

Major Land Resource Area 046X

Northern and Central Rocky Mountain Foothills

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Ecological site keys

MLRA 46 LRU N

I. Site receives additional effective moisture

A. Soil saline (EC > 4 within surface 4")

- 1 Seasonal high water table > 40" from ground surface; salt tolerant plants dominate site ... R046XN230MT – Saline Lowland (SL) RRU 46-N 13-19 PZ

B. Site NOT Saline

- 1 Seasonal high water table > 40" from ground surface; site regularly receives more than normal soil moisture because of run-in or stream overflow ... R046XN248MT – Overflow (Ov) RRU 46-N 13-19 PZ
- 2 Seasonal high water table within 40 inches
 - ii. Site has seasonal high water table from 12 to 24 inches below soil surface. ... R046XN256MT – Subirrigated (Sb) RRU 46-N 13-19 PZ
 - i. Site has seasonal high water table 24 to 40 inches below soil surface ... R046XN262MT – Wet Meadow (WM) RRU 46-N 15-19 PZ

II. Site does not receive additional effective moisture

A. Soil saline or saline-sodic within surface 20" or soils with natric or relic natric horizons

- 1 No columnar structure; site dominated by salt tolerant plants ... R046XN629MT – Saline Upland (SU) RRU 46-N 10-14 PZ
- 2 Columnar structure present, abrupt root or water restrictive clay layer present within 8" of soil surface
 - iii. Less than 4" of surface over clay layer (evidenced by columnar structure) ... R046XN630MT – Dense Clay (DC) RRU 46-N 10-14 PZ
 - ii. Soil has 4 to 8" of surface over clay layer (evidenced by columnar structure)
 - a. Site located in 15-19 inch precipitation zone located in the Northwestern portion of the LRU ... R046XN608MT – Claypan (Cp) RRU 46-N 15-19 PZ
 - b. Site located in the 13-19 inch precipitation zone located in the central portion of the LRU. ... R046XN628MT – Claypan (Cp) RRU 46-N 13-19 PZ

B. Site not as above

1 Soils are very shallow or shallow

- i. Soil very shallow (< 10" deep to bedrock, lithic, or paralithic root restrictive layer) ... R046XN261MT – Very Shallow (VSw) RRU 46-N 15-19 PZ
- ii. Soil shallow (10" – 20" deep to bedrock, lithic, or paralithic root restrictive layer)
 - a. Soil texture within surface mineral 4" is typified by loam, clay loam, or silt loam ... R046XN250MT – Shallow (Sw) RRU 46-N 13-19 PZ
 - b. Clay content > 32% in surface mineral 4" (ribbon length > 2" long) ... R046XN589MT – Shallow Clay (SwC) RRU 46-N 13-16 PZ

2 Soils moderately deep, deep, or very deep (≥ 20" deep to bedrock, lithic, or paralithic root restrictive layer)

- i. Strongly or violently effervescent in surface mineral 4", lime concentration increasing with depth. (typically limestone parent material) ... R046XN254MT – Limy (Ly) RRU 46-N 13-17 PZ
- ii. Not strongly or violently effervescent in surface mineral 4"

- a. Site sandy skeletal within 10 inches of soil surface ... R046XN601MT – Gravelly (Gr) RRU 46-N 13-19 PZ
- b. Site Not Sandy Skeletal
 - 1) Site <15 percent slope
 - a) Coarse sandy loam to fine sandy loam texture within surface mineral 4" ... R046XN249MT – Sandy (Sy) RRU 46-N 13-19 PZ
 - b) Site not sandy
 - (1) Soil clay content >32% but less than 45% in the surface mineral 4 inches ... R046XN247MT – Clayey (Cy) RRU 46-N 13-19 PZ
 - (2) Clay content less than 32% in the mineral surface 4 inches
 - (a) Stones and/or Boulders cover 3-15% surface area (15-30% cover measured by step transect) ... R046XN255MT – Stony (St) RRU 46-N 13-19 PZ
 - (b) Site less than 32 percent clay in surface mineral 4 inches and argillic horizon, if present, less than 35% clay. ... R046XN252MT – Silty (Si) RRU 46-N 13-19 PZ
 - 2) Site ≥ 15 percent slope
 - a) Site <15 percent slopeSite has mollic epipedon with clay content is < 32% (ribbon < 2" long) in surface mineral 4" ... R046XN594MT – Silty Steep (SiStp) RRU 46-N 13-19 PZ
 - b) Mollic epipedon not present. Site has coarse sandy loam to fine sandy loam texture. ... R046XN264MT – Thin Breaks (TB) RRU 46-N 13-19 PZ