

DESCRIPTION OF MAP UNITS

Quaternary, Tertiary, and Mesozoic Deposits

Qal	Alluvium (Holocene)
Qla	Talus and glacial deposits, undifferentiated (Holocene)
Qaf	Alluvial fan deposits (Holocene to Pleistocene)
Qalo	Older alluvium (Holocene to Pleistocene)
Qls	Landslide deposits (Holocene and Pleistocene)
Qlk	Lake deposits (Holocene and Pleistocene)
Qg	Glacial deposits, undivided (Holocene and Pleistocene)
Qc	Coluvial deposits (Holocene and Pleistocene)
Qgr	Gravel (Holocene and Pleistocene)
QTdf	Alluvial fan and debris-flow fan deposits (Pleistocene to Pliocene)
QTgr	Gravel (Miocene or younger)
Ts	Sediments, undifferentiated (Tertiary)
Tgr	Fluvial gravel (late to middle Miocene)
Tcl	Silt and clay (Miocene? to Eocene?)
Tec	Everson Creek beds (early Miocene to late Oligocene)
Tml	Medicine Lodge beds and equivalents (late Oligocene to Eocene)
Tmlc	Medicine Lodge beds conglomerate (Oligocene to Eocene)
Tls	Paleolandslide deposits (Oligocene and/or Eocene)
Tbr	Breccia (Tertiary?)
TKb	Beaverhead Group (Tertiary?) and Cretaceous

Paleozoic Strata

Pq	Quadrant Formation (Pennsylvanian)
Mm	Madison Group, undivided (Mississippian)
Dj	Jefferson Formation (Devonian)

Red Lion Formation (Cambrian)

Cr	Red Lion Formation (Cambrian)
Ch	Haskam Formation (Cambrian)
Cq	Quartzite (Cambrian)
Csh	Silver Hill Formation (Cambrian)
Cf	Flathead Formation (Cambrian)

Mesoproterozoic Strata

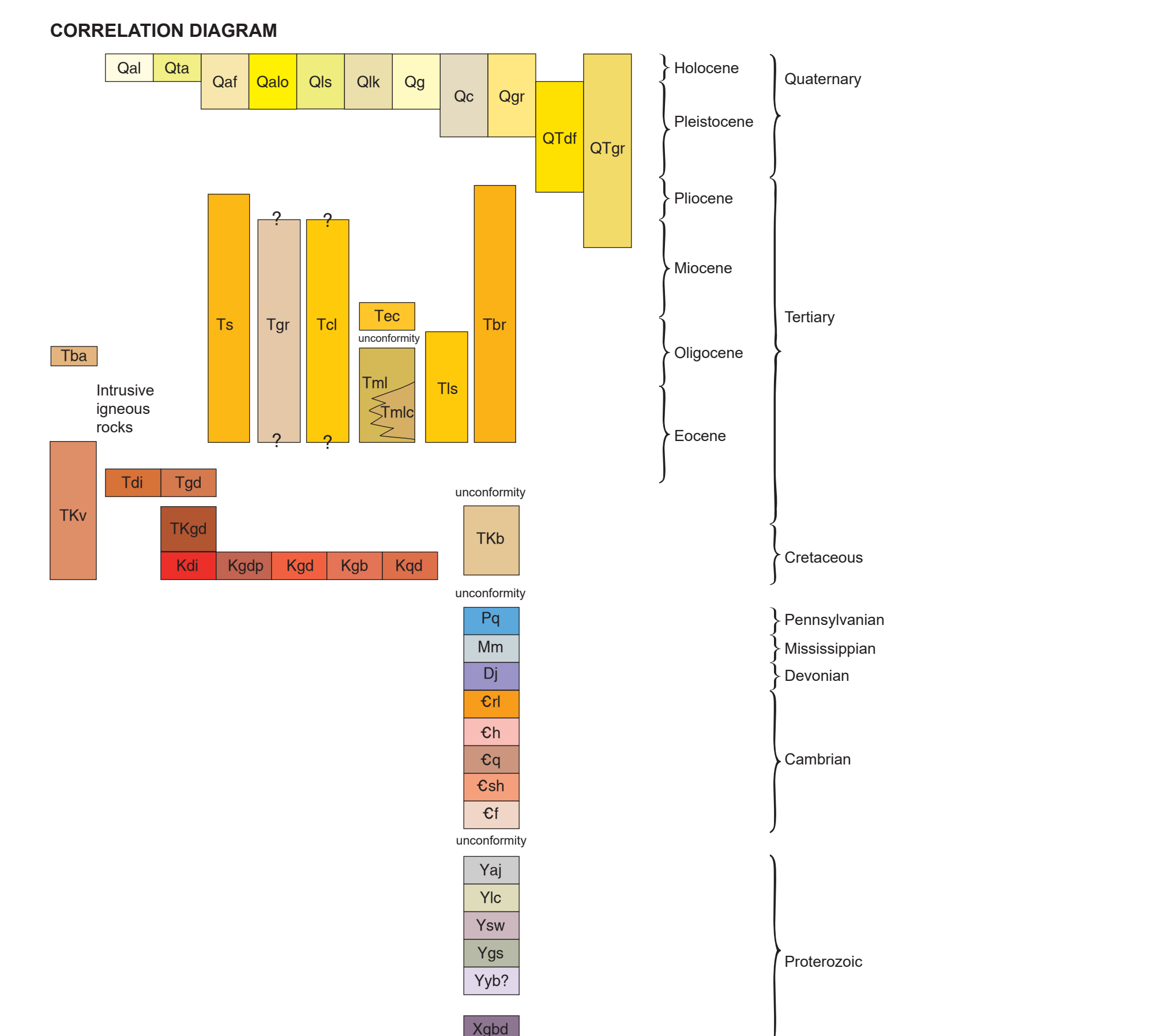
Yaj	Jahnke Lake member, Apple Creek Formation (Mesoproterozoic)
Yic	Lawson Creek Formation (Mesoproterozoic)
Ysw	Swauger Formation (Mesoproterozoic)
Yps	Gunsight Formation (Mesoproterozoic)
Yyb?	Yellow Lake and Big Creek Formations (Mesoproterozoic)
Yxpd	Gneiss of Bloody Dick Creek (Paleoproterozoic)

