

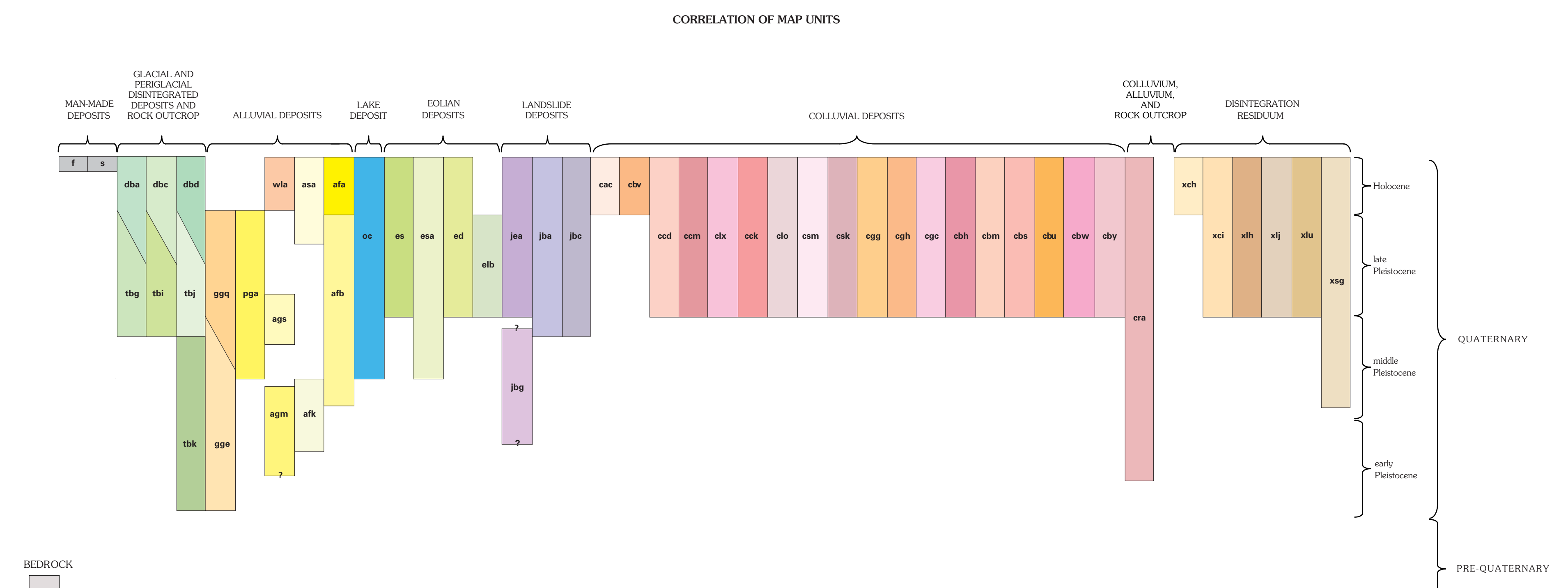
Base from U.S. Geological Survey, 1989  
 Transverse Mercator Projection  
 100,000-foot grid ticks based on Colorado coordinate system, central and south zones  
 Gray numbered lines indicate the 100,000-meter Universal Transverse Mercator grid, zone 13

