

# Major Land Resource Area 052X

## Brown Glaciated Plains

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### Ecological site keys

#### MLRA 52X Moist Grassland LRU Key - Version 8.2

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- A. Site Receives additional moisture either from groundwater (endosaturation) or from surface water (episaturation)
- 1a. Soil Saline ( $EC \geq 4$ ) and/or Sodic ( $SAR \geq 13$ ) within surface 4" (10 cm)
    - 2a. Water table < 24" (60 cm) soil poorly drained with long duration ponding, seasonal lake beds, depressions, & flats, vegetation sparse ... FX052X99X003 – Alkali Flat (Af)
    - 2b. Water table > 24" (60 cm); soil somewhat well drained to well drained
      - 3a. Seasonal high water table 24-40" (60-102 cm) from surface, soil somewhat well drained, usually endosaturation ... FX052X99X092 – Saline Subirrigated (Ssb)
      - 3b. Seasonal high water table > 40" (102 cm), soil well drained, usually episaturation ... FX052X99X091 – Saline Overflow (Sov)
  - 1b. Soil neither saline nor sodic [ $EC < 4$  and  $SAR < 13$  within surface 4" (10 cm)]
    - 4a. Site is a closed depression with run in
      - 5a. Site receives water from groundwater discharge - accumulated salts moderate to high ... FX052X99X705 – Discharge Closed Depression (Cdr)
      - 5b. Site does not receive water from groundwater discharge - accumulated salts low ... FX052X99X071 – Recharge Closed Depression (Cdr)
    - 4b. Site is a swale, coulee, or riparian area
      - 6a. Site is located outside of the floodplain
        - 7a. Upland swales and coulees; herbaceous species and/or sagebrush dominate site ... FX052X02X062 – Swale (Se) Moist Grassland
        - 7b. Upland swales & coulees; woody species (chokecherry, serviceberry, green ash) dominate site ... FX052X02X756 – Woody Draw (Wd) Moist Grassland
      - 6b. Site is located inside the floodplain
        - 8a. Site Dominated by woody vegetation ... FX052X99X061 – Riparian Woodland (RW)
        - 8b. Site dominated by herbaceous vegetation
          - 9a. Receives additional moisture from surface water (episaturation) ... FX052X99X060 – Overflow (Ov)
          - 9b. Receives additional moisture from groundwater (endosaturation), water table  $\leq 40$ " (102 cm)
            - 10a. Seasonal high water table 24" to 40" (60-102 cm) ... FX052X99X150 – Subirrigated (Sb)
            - 10b. Seasonal high water table < 24" (60 cm) ... FX052X99X084 – Slough (SI)
- B. Site does not receive additional effective moisture
- 1a. Soil saline and/or sodic within surface 20" (50 cm) or soils with natric or relic natric horizons.
  - 2a. Abrupt root or water restrictive clay layer (evidenced by columnar structure), present within 4" (10 cm) of soil surface
    - 3a. 1" (2.5 cm) or less of surface over clay layer (evidenced by columnar structure) ... FX052X02X145 – Panspot (Pn) Moist Grassland
    - 3b. Greater than 1" (2.5 cm) of surface over clay layer (evidenced by columnar structure) ... FX052X02X165 – Thin Claypan (Tcp) Moist Grassland

- 2b. Abrupt root or water restrictive clay layer (evidenced by columnar structure), present between 4" and 10" (10-25 cm) of soil surface ... FX052X02X006 – Claypan (Cp) Moist Grassland
- 1b. Soil neither saline nor sodic [EC < 4 and SAR < 13 within surface 20" (50 cm)]
  - 4a. Soil skeletal in surface 20" (50 cm) [ $\geq 35\%$  rock fragments in most of the surface 20"]
    - 5a. Soil sandy-skeletal within 10 inches of the surface ... FX052X02X021 – Sandy Gravel (Sygr) Moist Grassland
    - 5b. Soil loamy-skeletal within 10 inches of the surface ... FX052X02X022 – Loamy Gravel (Logr) Moist Grassland
  - 4b. Soil not skeletal in surface 20" (50 cm) [ $< 35\%$  rock fragments in most of the surface 20"]
    - 6a. Sandy textural family in surface mineral 4" (10 cm) - Future Site Concept Sands (Sa)\* - use 16a Sandy ... FX052X02X110 – Sandy (Sy) Moist Grassland
    - 6b. Coarse loamy or finer textural family in surface mineral 4" (10 cm)
      - 7a Coarse loamy or coarse silty textural family in surface mineral 4" (10 cm) ... FX052X02X110 – Sandy (Sy) Moist Grassland
      - 7b. Fine loamy, fine silty or finer textural family in surface mineral 4" (10 cm)
        - 8a. Clay content is  $> 35\%$  in surface mineral 4" (10 cm) [ribbon  $> 2$ " long]
          - 9a. Slope  $> 15\%$  ... FX052X02X005 – Clayey-Steep (Cystp) Moist Grassland
          - 9b. Slope  $\leq 15\%$  ... FX052X02X001 – Clayey (Cy) Moist Grassland
        - 8b. Clay content  $\leq 35\%$  in surface mineral 4" (10 cm) [ribbon  $< 2$ " long]
          - 10a. Strongly or violently effervescent in surface mineral 5" (12 cm), lime conc. increasing with depth.
            - 11a. Slope  $< 15\%$  ... FX052X02X030 – Limy (Ly) Moist Grassland
            - 11b. Slope  $\geq 15\%$  ... FX052X02X029 – Limy-Steep (Lystp) Moist Grassland
        - 10b. Not strongly or violently effervescent within surface mineral 5" (12 cm)
          - 12a. 22a. Slope  $< 15\%$  ... FX052X02X032 – Loamy (Lo) Moist Grassland
          - 12b. 22b. Slope  $\geq 15\%$  ... FX052X02X040 – Loamy-Steep (Lostp) Moist Grassland