U.S. GEOLOGICAL SURVEY
CHARLES D. WALCOTT
DIRECTOR

STRUCTURE SECTIONS

CALIFORNIA
(SHASTA COUNTY)
REDDING QUADRANGLE

LEGEND

IGNEOUS ROCKS
(continued)

SHEET SYMBOL / SECTION SYMBOL

LATE JURASSIC OR EARLY CRETACEOUS

Post-Potem and pre-Chico

- Jsp — Serpentine *(stock of altered peridotite)*
- Ja, Jhd, Jdp, Jh — Various dikes *(andesite-porphyry, Ja; dacite-porphyry, Jdp; quartz-hornblende-diorite, Jhd; and hornblendite, Jh)*
- Jad — Quartz-augite-diorite *(intrusive masses and dikes)*
- Jhd, Jmd — Quartz-hornblende-diorite *(batholith and stocks; includes a stock of quartz-mica-diorite, Jmd)*

JURASSIC

Pre-Potem

- Jb — Bagley andesite *(flows and tuffs)*

TRIASSIC

Pre-Hosselkus

- Ƭbh — Bully Hill rhyolite *(flows and tuffs; includes some dikes and sheets of later age)*
- Ƭd — Dekkas andesite *(chiefly flows and tuffs, with some fossiliferous tuffaceous shale)*

CARBONIFEROUS

Mississippian

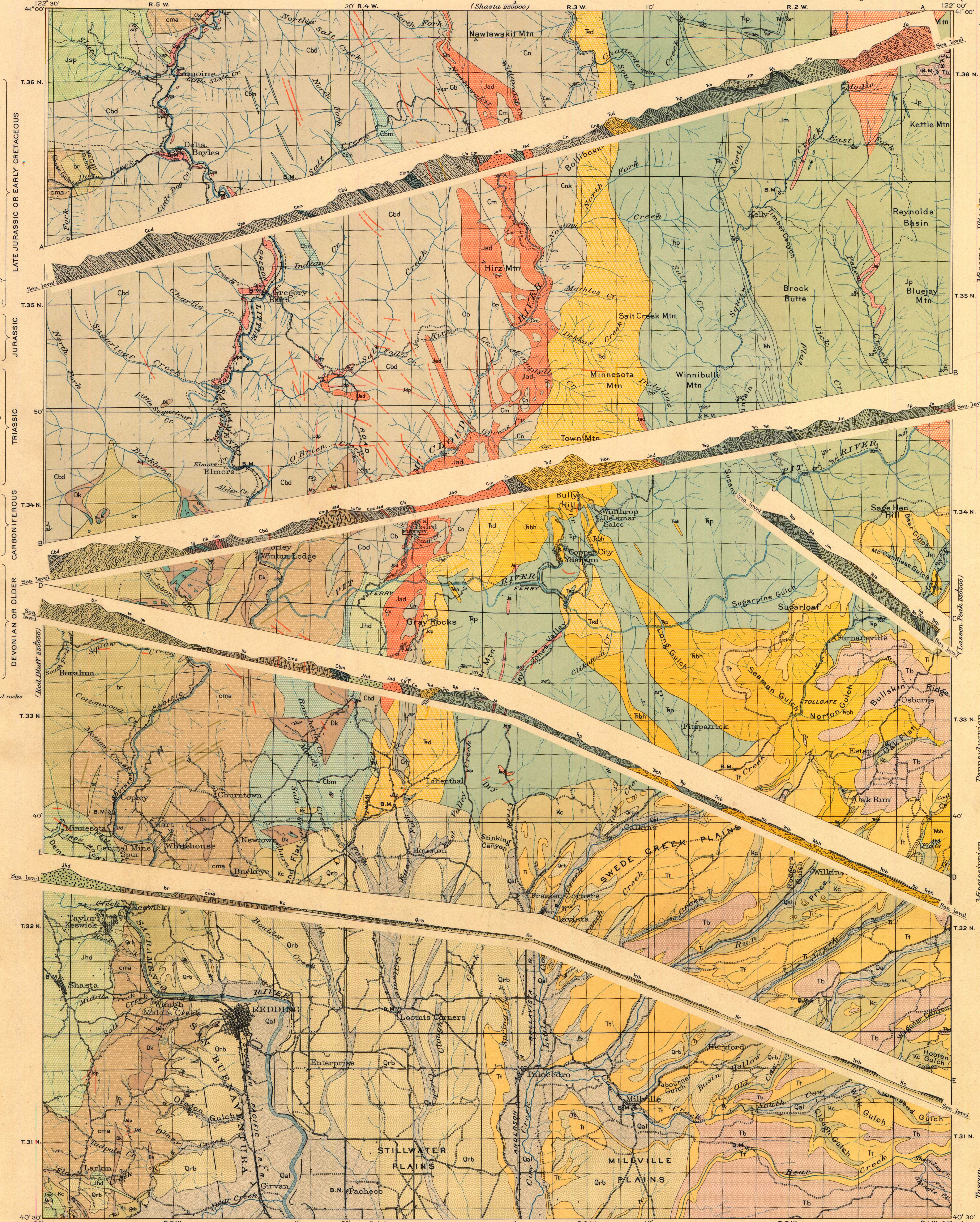
- Cbm — Bass Mountain diabase *(flows and tuffs partly interbedded in Bragdon formation)*