SCALE 1:250,000  
 0 5 10 15 20 25 MILES  
 0 5 10 15 20 25 KILOMETERS

CONTOUR INTERVAL 100 METERS  
 SUPPLEMENTARY CONTOUR INTERVAL 50 METERS

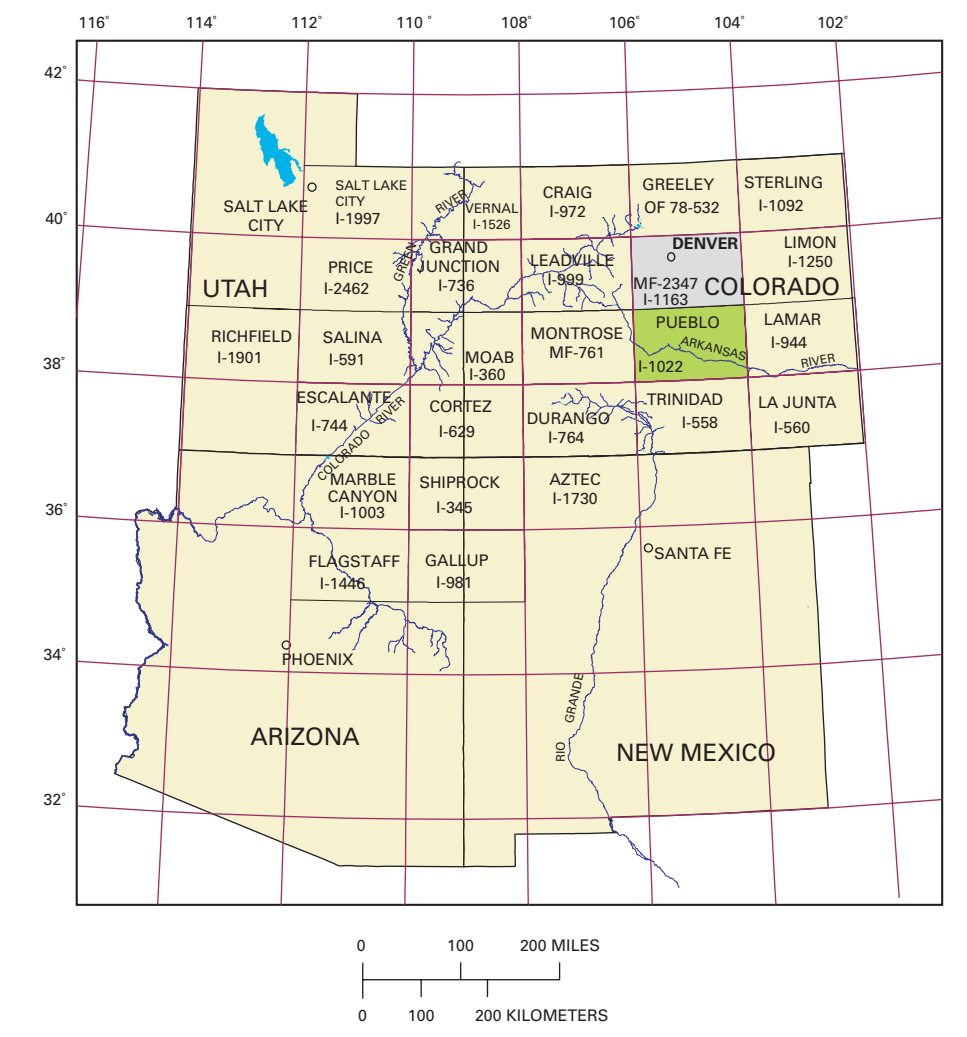
1988 MAGNETIC DECLINATION FROM THE NORTH POLES FROM 11.03 DEGREES EASTERNLY FOR THE CENTER OF THE WEST EDGE TO 10.58 (187 METERS) EASTERNLY FOR THE CENTER OF THE EAST EDGE. MEAN ANNUAL CHANGE 0.49 WESTERLY

Compiled during 1997-1999  
 D.W. Moore, Coordinator  
 Digital Cartography by T.E. Brandt and M.L. Baker  
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LIST OF MAP UNITS  
 [For map unit descriptions and references see "Description of Map Units" in accompanying pamphlet]

