAR >8 or subsurface EC>8 or surface EC>4 AND soil moisture regime is aridic) - 56 soil components ... ESG048A35 – Arid/Gypsic Saline Hills
- 3 Gypsum <5% surface, gypsum <10% subsurface, surface SAR <8, subsurface EC <8, and surface EC <4.
  - i. EC>1.5 surface or >2 subsurface - 42 soil components ... ESG048A24 – Saline Uplands
  - ii. EC<1.5 surface or <2 subsurface
    - a. slope >35% & >40% surface rock AND soil moisture regime of Udic or Ustic - 34 soil components ... ESG048A25 – Breaks
    - b. Depth <30 cm AND soil moisture regime of Udic or Ustic - 1170 soil components ... ESG048A26 – Very Shallow
    - c. Depth: 30-55 cm AND soil moisture regime of Udic or Ustic - 694 soil components ... ESG048A27 – Shallow
    - d. Rock >30% surface or >30% subsurface AND soil moisture regime of Udic or Ustic - 621 soil components ... ESG048A28 – Deep Rocky
    - e. Slope, rock, or depth meeting one of the four criteria above, but with an Aridic soil moisture regime - 71 soil components ... ESG048A36 – Aridic Shallow or Rocky
    - f. Soil not steep, rocky, or shallow
      - 1) Clay >30% surface or >35% subsurface AND Udic soil moisture regime - 216 soil components ... ESG048A37 – Udic Clay Uplands
      - 2) Clay >30% surface or >35% subsurface AND Ustic soil moisture regime - 370 soil components ... ESG048A38 – Ustic Clay Uplands
      - 3) Clay >30% surface or >35% subsurface AND Aridic soil moisture regime - 69 soil components ... ESG048A39 – Aridic Clay Uplands
      - 4) Clay >30% surface or >35% subsurface
        - a) sand >75% or texture is loamy sand or sandier in surface & subsurface - 21 soil components ... ESG048A30 – Sandy Uplands
        - b) sand <75% or texture is Loamy Fine Sand or finer in surface & subsurface
          - (1) Clay <20% or texture is Sandy Loam or sandier in surface - 993 soil components ... ESG048A31 – Loamy Uplands
          - (2) Clay >20% or texture is Fine Sandy Loam or finer in surface AND Udic soil moisture regime - 411 soil components ... ESG048A40 – Udic Finer Uplands
          - (3) Clay >20% or texture is Fine Sandy Loam or finer in surface AND Ustic soil moisture regime - 343 soil components ... ESG048A41 – Ustic Finer Uplands
          - (4) Clay >20% or texture is Fine Sandy Loam or finer in surface AND Aridic soil moisture regime - 96 soil components ... ESG048A42 – Aridic Finer Uplands