## Major Land Resource Area 043C Blue and Seven Devils Mountains

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## **Ecological site keys**

## **MLRA 43C**

- I. Site is rangeland (or juniper woodland)
  - A. Temperature regime is cryic
    - 1 Temperature regime is cryic, moisture regime is xeric or udic ... R043CY801OR Cold Dry Subalpine Grasslands (FEVI)
  - B. Temperature regime is frigid
    - 1 Soil has an abrupt textural change within 10 inches of the surface (Well-developed claypan) ... R043CY808OR Claypan (ARAR8/FEID-PSSPS)
    - 2 Not as above
      - i. Soils are very shallow over lithic bedrock
        - a. Soils have a maritime climate with damaging winter frosts ... R043CY807OR Scabland (PSSPS-POSE-DAUN)
        - b. Soils have a continental climate ... R043CY806OR Very Shallow Scabland (ARRI2/PSSPS-POSE)
      - ii. Not as above
        - a. Soils are generally shallow or very shallow over fractured bedrock interspersed with areas of rock outcrop. Soils may also have lower Ca/Mg ratios ... R043CY805OR Mountain Rockland (JUOC/CELE3/FEID)
        - b. Not as above
          - 1) Soils have a maritime climate with damaging winter frosts ... R043CY802OR Cool foothills and Mountains (FEID-KOMA-PSSPS)
          - 2) Soils have a continental climate ... R043CY804OR Cool Mountain Bunchgrass (ARTRV/FEID)
  - C. Temperature regime is mesic or frigid near mesic
    - 1 Soils occur on foothills or mountains ... R043CY809OR Warm Foothills and Mountains (PSSPS-POSE)
    - 2 Soils occur in canyons on fans or alluvial benches ... R043CY810OR Open Canyon Slopes and Fans (PSSPS-SPCR)
- II. Site receives subsurface moisture from an adjacent stream, spring or seep
  - A. Water table recedes to < 30cm by mid summer
    - 1 Temperature regime is frigid or cryic, moisture regime is xeric or udic ... R043CY502OR Cool Moist Mountain Meadow (DECE/CAREX)
  - B. Water table remains at > 30cm during mid summer
    - 1 Valley gradient moderate, shrub/forested communities ... F043CY503OR Mountain Riparian Forest (PIEN/ALIN)
    - 2 Valley gradient very low or low, meadow communities ... R043CY501OR Cold Wet Mountain Meadow (CAREX)
- III. Site is forested
  - 1 Sites reside north of the West Fork of the Walla Walla River and north of the South Fork of the Wenaha River

