

KEY TO ECOLOGICAL SITES
MLRA 43B – CENTRAL ROCKY MOUNTAINS
ZONE 1 – 20+” HIGH MOUNTAINS (20+M)

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 ground surface part of growing season, Nebraska sedge, water sedge, and willows common species.....**Wetland (WL)**
1. Sites without water table above ground surface for part of growing season...2
 2. Water table within rooting depth of herbaceous species (typically above 20”) during part of the growing season, tufted hairgrass, shrubby cinquefoil, blue wildrye, sedges, rushes, and willows 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, silver sagebrush, snowberry, slender wheatgrass, and blue 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 and black sage common shrubs.....**Igneous (Ig)**
 2. Fracture bedrock of various types except igneous or volcanic, commonly on windswept ridges, bluebunch wheatgrass, bitterbrush 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. Coarse fragments common on surface and throughout profile (>35% by volume in top 20”), low sagebrush and bitterbrush common shrubs..... **Stony (St)**
 3. Soils without high amount of coarse fragments4

- 4. Medium to moderately coarse textured soils over igneous or volcanic bedrock, bitterbrush and three-tip sagebrush common**Shallow Igneous (SwI)**
- 4. Very fine sandy loam to clay loam textured soils over various bedrock types (commonly limestone, siltstone, or shale), low sagebrush intermixed with big sagebrush**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)....2
 - 2. 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**Coarse Upland (CU)**
 - 2. Site occurs on steep south and west facing mountain slopes, bluebunch wheatgrass, Idaho fescue, and spike fescue dominant grasses, mountain mahogany common shrub.....**Steep Stony (SSt)**
- 1. Sites without high volume of coarse fragments.....3
 - 3. Soil textures are heavy, slight to severe soil cracking in dry conditions low sagebrush and green rabbitbrush common shrubs.....**Dense Clay (DC)**
 - 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)**
 - 4. Site occurs on steep north and east facing mountain slopes, mixed mountain shrub community often with aspen**Steep Loamy (Sly)**
 - 4. 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.