# Major Land Resource Area 035X Colorado Plateau

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# **Ecological site group keys**

#### 35X02 Western Colorado Plateau LRU

- I. North Slope of the Mogollon Rim (A)
  - A. Site parent material is limestone or dolomite, or soil is loamy.
    - 1 Site soils are ustic aridic or within a 10-14" precipitation zone.
      - i. Site is and/or located in a wash. ... DX035X02AESG01 North Slope of the Mogollon Rim Ustic Aridic Limestone or Loamy Bottoms
      - ii. Site is and/or located in an upland with slopes <15%. ... DX035X02AESG02 North Slope of the Mogollon Rim Ustic Aridic Limestone or Loamy Upland
      - iii. Site is and/or located on a cliff with slopes >50%. ... DX035X02AESG03 North Slope of the Mogollon Rim Ustic Aridic Limestone or Loamy Cliffs
    - 2 Site soils are aridic ustic or within a 14-18" precipitation zone.
      - i. Site is and/or located in an upland with slopes <15%.
    - 3 Site soils are typic aridic or within a 6-10" precipitation zone.
      - i. Site is and/or located in an upland with slopes <15%. ... DX035X02AESG06 North Slope of the Mogollon Rim Aridic Ustic Limestone or Loamy Upland
  - B. Site parent material is sandstone or soil is a sandy loam.
    - 1 Site soils are ustic aridic or within a 10-14" precipitation zone.
      - i. Site is and/or located in an upland with slopes <15%. ... DX035X02AESG07 North Slope of the Mogollon Rim Ustic Aridic Sandstone or Sandy Loam Upland
    - 2 Site soils are aridic ustic or within a 14-18" precipitation zone.
      - i. Site is and/or located in an upland with slopes <15%. ... DX035X02AESG08 North Slope of the Mogollon Rim Aridic Ustic Sandstone or Sandy Loam Upland.
  - C. Soil is basalt, shale, or clayey.
    - 1 Site soils are ustic aridic or within a 10-14" precipitation zone.
      - i. Site is and/or located in a wash. ... DX035X02AESG09 North Slope of the Mogollon Rim Ustic Aridic Clayey Wash
      - ii. Site is and/or located in an upland with slopes <15%. ... DX035X02AESG10 North Slope of the Mogollon Rim Ustic Aridic Clayey Upland
    - 2 Site soils are aridic ustic or within a 14-18" precipitation zone.
      - i. Site is and/or located in an upland with slopes <15%.
- II. Coconino Plateau (B)
  - A. Site parent material is limestone or dolomite, or soil is loamy.
    - 1 Site soils are ustic aridic or within a 10-14" precipitation zone.
      - i. Site is and/or located in a wash. ... DX035X02BESG01 Coconino Plateau Ustic Aridic Limestone or Loamy Bottoms
      - ii. Site is and/or located in an upland with slopes <15%. ... DX035X02BESG02 Coconino Plateau Ustic Aridic Limestone or Loamy Upland
      - iii. Site is and/or located on a cliff with slopes >50%. ... DX035X02BESG03 Coconino Plateau Ustic

