

# Major Land Resource Area 007X

## Columbia Basin

Accessed: 05/11/2025

---

### Ecological site keys

#### MLRA 7

---

##### I. Site resides in south of the Columbia River.

A. Soil is less than 20 inches to bedrock. R007XY015OR - SHALLOW LOAM 8-10 PZ ... R007XY015OR – Shallow Loam 8-10 PZ

B. Soil is greater than 20 inches to bedrock.

1 Soil on landscape of floodplains, terraces or alluvial fans.

i. Soil on floodplain; site is R007XY010OR - SANDY BOTTOM 8-10 PZ ... R007XY010OR – Sandy Bottom 8-10 PZ

ii. Not as above.

a. Family particle size sandy.

1) Soil surface texture of sand, low dunes or hummocky topography; site is 007XY011OR - SANDS 8-10 PZ ... R007XY011OR – Sands 8-10 PZ

2) Soil surface texture of loamy sand, gently rolling topography; site is R007XY012OR - SANDY 8-10 PZ ... R007XY012OR – Sandy 8-10 PZ

b. Family particle size loamy.

1) Soil surface texture of fine sandy loam; site is R007XY013OR - SANDY LOAM 8-10 PZ ... R007XY013OR – Sandy Loam 8-10 PZ

2) Soil surface texture of silt loam; site is R007XY014OR - LOAMY 8-10 PZ

2 Soil on landscape of uplands.

i. Aspect is south facing; site is R007XY020OR - SOUTH 8-10 PZ ... R007XY020OR – South 8-10 PZ

ii. Aspect is north facing; site is R007XY025OR - SANDY NORTH 8-10 PZ ... R007XY025OR – Sandy North 8-10 PZ

iii. Not as above; site is R007XY014OR - LOAMY 8-10 PZ ... R007XY014OR – Loamy 8-10 PZ

##### II. Site resides in north of the Columbia River.

A. Soil less than 20 inches deep to restrictive horizon.

1 Soil less than 10 inches deep to restrictive horizon. ESG R007XY001WA - Very Shallow ... R007XY001WA – Very Shallow

2 Soil greater than 10 inches deep to restrictive horizon. ESG R007XY114WA - Shallow Stony Sand ... R007XY114WA – Shallow Stony Sand

B. Soil greater than 20 inches deep to restrictive horizon.

1 Soil in a bottomland landscape position.

i. Soil pH is alkaline or greater.

a. Soil that is very strongly saline-sodic (SAR value is greater than 13). ESG R007XY978WA - Sodic Flat ... R007XY978WA – Sodic Flat

b. Soil that has SAR values less than 13. ESG R007XY970WA - Alkali Terrace ... R007XY970WA – Alkali Terrace

ii. Soil pH is less than alkaline.

a. Soil is wet to the surface and displays hydrophytic vegetation. ESG R007XY988WA - Wetland Complex ... R007XY988WA – Wetland Complex

b. Soil isn't wet to the surface.

1) Site is next to streams and bodies of water with tree vegetation. ESG R007XY720WA - Riparian Complex ... R007XY720WA – Riparian Complex

2) Site isn't next to streams and bodies of water.

a) Soils with great than 35% rock fragments in particle-size control section. R007XY930WA - Loamy Bottom ... R007XY930WA – Loamy Bottom

b) Soils with less than 35% rock fragments. Sites include: ESG R007XY930WA - Loamy Bottom, R007XY402WA - LOAMY BOTTOM 6-10 PZ. ... R007XY930WA – Loamy Bottom

## 2 Soils in an upland position.

i. Soil with sands, loamy sand or sandy loam surface textures.

a. Soils with a coarse sand, sand, fine sand or very fine sand surface texture. ESG R007XY140WA - Sands ... R007XY140WA – Sands

b. Soil texture isn't coarse sand, sand, find sand or very find sand for the surface horizon.

1) Soil with loamy coarse sand, loamy sand, loamy fine sand and loamy very fine sand with carbonates within rooting depth. ESG R007XY449WA - Sandy ... R007XY449WA – Sandy

2) Soils with sandy loam variations of texture in the surface horizon and without carbonates within rooting depth. ESG R007XY143WA - Sandy Loam ... R007XY143WA – Sandy Loam

ii. Soil with texture fine than sandy loam.

a. Site with north aspect and higher elevations.

1) Soil with greater than 35 percent rock fragments in particle-size control section. ESG R007XY153WA - Cool Loamy ... R007XY153WA – Cool Loamy

2) Soil with less than 35 percent rock fragments. ESG R007XY153WA - Cool Loamy ... R007XY153WA – Cool Loamy

b. Sites at lowest elevations in driest and hottest portions of MLRA with south aspect.

1) Soil with greater than 35 percent rock fragments in particle-size control section. ESG R007XY120WA - Stony ... R007XY120WA – Stony

2) Soil with less than 35 percent rock fragments. ESG R007XY163WA - Dry Loamy ... R007XY163WA – Dry Loamy

c. Site not as above.

1) Soil with rock fragment content greater than 35%. ESG R007XY120WA - Stony ... R007XY120WA – Stony

2) Soil with rock fragment content less than 35%.

a) Soil with carbonates within rooting depth. ESG R007XY193WA ... R007XY193WA – Calcareous Loam

b) Soil without carbonates within rooting depth. ESG R007XY130WA - Loamy ... R007XY130WA – Loamy