

# Major Land Resource Area 043B

## Central Rocky Mountains

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### Ecological site keys

#### Pre-2010 Zone Key: Ecological Site Key MLRA 43B Zone 13:15-19NP

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- 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, water sedge, and willows common species ... R043BY478WY – Wetland (WL) 15-19" Northern Plains Precipitation Zone
  - B. Site not as above
    - 1 Site has a fluctuating water table, with water within the rooting depths of herbaceous or woody species for at least part of the growing season.
      - i. Water table within rooting depth of herbaceous species (typically above 20") during part of the growing season, tufted hairgrass, shrubby cinquefoil, sedges, rushes, and willows common ... R043BY474WY – Subirrigated (Sb) 15-19" Northern Plains Precipitation Zone
      - ii. Fluctuating Water table, within rooting depth of woody species (typically greater than 3 ft during part of the growing season) well drained soils; rhizomatous wheatgrasses, green needlegrass and cottonwoods are common ... R043BY428WY – Lowland (LL) 15-19" Northern Plains 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. Silver sagebrush, and basin wildrye common ... R043BY430WY – Overflow (Ov) 15-19" Northern Plains 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; fracture bedrock of various types, commonly on windswept ridges, bluebunch wheatgrass and a variety of shrub species dominate ... R043BY476WY – Very Shallow (VS) 15-19" Northern Plains Precipitation Zone
    - 2 Soils shallow (10-20"), soils with a root restrictive layer, and/or south and west facing slopes that react like shallow soils
      - i. Soils are shallow, well drained, sandy, and loamy underlain by soft calcareous materials, with many outcrops of sedimentary bedrock. Deep pockets of soil may occur between the outcrops of bedrock ... R043BY434WY – Rocky Hills (RH) 15-19" Northern Plains Precipitation Zone
      - ii. Site not as above
        - a. The soils of this site include the finer portions of sandy clay loam and heavier, are moderately to slowly permeable, and overlay clay shale bedrock; rhizomatous wheatgrasses, Idaho fescue, green needlegrass and Wyoming big sagebrush are common ... R043BY458WY – Shallow Clayey (SwCy) 15-19" Northern Plains Precipitation Zone
        - b. Soils are fine sandy loams or coarser over all bedrock types except igneous or volcanic; prairie sandreed, needleandthread, and fringed sagewort or prominent on this site ... R043BY466WY – Shallow Sandy (SwSy) 15-19" Northern Plains Precipitation Zone
        - c. Very fine sandy loam to clay loam textured soils over various bedrock types (commonly limestone, siltstone, or shale), bluebunch wheatgrass, Idaho fescue, and needle and thread common along with

big sagebrush ... R043BY462WY – Shallow Loamy (SwLy) 15-19" Northern Plains 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, bluebunch wheatgrass, Idaho fescue, spike fescue, bitterbrush, and big sage common, productivity high ... R043BY408WY – Coarse Upland (CU) 15-19" Northern Plains 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, serviceberry common shrub with a lot of western needlegrass and rhizomatous wheatgrass ... R043BY404WY – Clayey (Cy) 15-19" Northern Plains Precipitation Zone

ii. Site not as above

a. Soils ranging from sands to fine sandy loams, a good variety and even mix of grass species, big sagebrush dominant shrub ... R043BY450WY – Sandy (Sy) 15-19" Northern Plains Precipitation Zone

b. Soils very fine sandy loams to clay loams, a good variety and even mix of grass species, big sagebrush dominant shrub ... R043BY422WY – Loamy (Ly) 15-19" Northern Plains Precipitation Zone