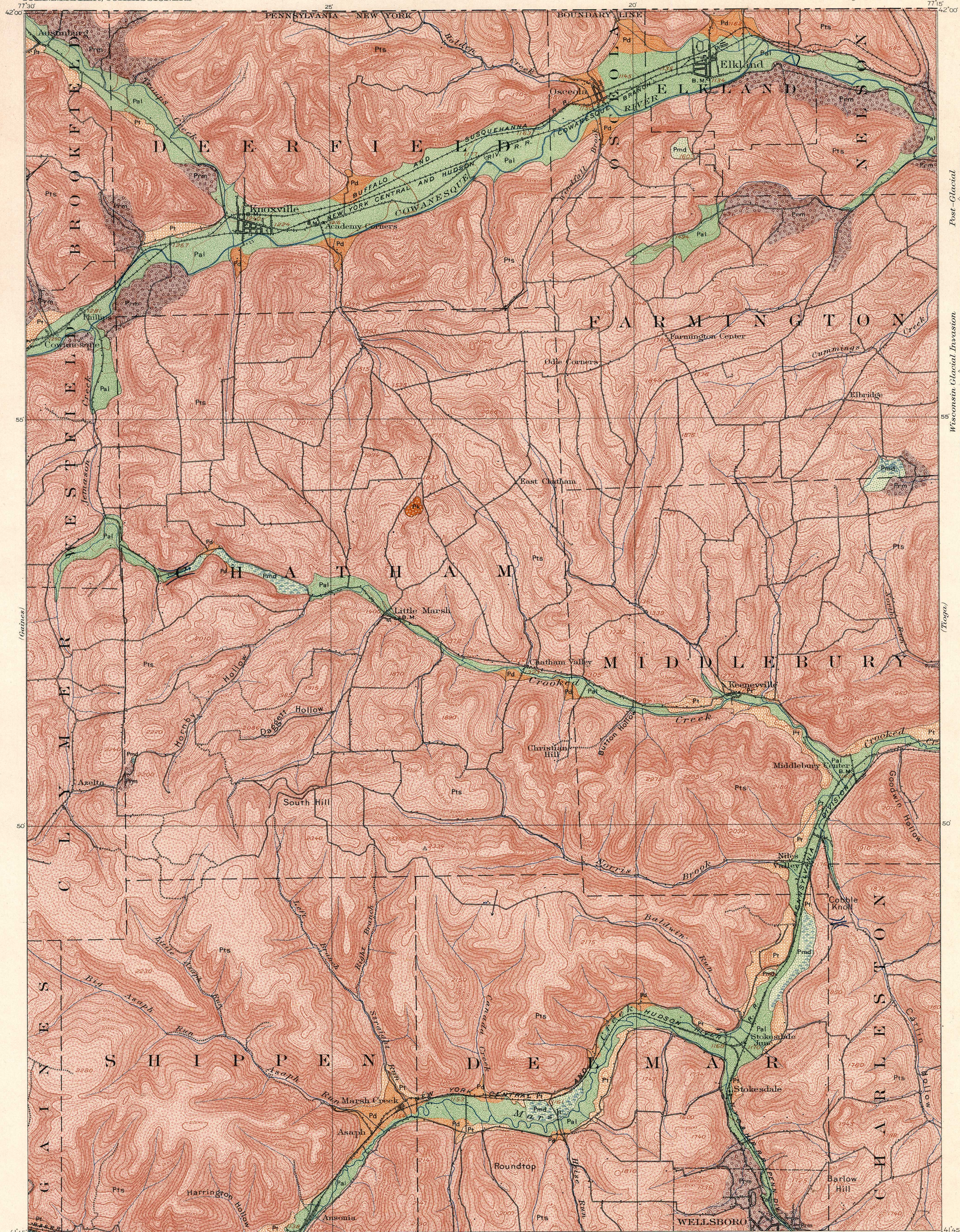


U.S. GEOLOGICAL SURVEY
CHARLES D. WALCOTT, DIRECTOR

STATE OF PENNSYLVANIA
GEORGE W. MC NEES, SIMON HAROLD
FRED D. BARKER, COMMISSIONERS

SURFICIAL GEOLOGY

PENNSYLVANIA
(TIOGA COUNTY)
ELKLAND QUADRANGLE



LEGEND

SURFICIAL ROCKS
(Areas of surficial rocks are shown by patterns of dots and circles.)

- Pal Alluvium (flood plain, alluvial deposits, drift)
- Pmd Marsh deposits (peat and mud)
- Pd Gravel fans or deltas
- Pt Morainal and frontal terraces
- Pk Kames (including isolated gravel deposits)
- Br Retreat moraines
- Pts Till sheet

Glacial spillways
(direction of current indicated by arrow)

Glacial striae

PLEISTOCENE

H. M. Wilson, Geographer in charge.
Control by S. S. Gannett, Oscar Jones, and J. W. Thom.
Topography by J. H. Jennings and J. W. Thom.
Surveyed in 1899 in cooperation with the
State of Pennsylvania.

APPROXIMATE MEAN
DECLINATION 1903.

Scale 1:25,000
1 2 3 4 Miles
1 2 3 4 Kilometers

Contour interval 20 feet.
Datum is mean sea level.
Edition of April 1903.

T. C. Chamberlin, Geologist in charge.
Geology by William C. Alden.
Surveyed in 1900.