

# Major Land Resource Area 053C

## Southern Dark Brown Glaciated Plains

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### Ecological site keys

#### MLRA 53C Ecological Site Key

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##### 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<sup>1</sup> 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.