- Aridic Limestone or Loamy Cliffs
- 2 Site soils are aridic ustic or within a 14-18" precipitation zone.
  - i. Site is and/or located in an upland with slopes <15%. ... DX035X02BESG04 Coconino Plateau Aridic Ustic Limestone or Loamy Upland
- B. Soil at site is sandy.
  - 1 Site is and/or located in an upland with slopes <15%. ... DX035X02BESG06 Coconino Plateau Ustic Aridic Sandy Upland
- C. Soil at site is Clayey.
  - 1 Site soils are ustic aridic or within a 10-14" precipitation zone.
    - i. Site is and/or located in a wash. ... DX035X02BESG07 Coconino Plateau Ustic Aridic Clayey Wash
    - ii. Site is and/or located in an upland with slopes <15%. ... DX035X02BESG08 Coconino Plateau Ustic Aridic Clayey Upland
  - 2 Site soils are aridic ustic or within a 14-18" precipitation zone.
    - i. Site is and/or located in an upland with slopes <15%. ... DX035X02BESG09 Coconino Plateau Aridic Ustic Clayey Upland
- D. Site parent material is volcanic.
  - 1 Site is and/or located on a hill with slopes >15%. ... DX035X02BESG10 Coconino Plateau Ustic Aridic Volcanic Hills
- E. Site parent material is sandstone or soil is a sandy loam.
  - 1 Site is and/or located in an upland with slopes <15%. ... DX035X02BESG11 Coconino Plateau Ustic Aridic Sandstone or Sandy Loam Upland
- III. Coconino Transition (C)
  - A. Site parent material is limestone or dolomite, or soil is loamy.
    - 1 Site soils are ustic aridic or within a 10-14" precipitation zone.
      - i. Site is and/or located in a wash. ... DX035X02CESG01 Coconino Transition Ustic Aridic Limestone or Loamy Wash
      - ii. Site is and/or located in an upland with slopes <15%. ... DX035X02CESG02 Coconino Transition Ustic Aridic Limestone or Loamy Upland
      - iii. Site is and/or located on a hill with slopes >15%. ... DX035X02CESG03 Coconino Transition Ustic Aridic Limestone or Loamy Hills
    - 2 Site soils are aridic ustic or within a 13-17" precipitation zone.
      - i. Site is and/or located in an upland with slopes <15%. ... DX035X02CESG04 Coconino Transition Aridic Ustic Limestone or Loamy Upland
      - ii. Site is and/or located on a hill with slopes >15%. ... DX035X02CESG05 Coconino Transition Aridic Ustic Limestone or Loamy Hills
      - iii. Site is and/or located on a cliff with slopes >50%. ... DX035X02CESG06 Coconino Transition Aridic Ustic Limestone or Loamy Cliffs
    - 3 Site soils are aridic ustic or within a 14-18" precipitation zone.
      - i. Site is and/or located in a wash. ... DX035X02CESG07 Coconino Transition Aridic Ustic Limestone or Loamy Bottoms
      - ii. Site is and/or located in an upland with slopes <15%. ... DX035X02CESG08 Coconino Transition Aridic Ustic Limestone or Loamy Upland
      - iii. Site is and/or located on a hill with slopes >15%. ... DX035X02CESG09 Coconino Transition Aridic Ustic Limestone or Loamy Hills
      - iv. Site is and/or located on a cliff with slopes >50%. ... DX035X02CESG10 Coconino Transition Aridic Ustic Limestone or Loamy Cliffs
  - B. Soil at site is sandy.
    - 1 Site soils are ustic aridic or within a 10-14" precipitation zone.

- i. Site is and/or located in an upland with slopes <15%. ... DX035X02CESG11 Coconino Transition Ustic Aridic Sandstone or Sandy Upland
- 2 Site soils are aridic ustic or within a 14-18" precipitation zone.
  - i. Site is and/or located in an upland with slopes <15%. ... DX035X02CESG12 Coconino Transition Aridic Ustic Sandstone or Sandy Upland
- C. Soil at site is basalt or clayey.
  - 1 Site soils are ustic aridic or within a 10-14" precipitation zone.
    - i. Site is and/or located in a wash. ... DX035X02CESG13 Coconino Transition Ustic Aridic Clayey Wash
    - ii. Site is and/or located in an upland with slopes <15%. ... DX035X02CESG14 Coconino Transition Ustic Aridic Clayey Upland
    - iii. Site is and/or located on a hill with slopes >15%. ... DX035X02CESG15 Coconino Transition Ustic Aridic Basalt Hills
  - 2 Site soils are aridic ustic or within a 14-18" precipitation zone.
    - i. Site is and/or located in an upland with slopes <15%. ... DX035X02CESG16 Coconino Transition Aridic Ustic Basalt or Clayey Upland

#### IV. Grand Canyon (D)

- A. Site parent material is limestone or dolomite, or soil is loamy.
  - 1 Site soils are typic aridic or within a 6-10" precipitation zone.
    - i. Site is and/or located in an upland with slopes <15%. ... DX035X02DESG01 Grand Canyon Typic Aridic Limestone or Loamy Upland
    - ii. Slopes exceed 15% ... DX035X02DESG20 Grand Canyon Typic Aridic Limestone Hills
  - 2 Site soils are ustic aridic or within a 10-14" precipitation zone.
    - i. Site is and/or located in an upland with slopes <15%. ... DX035X02DESG02 Grand Canyon Ustic Aridic Limestone or Loamy Upland
    - ii. Site is and/or located on a hill with slopes >15%. ... DX035X02DESG03 Grand Canyon Ustic Aridic Limestone or Loamy Hills
  - 3 Site soils are aridic ustic or within a 13-17" precipitation zone.
    - i. Site is and/or located in an upland with slopes <15%. ... DX035X02DESG04 Grand Canyon Aridic Ustic Limestone or Loamy Upland
    - ii. Site is and/or located on a hill with slopes >15%. ... DX035X02DESG05 Grand Canyon Aridic Ustic
    - Limestone or Loamy Hills
    - iii. Site is and/or located in an upland with slopes <15%. ... DX035X02DESG06 Grand Canyon Aridic Ustic Limestone or Loamy Cliffs
  - 4 Site soils are within a 17-25" precipitation zone.
    - i. Site is and/or located in an upland with slopes <15%. ... DX035X02DESG07 Grand Canyon Typic Ustic Limestone or Loamy Upland
- B. Site parent material is volcanic or clayey.
  - 1 Site soils are ustic aridic or within a 10-14" precipitation zone.
    - i. Site is and/or located in a wash. ... DX035X02DESG08 Grand Canyon Ustic Aridic Clayey Bottoms
    - ii. Site is and/or located in an upland with slopes <15%. ... DX035X02DESG09 Grand Canyon Ustic Aridic Volcanic or Clayey Upland
    - iii. Site is and/or located on a hill with slopes >15%. ... DX035X02DESG10 Grand Canyon Ustic Aridic Volcanic or Clayey Hills
  - 2 [Criteria]
    - i. Site is and/or located in an upland with slopes <15%. ... DX035X02DESG11 Grand Canyon Aridic Ustic Volcanic or Clayey Upland
  - 3 site is typic aridic or precipitation is within 6 to 10 inch range