Igneous rocks

Tba	Basalt (Oligocene?)
Td	Diorite dikes (Eocene)
Tgd	Granodiorite (Eocene)
TKgd	Granodiorite (Tertiary or Cretaceous)
TKv	Volcanic rocks, undivided (Tertiary or Cretaceous)
Kd	Diorite (Cretaceous?)
Kgd	Porphyritic granodiorite (Cretaceous)
Kad	Granodiorite (Cretaceous)
Kgb	Hornblende gabbro (Cretaceous)
Kqd	Quartz diorite (Cretaceous)

MAP SYMBOLS

--- ---	Contact: dashed where approximately located	↘	Strike and dip of inclined beds
-.-.- ---	Fault: dashed where approximately located, dotted where concealed	↘	Strike and dip of bedding where stratigraphic tops were confirmed using primary sedimentary structures
--- ---	Normal fault: dashed where approximately located, dotted where concealed, bar and ball on downthrown side	⊥	Vertical bedding
--- ---	Reverse or thrust fault: dashed where approximately located, dotted where concealed, teeth on upthrown block	⊕	Horizontal bedding
--- ---	Reverse or thrust fault reactivated as a normal fault: dashed where approximately located, dotted where concealed, symbols on hanging wall	↘	Overtimed bedding
--- ---	Detachment fault: teeth on upper plate	↘	Strike and dip of overturned bedding where stratigraphic tops were confirmed using primary sedimentary structures
⋯	Plunging syncline axial trace: dotted where concealed	⊥	Inclined metamorphic foliation
⋯	Plunging anticline axial trace: dotted where concealed	↘	Inclined cleavage
■	Mining waste	↘	Inclined mylonitic foliation with plunge and trend of lineation
—	Montana-Idaho border; Continental Divide	↘	Plunging lineation
●	Detrital zircon sample location and number		

