

Major Land Resource Area 043B

Central Rocky Mountains

Accessed: 04/19/2024

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