- i. site is volcanic or clayey, typic aridic, and slopes exceed 15% ... DX035X02DESG18 Grand Canyon
- Typic Aridic Volcanic or Clayey Hills
- ii. Upland, slopes are ≤ 15% ... DX035X02DESG24 Grand Canyon Typic Aridic Volcanic or Clayey Upland
- C. Site parent material is sandstone or soil is a sandy loam.
  - 1 Site soils are typic aridic or within a 6-10" precipitation zone.
    - i. Site is and/or located in an upland with slopes <15%. ... DX035X02DESG12 Grand Canyon Typic Aridic Sandstone or Sandy Loam Upland
    - ii. Site is and/or located on a hill with slopes >15%. ... DX035X02DESG13 Grand Canyon Typic Aridic Sandstone or Sandy Loam Hills
  - 2 Site soils are ustic aridic or within a 10-14" precipitation zone.
    - i. Site is and/or located in an upland with slopes <15%. ... DX035X02DESG14 Grand Canyon Ustic Aridic Sandstone or Sandy Loam Upland
  - 3 Site soils are aridic ustic or within a 13-17" precipitation zone.
    - i. Site is and/or located in an upland with slopes <15%. ... DX035X02DESG15 Grand Canyon Aridic Ustic Sandstone or Sandy Loam Upland

# D. Sandy

- 1 Ustic Aridic
  - i. Sandy bottoms ustic aridic ... DX035X02DESG16 Grand Canyon Ustic Aridic Sandy Bottoms
- 2 Typic Aridic
  - i. typic aridic sandy bottoms ... DX035X02DESG17 Grand Canyon Typic Aridic Sandy Bottoms

### E. Limy

- 1 uplands slopes ≤ 15%
  - i. typic aridic limy uplands ... DX035X02DESG21 Grand Canyon Typic Aridic Limy Upland
- 2 Hillslopes ≥ 15% typic aridic
  - i. [Criteria] ... DX035X02DESG22 Grand Canyon Typic Aridic Limy Hills

### F. Gypsum

- 1 Gypsum Uplands, Slopes ≤ 15%
  - i. Gypsum Uplands, slopes ≤ 15%, typic aridic ... DX035X02DESG23 Grand Canyon Typic Aridic Gypsic Upland
- 2 Gypsum Hills, Slopes ≥ 15%
  - i. Gypsum Hills, slopes ≥ 15%, typic aridic ... DX035X02DESG19 Grand Canyon Typic Aridic Gypsic Hills

## V. Arizona Strip (E)

- A. Site soils are gypsiferous
  - 1 Soils are typic aridic, or precipitation is within the range of 7 to 11 inches.
    - i. Site is and/or located in an upland with slopes <15%. ... DX035X02EESG01 Arizona Strip Typic Aridic Gypsum Upland
    - ii. Site is and/or located in an upland with slopes >15%. ... DX035X02EESG02 Arizona Strip Typic Aridic Gypsum Hills
  - 2 Soils are ustic aridic, or precipitation is within the range of 10 to 14 inches.
    - i. Site is and/or located in an upland with slopes <15%. ... DX035X02EESG03 Arizona Strip Ustic Aridic Gypsum Upland
    - ii. Site is and/or located in an upland with slopes >15%. ... DX035X02EESG04 Arizona Strip Ustic Aridic Gypsum Hills
- B. Site is sandy.
  - 1 Soils are typic aridic, or precipitation is within the range of 6 to 10 inches.
    - i. Site is and/or located in an upland with slopes <15%. ... DX035X02EESG05 Arizona Strip Typic