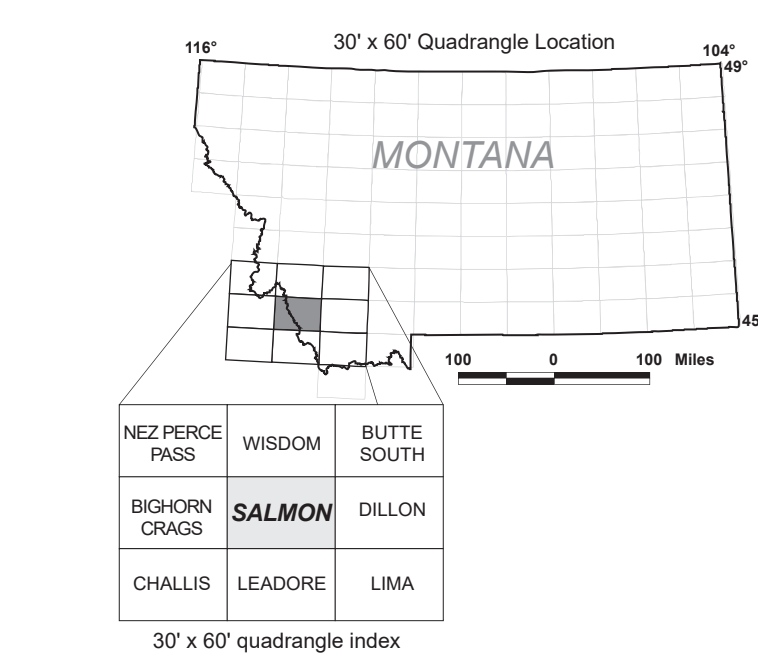
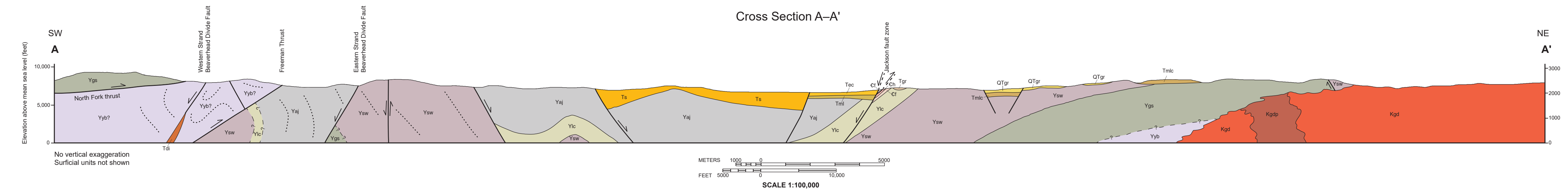


Base from U.S. Geological Survey Salmon 30' x 60' topographic quadrangle Map date: 1981
Projection: UTM zone 12; 1927 NAD
UTM grid declination: 1°47' West
1984 magnetic north declination: 17.5° East

Shaded relief created from 10 meter digital elevation model from U.S. Geological Survey National Elevation Dataset.

Scale: SCALE 1:100,000
1 CENTIMETER ON THE MAP REPRESENTS 1 KILOMETER ON THE GROUND
CONTOUR INTERVAL: 50 METERS
ELEVATIONS SHOWN TO THE NEAREST METER

Maps may be obtained from:
Publications Office
Montana Bureau of Mines and Geology
1300 West Park Street
Butte, Montana 59701-8997
Phone: (406) 496-4167 Fax: (406) 496-4451
http://mbmg.mtech.edu