and north of the Grand Ronde River, or east of the Snake River

- A. Site resides in mesic soil temperature regime and xeric soil moisture regime (meaning very warm, dry soil conditions) ... F043CY501WA Mesic, Xeric, Loamy Foothills and Canyons (Ponderosa Pine Warm Dry Shrub) Pinus ponderosa/Symphoricarpos albus
- B. Site resides in frigid soil temperature regime and udic soil moisture regime (meaning warm, moist soil conditions)
  - 1 Basalt geology
    - i. Mixed ash surface ... F043CY511WA Frigid, Dry-Udic, Loamy, Hills, and Canyons, Basalt, Mixed Ash (grand fir/moist herb)
    - ii. Ashy surface ... F043CY510WA Frigid, Dry-Udic, Loamy, Hills and Mountains, Basalt, Ashy surface (grand fir/moist herb)
  - 2 Other geology
    - i. Mixed ash surface ... F043CY512WA Frigid, Dry-Udic, Loamy, Hills, and Canyons, Mixed Ash (grand fir/moist herb)
    - ii. Ashy surface ... F043CY513WA Frigid, Dry-Udic, Loamy, Mountains, and Canyons, Ashy Surface (grand fir/moist herb)
- C. Site resides in the frigid soil temperature regime and xeric soil moisture regime (meaning warm, dry soil conditions)
  - 1 Warm-Frigid
    - i. Xeric...EX43CESG02 (Douglas-fir/shrub).
      - a) High water table ... F043CY507WA Warm-Frigid, Xeric Loamy, Hills and Plateaus, High WT (Douglas-fir/ warm dry shrub)
      - b) Not as above
        - 1 Basalt geology ... F043CY504WA Warm-Frigid, Xeric, Loamy, Basalt Mountains and Plateaus (Douglas-fir/warm dry shrub)
        - 2 Other geology
          - a. Granitic geology ... F043CY506WA Warm-Frigid, Xeric Loamy, Granitic, Mountains (Douglas-fir/ warm dry shrub)
          - b. Other geology (dominantly eolian deposits) ... F043CY505WA Warm-Frigid, Xeric, Loamy Eolian Hills and Plateaus (Douglas-fir/ warm dry shrub)
  - 2 Frigid or Cool-frigid
    - a. Frigid
      - i. Xeric...EX043CESG01 (grand fir/pinegrass)
        - a) Mixed ash surface ... F043CY508WA Frigid, Xeric, Loamy, Mountains and Plateaus, Mixed Ash Surface Grand fir/pinegrass
        - b) Ashy surface ... F043CY509WA Frigid, Xeric, Loamy Mountains and Plateaus, Ashy Surface Grand fir/pinegrass
      - ii. Moist-xeric ... F043CY503WA Frigid, Moist-Xeric Loamy, Canyons and Mountains (Grand fir/Moist Shrub)
    - b. Cool-frigid/dry-xeric ... F043CY502WA Cool-Frigid, Dry-Xeric, Loamy Mountains (Douglas-fir Cool Dry Grass)
- D. Site resides in the cryic soil temperature regime and the udic soil moisture regime (meaning cold, moist soil conditions)
  - 1 Warm-Cryic transition zone
    - a. Dry-udic ... F043CY514WA Cryic, Dry-Udic Mountains and Ridges (Subalpine Fir cold dry shrub)
    - b. Udic... EX43CESG04 (Subalpine Fir-Mountain Hemlock/ Cool Moist Shrub)
      - i. Basalt geology
        - a) Mixed ash surface ... F043CY517WA Warm-Cryic, Udic, Loamy, Mountains, and Uplands, Basalt, Mixed Ash (subalpine fir/cool moist shrub)

- b) Ashy surface ... F043CY516WA Warm-Cryic, Udic, Loamy, Mountains, and Plateaus, Basalt, Ashy Surface (subalpine fir/cool moist shrub)
- ii. Other geology
  - a) Mixed ash surface ... F043CY519WA Warm-Cryic, Udic, Loamy, Mountains, Mixed Ash (subalpine fir/cool moist shrub)
  - b) Ashy surface ... F043CY518WA Warm-Cryic, Udic, Loamy, Mountains, Ashy surface (subalpine fir/cool moist shrub)
- 2 Sites reside south of the West Fork of the Walla Walla River and south of the South Fork of the Wenaha River and south of the Grand Ronde River and west of the Snake River
  - A. Dry days: <45
    - 1 Temperature regime is cryic, moisture regime is udic. Commonly occurs on very high elevation forested backslopes ... F043CY601OR Cold Wet Conifer Mountains and Plateaus (ABLA/VASC-VAME)
    - 2 Temperature regime is frigid, moisture regime is udic. Commonly occurs on high elevation forested backslopes ... F043CY603OR Cool Wet Conifer Mountains and Plateaus (ABGR/VAME/LIBO)
  - B. Dry days: 45-60
    - 1 Temperature regime is frigid, moisture regime is xeric ... F043CY605OR Cool Moist Conifer Mountains and Plateaus (PSME-PIPO/CARU)
  - C. Dry days: 60-90
    - 1 Soil temperature regime is frigid, moisture regime is xeric
      - i. Soils typically have an AWC of greater than 1 inch in the upper ten inches ... F043CY607OR Cool Moist Conifer Foothills and Mountains (PIPO-PSME/SYAL)
      - ii. Not as above ... F043CY608OR Cool Dry Conifer Foothills and Mountains (PIPO/FEID-PSSPS)
    - ii. Soil temperature regime is mesic, moisture regime is xeric ... F043CY609OR Warm Dry Conifer Foothills and Mountains (PIPO-PSME/SYAL/CAGE)