- |   |   |  |   |
|---|---|--|---|
| <p><b>HOLOCENE</b></p> <ul style="list-style-type: none"> <li>f Artificial landfill</li> <li>s Slag</li> <li>wia Loamy or clayey sheetwash alluvium</li> <li>afa Alluvial-fan deposit</li> <li>cac Arkosic loamy colluvium and sheetwash alluvium</li> <li>cbv Metamorphic and metavolcanic blocky colluvium</li> <li>xch Clayey, calcareous disintegration residuum</li> </ul> <p><b>HOLOCENE AND LATE PLEISTOCENE</b></p> <ul style="list-style-type: none"> <li>dba Crystalline-clast deposits</li> <li>dbc Sedimentary-clast deposits</li> <li>dbd Mixed-lithology-clast deposits</li> <li>asa Alluvial sand, silt, clay, and gravel (post-Piney Creek alluvium, Piney Creek Alluvium, and pre-Piney Creek alluvium of Hunt, 1954, and Scott, 1960; Broadway Alluvium)</li> <li>es Eolian sand</li> <li>ed Stabilized dune sand</li> <li>ja Slump-block landslide deposits, earthflow and mudflow deposits</li> <li>cc Calcareous clayey colluvium</li> <li>ccm Andesitic clayey colluvium</li> </ul> | <ul style="list-style-type: none"> <li>clx Clay loam colluvium</li> <li>cck Tuff-clast loam and clay loam colluvium</li> <li>clo Shale-, chalk-, and chalky-limestone-clast loamy colluvium</li> <li>csm Tuffaceous colluvium</li> <li>csk Grus, crystalline-clast colluvium, alluvium, and rock outcrop</li> <li>cgg Sandstone-clast sandy loam to clay loam colluvium</li> <li>cgh Arkosic-clast loamy colluvium</li> <li>cgc Gneiss- and granite-clast gravelly colluvium</li> <li>cbh Blocky sedimentary-rock colluvium</li> <li>cbm Carbonate-clast loamy colluvium</li> <li>cbs Rhyolite- and andesite-clast colluvium</li> <li>cbu Mixed-lithology blocky colluvium</li> <li>cbw Blocky basalt- and andesite-clast colluvium</li> <li>cby Blocky feldspathic-sandstone colluvium</li> <li>xci Sandy clay disintegration residuum</li> <li>xli Limestone-chip loamy disintegration residuum</li> <li>xli Silty loam disintegration residuum</li> <li>xlu Feldspathic loamy disintegration residuum</li> </ul> | <p><b>HOLOCENE TO MIDDLE PLEISTOCENE</b></p> <ul style="list-style-type: none"> <li>oc Playa clay</li> <li>ess Eolian sheet sand and loess (included in the "cover sand" of Frye and Leonard, 1957, and Blackwater Draw Formation of Reeves, 1976, described by Holiday, 1989)</li> <li>jba Bouldery volcanic-rock landslide deposit</li> <li>jbc Bouldery crystalline-rock landslide deposit</li> <li>xsg Feldspathic quartz-sand disintegration residuum</li> </ul> <p><b>LATE PLEISTOCENE</b></p> <ul style="list-style-type: none"> <li>elb Loess (Peoria Formation)</li> </ul> <p><b>LATE AND MIDDLE PLEISTOCENE</b></p> <ul style="list-style-type: none"> <li>tbg Bouldery till (of Pinedale and Bull Lake glaciations)</li> <li>tbi Crystalline-clast bouldery till</li> <li>tbi Sedimentary-clast bouldery till</li> <li>tbi Mixed-lithology-clast bouldery till</li> <li>ggq Outwash sand and gravel (of Bull Lake, Pinedale, and post-Pinedale ages)</li> <li>ags Alluvial sand, silt, clay, and gravel (Louvers and Slocum Alluviums, undivided; late middle Pleistocene)</li> <li>afb Alluvial-fan gravelly loam</li> </ul> <p><b>MIDDLE AND EARLY PLEISTOCENE</b></p> <ul style="list-style-type: none"> <li>tbi Bouldery till (of pre-Bull Lake glaciations)</li> <li>ggq Outwash sand and gravel (of pre-Bull Lake glaciations)</li> <li>agm Alluvial gravel and sand (Verdos and Rocky Flats Alluviums, undivided; early middle Pleistocene and early Pleistocene)</li> <li>afk Alluvial-fan gravelly loam</li> </ul> | <p><b>PLEISTOCENE</b></p> <ul style="list-style-type: none"> <li>pga Pediment gravel</li> <li>jbg Granodiorite-block debris-avalanche deposit</li> </ul> <p><b>QUATERNARY</b></p> <ul style="list-style-type: none"> <li>cra Hogback and range-front colluvium, alluvium, and rock outcrop</li> </ul> <p><b>PRE-QUATERNARY</b></p> <ul style="list-style-type: none"> <li>R Bedrock</li> </ul> <p>— Contact<br/>  Open Water<br/>  Fault, Quaternary age—Bar and ball on downthrown side<br/>  High-angle reverse fault—Inferred, R on upthrown block</p> |
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INDEX MAP SHOWING AREA OF PUEBLO QUADRANGLE, COMPANION GENERALIZED SURFICIAL GEOLOGIC MAP OF THE DENVER QUADRANGLE (shown in gray), AND OTHER PUBLISHED 1° x 2° GEOLOGIC MAPS

**GENERALIZED SURFICIAL GEOLOGIC MAP OF THE PUEBLO 1° x 2° QUADRANGLE, COLORADO**  
 Compiled by  
 David W. Moore, Arthur W. Straub, Margaret E. Berry, Michael L. Baker, and Theodore R. Brandt  
 2002

Any use of trade names in this publication is for descriptive purposes only and does not imply endorsement by the U.S. Government  
 For sale by U.S. Geological Survey Information Services, Box 25286, Federal Center, Denver, CO 80225  
 This map was produced on request, directly from digital files, on an electronic plotter. It is also available as a PDF file at <http://geology.cr.usgs.gov>