

Major Land Resource Area 043B

Central Rocky Mountains

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Ecological site keys

ARCHIVED: Key to Ecological Sites MLRA 43B Zone 6: 15-19 E

- 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 ... R043BY378WY – Wetland (WL) 15-19” Foothills and Mountains East Precipitation Zone
 - 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 ... R043BY374WY – Subirrigated (Sb) 15-19” Foothills and Mountains East Precipitation Zone
 - 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 ... R043BY330WY – Overflow (Ov) 15-19” Foothills and Mountains East Precipitation Zone
- 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 ... R043BY316WY – Igneous (Ig) 15-19” Foothills and Mountains East Precipitation Zone
 - 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 ... R043BY376WY – Very Shallow (VS) 15-19” Foothills and Mountains East Precipitation Zone
 - 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. Silty clays or heavier textured soils over clay shale bedrock, rhizomatous wheatgrasses, Idaho fescue, bluebunch wheatgrass ... R043BY358WY – Shallow Clayey (SwCy) 15-19” Foothills and Mountains East Precipitation Zone
 - ii. Site not as above
 - a. Fine sandy loams or coarser textured soils over sandstone or sandy shale, Columbia needlegrass, Idaho fescue & bluebunch wheatgrass dominant grass species on site ... R043BY366WY – Shallow Sandy (SwSy) 15-19” Foothills and Mountains East Precipitation Zone
 - b. Site not as above
 - 1) Medium to moderately coarse textured soils over igneous or volcanic bedrock, bitterbrush, black sage and three-tip sagebrush common ... R043BY360WY – Shallow Igneous (SwIg) 15-19” Foothills and Mountains East Precipitation Zone
 - 2) Very fine sandy loam to clay loam textured soils over various bedrock types (commonly

limestone, siltstone, or shale), black sagebrush or mountain mahogany intermixed with big sage ... R043BY362WY – Shallow Loamy (SwLy) 15-19" Foothills and Mountains East Precipitation Zone

- 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) Site occurs in a variety of upland positions, boulders found in abundance on surface, Columbia needlegrass, Idaho fescue, spike fescue, bitterbrush, and big sage, productivity less than others in group ... R043BY308WY – Coarse Upland (CU) 15-19" Foothills and Mountains East Precipitation Zone
 - 2 Sites without high volume of coarse fragments
 - i. Soil textures are heavy, slight to severe soil cracking in dry conditions. Soil textures range from silty clay through finer silty and sandy clay loams, soil cracking common during dry summer months, though not severe, big sage common shrub with a lot of Columbia needlegrass, Idaho fescue and rhizomatous wheatgrasses ... R043BY304WY – Clayey (Cy) 15-19" Foothills and Mountains East Precipitation Zone
 - ii. Site not as above
 - a. Soils fine sandy loams to loamy sands, light or dark colored, Columbia needlegrass and mountain brome abundant ... R043BY350WY – Sandy (Sy) 15-19" Foothills and Mountains East Precipitation Zone
 - b. Soils very fine sandy loams to clay loams, a good variety and even mix of grass species, mountain big sagebrush dominant shrub ... R043BY322WY – Loamy (Ly) 15-19" Foothills and Mountains East Precipitation Zone