- Aridic Sandy Upland
- 2 Soils are Ustic Aridic, or precipitation is within a range of 10 to 14 inches
  - i. Site is and/or located in an upland with slopes <15%. ... DX035X02EESG06 Arizona Strip Ustic Aridic Sandy Upland
- C. Site parent material is sandstone or sandy loam.
  - 1 Soil are typic aridic, or precipitation is within the range of 7 to 11 inches.
    - i. Site is and/or located in an upland with slopes <15%. ... DX035X02EESG07 Arizona Strip Typic Aridic Sandstone or Sandy Loam Upland
  - 2 Soils are ustic aridic, or precipitation is within the range of 10 to 14 inches.
    - i. Site is and/or located in an upland with slopes <15%. ... DX035X02EESG08 Arizona Strip Ustic Aridic Sandstone or Sandy Loam Upland
  - 3 moisture is aridic ustic or precipitation is 13 to 17 inches annually
    - i. upland, slopes are ≤ 15% ... DX035X02EESG23 Arizona Strip Aridic Ustic Sandstone or Sandy Loam Upland
- D. Site parent material is basalt or clayey
  - 1 Soils are typic aridic, or precipitation is within the range of 7 to 11 inches.
    - i. Site is and/or located in a wash. ... DX035X02EESG09 Arizona Strip Typic Aridic Clay Loam Bottoms
    - ii. Site is and/or located in an upland with slopes <15%. ... DX035X02EESG10 Arizona Strip Typic Aridic Basalt or Clay Loam Upland
  - 2 Soils are ustic aridic or precipitation is within the range of 10 to 14 inches.
    - i. Site is and/or located in an upland with slopes <15%. ... DX035X02EESG11 Arizona Strip Ustic Aridic Basalt or Clay Loam Upland
  - 3 Soils are ustic aridic, or precipitation is within the range of 13 to 17 inches.
    - i. Site is and/or located in an upland with slopes <15%. ... DX035X02EESG13 Arizona Strip Aridic Ustic Clayey or Clay Loam Upland
    - ii. Site is and/or located in an upland with slopes >15%. ... DX035X02EESG14 Arizona Strip Aridic Ustic Basalt Slopes
- E. Site parent material is limestone or loamy.
  - 1 Soils are typic aridic, or precipitation is within the range of 7 to 11 inches.
    - i. Site is and/or located in an upland with slopes <15%. ... DX035X02EESG15 Arizona Strip Typic Aridic Limestone or Loamy Upland
    - ii. Site is and/or located in an upland with slopes >15%. ... DX035X02EESG16 Arizona Strip Typic Aridic Limestone Slopes
  - 2 Soils are ustic aridic, or precipitation is within the range of 10 to 14 inches.
    - i. Site is and/or located in a wash. ... DX035X02EESG17 Arizona Strip Ustic Aridic Limestone or Loamy Bottoms
    - ii. Site is and/or located in an upland with slopes <15%. ... DX035X02EESG18 Arizona Strip Ustic Aridic Limestone or Loamy Upland Blackbrush
    - iii. Site is and/or located in an upland with slopes >15%. ... DX035X02EESG19 Arizona Strip Ustic Aridic Limestone or Loamy Slopes
  - 3 Soils are aridic ustic, or precipitation is within the range of 13 to 17 inches.
    - i. Site is and/or located in an upland with slopes <15%. ... DX035X02EESG20 Arizona Strip Aridic Ustic Limestone or Loamy Upland
    - ii. Site is and/or located in an upland with slopes >15%. ... DX035X02EESG21 Arizona Strip Aridic Ustic Limestone or Loamy Slopes
- F. Blackbrush (coleogyne ramosissima) is present on site
  - 1 Parent Material is not basalt. ... Dx035X02EESG22 Arizona Strip- Ustic Aridic- Limestone or loamy upland- Blackbrush

