

Major Land Resource Area 053C Southern Dark Brown Glaciated Plains

Accessed: 06/18/2026

Ecological site keys

MLRA 53C Ecological Site Key

I. RUN-OFF LANDSCAPE POSITIONS- Upland, normally convex, short slopes.

1 Is there a root restricting layer within 10 inches of soil surface? ... R053CY016SD – Very Shallow

2 Is there a root restricting layer within 10-20 inches of soil surface?

a. Restricting layer is >15% gravel by volume. ... R053CY014SD – Shallow To Gravel

b. Does the soil effervesce with acid (10% HCl) within 6 inches of the surface? ... R053CY012SD – Thin Upland

II. NORMAL LANDSCAPE POSITIONS- Upland, normally linear slopes with the exception of sandy sites which may have complex slopes.

1 Is there a claypan (columnar soil structure) within 16 inches of surface?

a. See “IV. Other Landscape Positions”

2 What is the surface and subsoil texture?

a. Clay, Silty Clay (>55% clay) surface texture with Clayey subsoil texture. ... R053CY018SD – Dense Clay

b. Clay, Silty Clay (40-55% clay) or Loamy surface texture with Clayey subsoil texture. ... R053CY011SD – Clayey

c. Loam, Silt Loam, Silty Clay Loam, Clay Loam, Sandy Clay Loam, Very Fine Sandy Loam. ... R053CY010SD –
Loamy

d. Sandy Loam, Fine Sand Loam, Loamy Very Fine Sand. ... R053CY009SD – Sandy

III. RUN-IN LANDSCAPE POSITIONS- Floodplains, drainageways, etc. For depressional landscape positions, see “IV. Other Landscape Positions”.

1 Is there evidence of a permanent water table within 24 inches of the soil surface, with the site having dominantly hydrophytic vegetation?

a. Are there visible salts (including sodium and gypsum) within 16 inches of the surface?

1 Yes. ... R053CY007SD – Saline Lowland

2 No. ... R053CY002SD – Linear Meadow

2 Is there evidence of a permanent water table between 24 and 60 inches below the soil surface?

a. Does the soil effervesce with acid (10% HCl) within 6 inches of the surface?

1 Yes. ... R053CY006SD – Limy Subirrigated

2 No. ... R053CY003SD – Subirrigated

3 Does water flow into and over/through the site?

a. Does the site have a flooding frequency?

1 Yes: What is the soil surface and subsurface texture?

i. Loam, Silt Loam, Silty Clay Loam, Clay Loam, or Sandy Clay Loam. ... R053CY040SD – Loamy Floodplain

ii. Clay, Silty Clay (40-55% clay) or Loamy Surface with Clayey Subsoil. ... R053CY041SD – Clayey Floodplain

2 No: What is the soil surface and subsurface texture?

i. Loam, Silt Loam, Silty Clay Loam, Clay Loam, Sandy Clay Loam, Very Fine Sandy Loam. ... R053CY020SD – Loamy Overflow

IV. OTHER LANDSCAPE POSITIONS- Basins, depressions, run-off and/or run-in positions

1 Does the soil have a claypan (columnar structure) within 16 inches of the soil surface?

a. Yes: Is the site in a closed depression?

1 Yes. ... R053CY019SD – Closed Depression

2 No: Is the claypan within 4 inches of the soil surface?

i. Yes. ... R053CY015SD – Thin Claypan

ii. No. ... R053CY013SD – Claypan

b. No: Is the area in a basin or closed depression with no outlet?

1 Yes.

i. The site ponds water for 4 to 8 weeks in the spring or after heavy rain and has a high organic matter content. ... R053CY004SD – Wet Meadow

ii. The site ponds water greater than 8 weeks or until early summer and has a high organic matter content.

iii. The site ponds water year-round in most years and has a high organic matter content. ... R053CY037SD – Deep Marsh

iv. All other closed depressions that pond water briefly after precipitation or during abnormally wet years. ... R053CY019SD – Closed Depression

2 No: Re-think your position and start again.