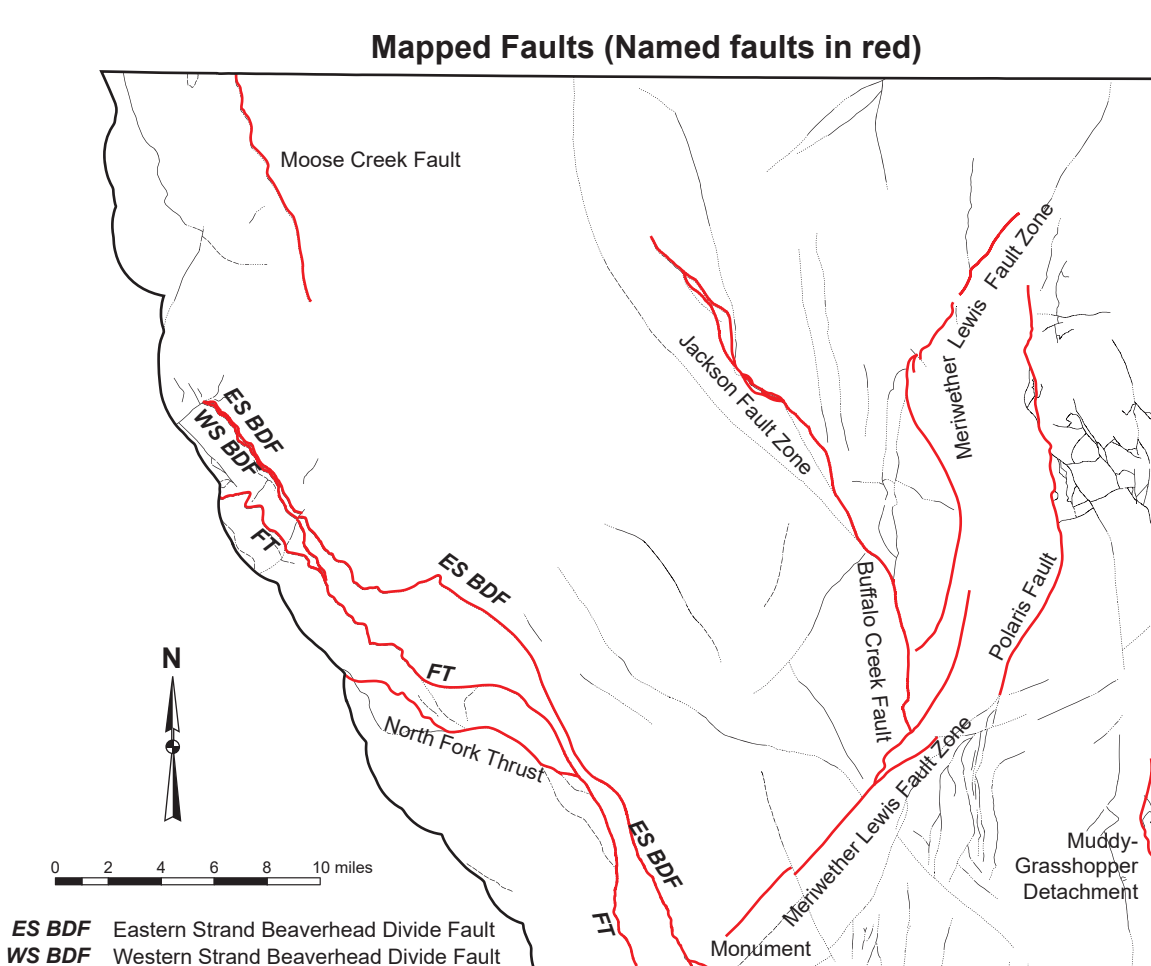
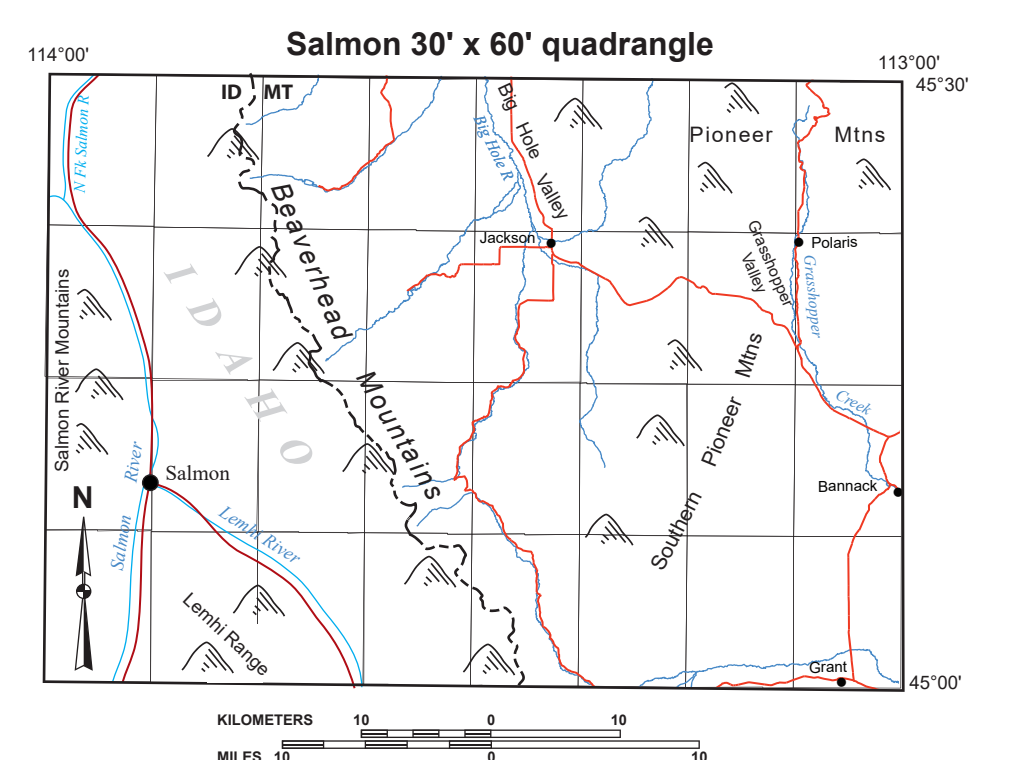
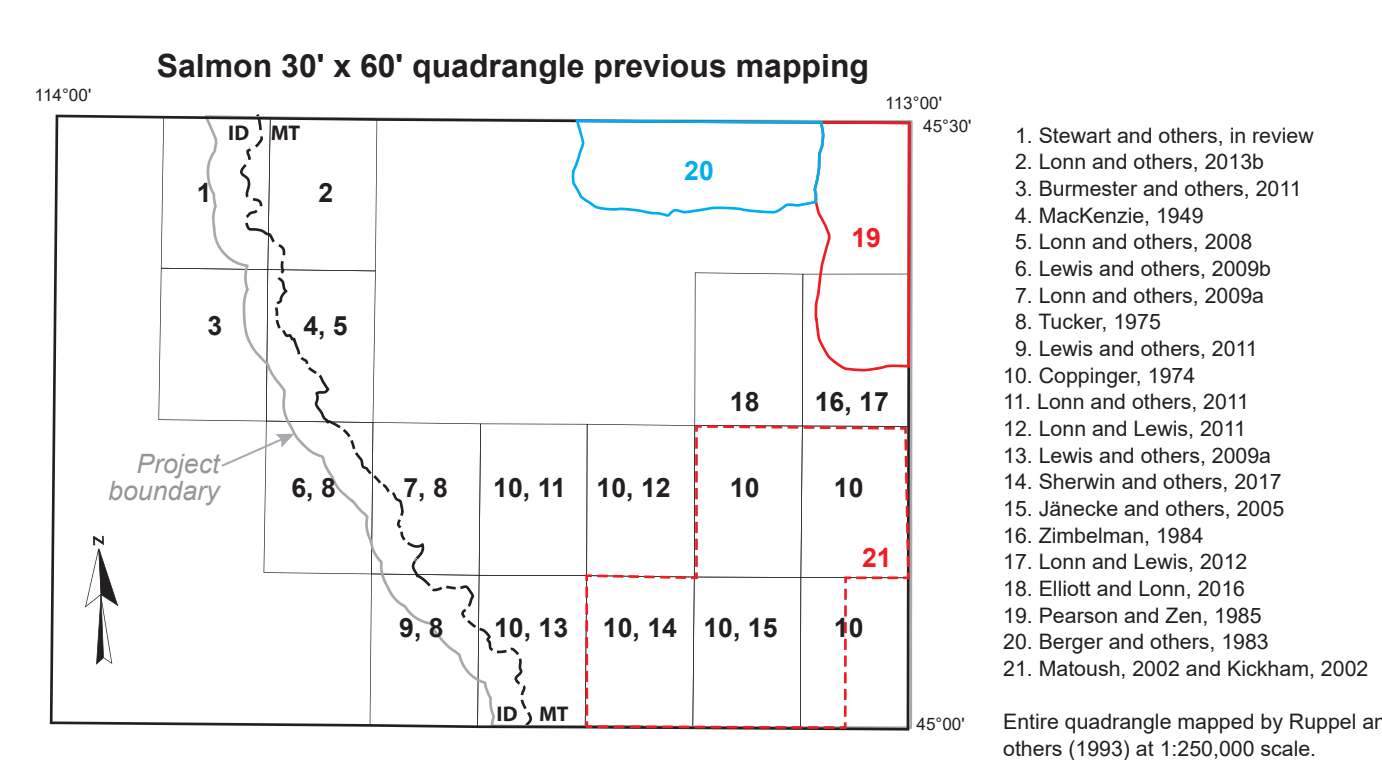


7 1/2' quadrangle map index

NEZ PERCE	WISDOM	SUTTE
POWELL	SALMON	SOUTH
CHALLIS	LEADORE	LIMA

Published 7 1/2' quadrangle maps

Montana	Idaho	EDMAP
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MBMG
Montana Bureau of Mines and Geology
Geologic Map 75

Geologic Map of the Montana Part of the Salmon 30' x 60' Quadrangle, Southwestern Montana

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