2 Parent material is basalt. ... DX035X02EESG12 – Arizona Strip - Ustic Aridic - Basalt or Clay Loam Slopes- Blackbrush

## VI. Kaibab Plateau (F)

- A. Site soils are gypsiferous.
  - 1 Soils are ustic aridic or precipitation is within the range of 10 to 14 inches.
    - i. Site is and/or located in an upland with slopes >15%. ... DX035X02FESG01 Kaibab Plateau Ustic Aridic Gypsum Hills
- B. Site parent material is shale or clayey.
  - 1 Soils are ustic aridic, or precipitation is within the range of 10 to 14 inches.
    - i. Site is and/or located in an upland with slopes <15%. ... DX035X02FESG02 Kaibab Plateau Ustic Aridic Clay Loam or Shale Upland
- C. Site parent material is limestone or loamy.
  - 1 Soils are ustic aridic, or precipitation is within the range of 10 to 14 inches.
    - i. Site is and/or located in a wash. ... DX035X02FESG03 Kaibab Plateau Ustic Aridic Limestone or Loamy Bottoms
    - ii. Site is and/or located in an upland with slopes <15%. ... DX035X02FESG04 Kaibab Plateau Ustic Aridic Limestone or Loamy Upland
    - iii. Site is and/or located in an upland with slopes >15%. ... DX035X02FESG05 Kaibab Plateau Ustic Aridic Limestone or Loamy Slopes
  - 2 Soils are aridic ustic, or precipitation is within the range of 13 to 17 inches.
    - i. Site is and/or located in an upland with slopes <15%. ... DX035X02FESG06 Kaibab Plateau Aridic Ustic Limestone or Loamy Upland
    - ii. Site is and/or located in an upland with slopes >15%. ... DX035X02FESG07 Kaibab Plateau Aridic Ustic Limestone or Loamy Slopes
  - 3 Soils are typic ustic, or precipitation is within the range of 17 to 25 inches.
    - i. Site is and/or located in an upland with slopes <15%. ... DX035X02FESG08 Kaibab Plateau Xeric Udic Limestone or Loamy Upland
  - 4 Soils are ustic udic, or precipitation is within the range of 25 to 33 inches.
    - i. Site is and/or located in an upland with slopes <15%. ... DX035X02FESG09 Kaibab Plateau Typic Udic Limestone or Loamy Upland

# VII. Marble Canyon (G)

- A. Soil at site is colluvial.
  - 1 Site soils are typic aridic or within a 6-10" precipitation zone.
    - i. Site is and/or located in an upland with slopes <15%. ... DX035X02GESG01 Marble Canyon Typic Aridic Upland Colluvial
- B. Soil at site is saline.
  - 1 Site soils are typic aridic or within a 6-10" precipitation zone.
    - i. Site is and/or located in an upland with slopes <15%. ... DX035X02GESG02 Marble Canyon Typic Aridic Saline Upland
- E. Soil at site is sandy.
  - 1 Site soils are typic aridic or within a 6-10" precipitation zone.
    - i. Site is and/or located in an upland with slopes <15%. ... DX035X02GESG06 Marble Canyon Typic Aridic Sandy Upland
  - 2 Site soils are within a 7-11" precipitation zone.
    - i. Site is and/or located in an upland with slopes <15%. ... DX035X02GESG08 Marble Canyon Typic Aridic Sandy Upland 7-11" p.z.
- F. Soil at site is sedimentary or loamy.
  - 1 Site soils are typic aridic or within a 6-10" precipitation zone.

- i. Site is and/or located in an upland with slopes <15%. ... DX035X02GESG10 Marble Canyon Typic Aridic Limestone or Loamy Upland
- ii. Site is and/or located on a hill with slopes >15%. ... DX035X02GESG11 Marble Canyon Typic Aridic Limestone or Loamy Cliffs
- 2 Site soils are within a 7-11" precipitation zone.
  - i. Site is and/or located in an upland with slopes <15%. ... DX035X02GESG13 Marble Canyon Typic Aridic Limestone or Loamy Upland 7-11" p.z.
- H. Site parent material is sandstone or soil is a sandy loam.
  - 1 Site soils are typic aridic or within a 6-10" precipitation zone.
    - i. Site is and/or located in an upland with slopes <15%. ... DX035X02GESG20 Marble Canyon Typic Aridic Sandstone or Sandy Loam Upland
  - 2 Site soils are within a 7-11" precipitation zone.
    - i. Site is and/or located in an upland with slopes <15%. ... DX035X02GESG21 Marble Canyon Typic Aridic Sandstone or Sandy Loam Upland 7-11" p.z.

# F. site is gypsic

- 1 site soils are typic aridic or within 6 to 10 inch precipitation range
  - i. site slopes are upland, slopes ≤ 15% ... DX035X02GESG04 Marble Canyon Typic Aridic Gypsum Upland
  - ii. site slopes are hills, slopes are  $\geq$  15% ... DX035X02GESG05 Marble Canyon Typic Aridic Gypsum Hills

#### G. shale

- 1 soils are in the typic aridic or within the 6 to 10 inch annual precipitation range
  - i. upland, slopes are ≤ 15% ... DX035X02GESG18 Marble Canyon Typic Aridic Shale or Clayey Upland
  - ii. bottoms ... DX035X02GESG19 Marble Canyon Typic Aridic Shale or Clayey Bottoms