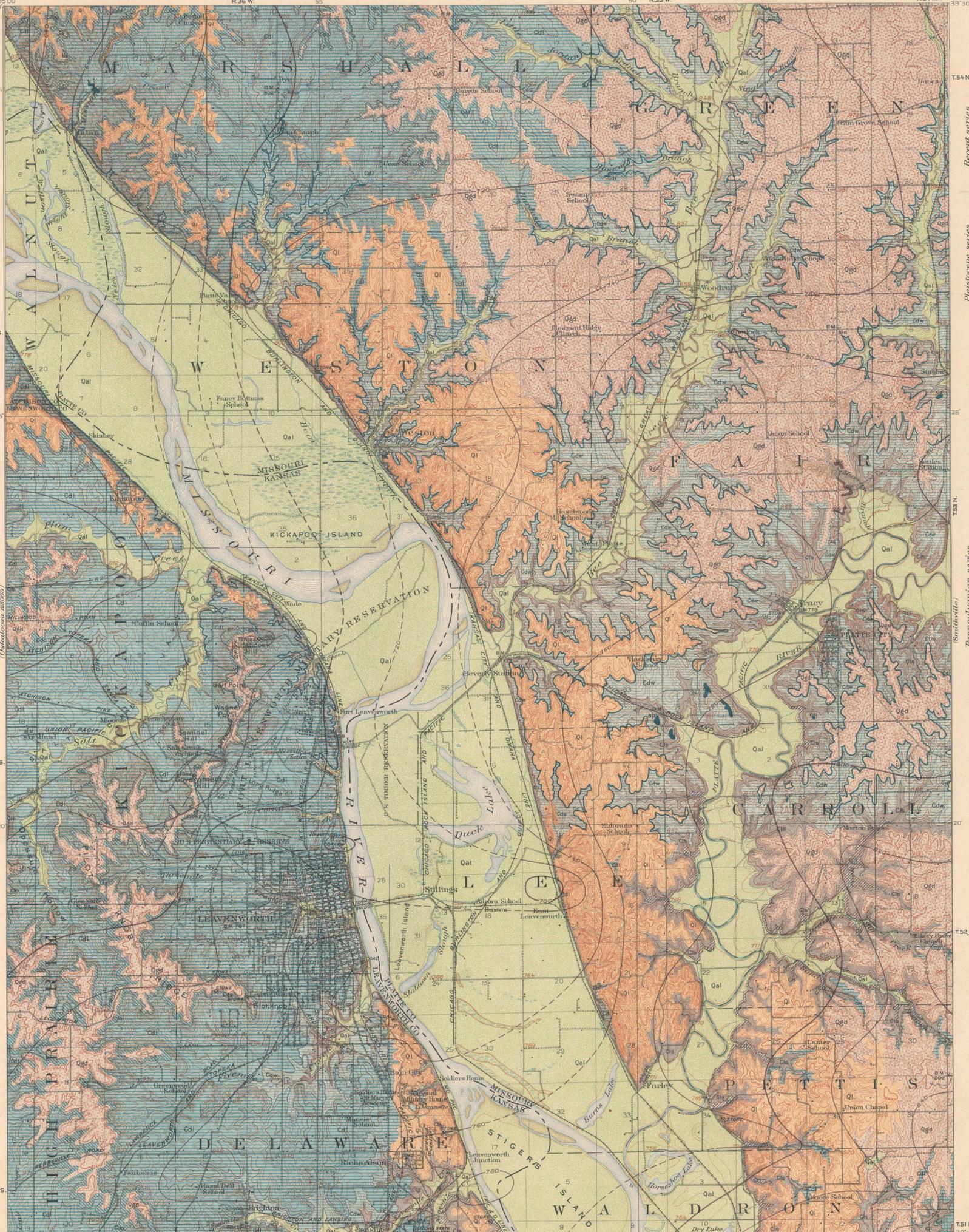


# AREAL GEOLOGY

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MISSOURI-KANSAS  
LEAVENWORTH QUADRANGLE

U.S. GEOLOGICAL SURVEY  
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## LEGEND

### SEDIMENTARY ROCKS

(Areas of subsequent deposits are shown by patterns of parallel lines, subvertical deposits by patterns of dots and circles)

Qal Alluvium (in flood plains of present streams)

Ql Loess (but in places overlain by older formations; only those deposits mapped, boundaries are indefinite)

Qgd Glacial drift (loamier clay overlain by thin loess of post-glacial age; small patches not mapped, boundaries indefinite)

Qig Inter-glacial deposits (stratified gravel, boulders, and sand in pre-glacial valleys; mapped only at Westport and on Murray branch)

Cs Shawnee formation (chiefly shale and shaly sandstone, limestone members with this Leavenworth limestone member at the top; not separately mapped)

Cdc Douglas formation (chiefly shale and sandstone with limestone beds near middle and at top; Oread limestone member; Cdc thick-bedded cherty limestone with two interbedded shale beds)

Cdl Lawrence shale member (shale and sandstone with several thin beds of sandstone and coal south of Lawrence; reported as a cherty deposit, which is not mapped, but is reported as occurring in places)

Cdi Lataste limestone member (gray massive limestone)

Cdw Weston shale member (blue or drab argillaceous shale)

Cls Lansing formation (limestone and shales, interbedded; the upper three members mapped together as Csl)

Cst Stanton limestone member (limestone with two interbedded thin shales)

Cvs Vilas shale member (blue shale with sandstone layers)

Cpl Plattsburg limestone member (cherty limestone, shaly in middle)

Cil Lane shale member (shale, with some sandstone in upper half; some argillaceous limestones in middle)

Recent series

Post-glacial

Platystrophia stage

Albany stage

Missouri group

(Southville)

Pennsylvanian series

Carboniferous

Missouri group

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