

Major Land Resource Area 043B

Central Rocky Mountains

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Ecological site keys

ARCHIVED: Key to Ecological Sites MLRA 43B Zone 1: 20+ M

- I. Site in a lowland position that receives significant additional moisture from runoff of adjacent slopes or from intermittent/perennial streams or a water table (HIGH Productivity Potential)
 - A. Site poorly drained with water table above surface part of growing season, Nebraska sedge, northern reedgrass, tufted hairgrass, and willows common species ... R043BY178WY – Wetland High Mountains
 - B. Site not as above
 - 1 Water table within rooting depth of herbaceous species (typically above 20”) during part of the growing season, tufted hairgrass, Nebraska sedge, shrubby cinquefoil, sedges, rushes, and willow common ... R043BY174WY – Subirrigated High Mountains
 - 2 Site receives periodic overflow from adjacent slopes, but without a water table within rooting depth of woody plants, and soil textures are loamy, serviceberry, silver sagebrush, slender wheatgrass, and basin wildrye common ... R043BY130WY – Overflow High Mountains
- II. Upland site that does not receive additional moisture as above
 - A. Soil depth very shallow (<10”), shallow (10-20”) OR moderately deep to deep (>20”) reacting like shallow soils due to root restrictive layer or on south and west facing slopes (LOW productivity potential)
 - 1 Soils very shallow (<10”), but may include areas of exposed bedrock and pockets of deep soil, often on steep (up to 55%) south and west facing slopes with VERY LOW productivity potential
 - i. Bedrock igneous or volcanic, three-tip sagebrush, antelope bitterbrush, and black sage common shrubs ... R043BY116WY – Igneous High Mountains
 - ii. Fractured bedrock of various types except igneous or volcanic, commonly on windswept ridges, bluebunch wheatgrass, Columbia needlegrass and a variety of shrub species dominate ... R043BY176WY – Very Shallow High Mountains
 - 2 Soils shallow (10-20”), but may include moderately deep to deep gravelly or cobbly soils, soils with a root restrictive layer, and/or south and west facing slopes that react like shallow soils, productivity potential is LOW
 - i. Coarse fragments common on surface and throughout profile (>35% by volume in top 20”), low sagebrush and bitterbrush common shrubs ... R043BY172WY – Stony High Mountains
 - ii. Soils without high amount of coarse fragments
 - a. Medium to moderately coarse textured soils over igneous or volcanic bedrock, bitterbrush and three-tip sagebrush common ... R043BY160WY – Shallow Igneous High Mountains
 - b. Very fine sandy loam to clay loam textured soils over various bedrock types (commonly limestone, siltstone, or shale), low sagebrush intermixed with big sagebrush ... R043BY162WY – Shallow Loamy High Mountains
 - B. Soil depth moderately deep to deep (>20”) without root restricting layer that inhibits the productivity potential
 - 1 Sites with a high volume of coarse fragments in top 20” (>35% by volume)
 - i. Site occurs in a variety of upland positions, boulders found in abundance on surface, bluebunch wheatgrass, Idaho fescue, spike fescue, bitterbrush, and big sage common, productivity high ... R043BY108WY – Coarse Upland High Mountains

- ii. Site occurs on steep south and west facing mountain slopes, bluebunch wheatgrass, Idaho fescue, and spike fescue dominant grasses, mountain mahogany common shrub ... R043BY170WY – Steep Stony High Mountains

2 Sites without high volume of coarse fragments

- i. Soil textures are heavy, slight to severe soil cracking in dry conditions low sagebrush and green rabbitbrush common shrubs ... R043BY110WY – Dense Clay High Mountains
- ii. Soils very fine sandy loams to clay loams, a good variety and even mix of grass species, mountain big sagebrush dominant shrub
 - a. Site occurs on steep north and east facing mountain slopes, mixed mountain shrub community often with aspen ... R043BY168WY – Steep Loamy High Mountains
 - b. Soils very fine sandy loams to clay loams, a good variety and even mix of grass species, mountain big sagebrush dominant shrub ... R043BY122WY – Loamy High Mountains