

KEY TO ECOLOGICAL SITES
MLRA 43B – Central Rocky Mountains
ZONE 6 – 15-19” Foothills and Mountains East (15-19E)

1. 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*).....**Group I**
1. Upland site that does not receive additional moisture as above.....2
 2. 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*).....**Group II**
 2. Soil depth moderately deep to deep (>20”) without root restricting layer that inhibits the productivity potential**Group III**

GROUP I – Sites that Receive Additional Moisture

1. Site poorly drained with water table above surface part of growing season, Nebraska sedge, northern reedgrass, tufted hairgrass, and willows common species.....**Wetland (WL)**
1. Site not as above.....2
 2. 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.....**Subirrigated (Sb)**
 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.....**Overflow (Ov)**

GROUP II – Upland Sites that are Very Shallow (<10”) OR Shallow (10-20”)

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.....2
 2. Bedrock igneous or volcanic, three-tip sagebrush, antelope bitterbrush, and black sage common shrubs.....**Igneous (Ig)**
 2. Fractured bedrock of various types except igneous or volcanic, commonly on windswept ridges, bluebunch wheatgrass, Columbia needlegrass and a variety of shrub species dominate..... **Very Shallow (VS)**
1. 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.....3
 3. Silty clays or heavier textured soils over clay shale bedrock, rhizomatous wheatgrasses, Idaho fescue, bluebunch wheatgrass**Shallow Clayey (SwCy)**
 3. Soils not as above4

- 4. Fine sandy loams or coarser textured soils over sandstone or sandy shale, Columbia needlegrass, Idaho fescue & bluebunch wheatgrass dominant grass species on site**Shallow Sandy (SwSy)**
- 4. Soils not as above.....5
 - 5. Medium to moderately coarse textured soils over igneous or volcanic bedrock, bitterbrush, black sage and three-tip sagebrush common ...**Shallow Igneous (SwI)**
 - 5. 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**Shallow Loamy (SwLy)**

GROUP III – Upland Sites that are Moderately Deep to Deep (>20”)

- 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**Coarse Upland (CU)**
- 1. Sites without high volume of coarse fragments.....2
 - 2. 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.....**Clayey (Cy)**
 - 2. Soils not as above.....3
 - 3. Soils fine sandy loams to loamy sands, light or dark colored, Columbia needlegrass and mountain brome abundant.....**Sandy (Sy)**
 - 3. Soils very fine sandy loams to clay loams, a good variety and even mix of grass species, mountain big sagebrush dominant shrub..**Loamy (Ly)**

Note: Plant species should not be used as sole criteria for ecological site identification as they may not be present or may have been removed from the plant community. An ecological site is based on specific soil characteristics that result in its ability to produce distinctive kinds and amounts of vegetation and responds similarly to disturbance.