DEVONIAN OR OLDER

Pre-Kennett

- br — Balaklala rhyolite *(altered rhyolitic lava and tuff; also dikes)*
- cma — Copley meta-andesite *(lava and tuff)*

35° Strike and dip of stratified rocks



R. U. Goode, Geographer in charge.
Triangulation by C. F. Urquhart.
Topography by R. H. Mc Kee and A. B. Searle.
Surveyed in 1900.

TRUE NORTH / MAGNETIC NORTH 18½°
APPROXIMATE MEAN DECLINATION 1902.

Scale 1/125000
1 ½ 0 1 2 3 4 5 Miles
1 ½ 0 1 2 3 4 5 Kilometers

Edition of Mar. 1906.

DIAGRAM OF TOWNSHIP.

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

Geology by J. S. Diller,
assisted by James Storrs,
H. R. Johnson, Chester Washburne,
G. B. Richardson, and Frank L. Hess.
Surveyed in 1901–1904.

LEGEND

SEDIMENTARY ROCKS

SHEET SYMBOL / SECTION SYMBOL

QUATERNARY

- Qal — Alluvium *(silt, sand, and gravel in flood plains)*
- Qrb — Red Bluff formation *(gravels with layers of sand and a few large bowlders)*

UNCONFORMITY

TERTIARY

Pliocene

- Tt, Ttib — Tuscan tuff *(chiefly tuff, in large part coarse agglomerate, and some gravel and sand)*

Miocene

- Ti — Ione formation *(sand containing gravel above and clay and coaly material below)* — Combined with Tuscan tuff on sections

UNCONFORMITY

CRETACEOUS

- Kc — Chico formation *(conglomerate overlain by sandstone and shale)*

UNCONFORMITY

JURASSIC

- Jp, ls — Potem formation *(shale and thin-bedded sandstone with small limestone lentils, ls, and some tuffaceous conglomerate)*
- Jm, ls — Modin formation *(tuffaceous beds, chiefly conglomerate, overlain by gray sandstone and shale, with small limestone lentils, ls)*

UNCONFORMITY

TRIASSIC

- Ƭb — Brock shale *(dark below, reddish and sandy above)*
- Ƭh — Hosselkus limestone *(gray limestone above, thinner bedded and darker below)*
- Ƭp — Pit formation *(black and gray shale, with thin-bedded sandstone and much interstratified tuff)*

CARBONIFEROUS

Pennsylvanian

- Cn, Cns — Nosoni formation *(chiefly tuffaceous beds with interstratified shale, Cns, and sandstone, and a few limestone lentils)*
- Cm — Mc Cloud limestone *(massive gray limestone with chert layers and nodules; toward the south occurs only in lenses)*

Mississippian

- Cb — Baird formation *(chiefly red to white tuffs and overlying fossiliferous tuffaceous sandstone and shale)*
- Cbd — Bragdon formation *(thin-bedded shale, sandstone, and conglomerate composed chiefly of fragments of Kennett formation)*

UNCONFORMITY

DEVONIAN

- Dk, ls — Kennett formation *(black shale, chert, and thin-bedded sandstone, with large lentils of limestone, ls)*
- ls — Limestone lentils *(in Kennett, Modin, and Potem formations)*

IGNEOUS ROCKS

QUATERNARY

- Qpa — Pyroxene-andesite *(lava flow from Mount Shasta)*

TERTIARY

Tuscan

- Tb — Basalt *(lava flows contemporaneous with Tuscan tuff)* — Combined with Tuscan tuff on sections

Legend is continued on the left margin.