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)