WYOMING STATE GEOLOGICAL SURVEY
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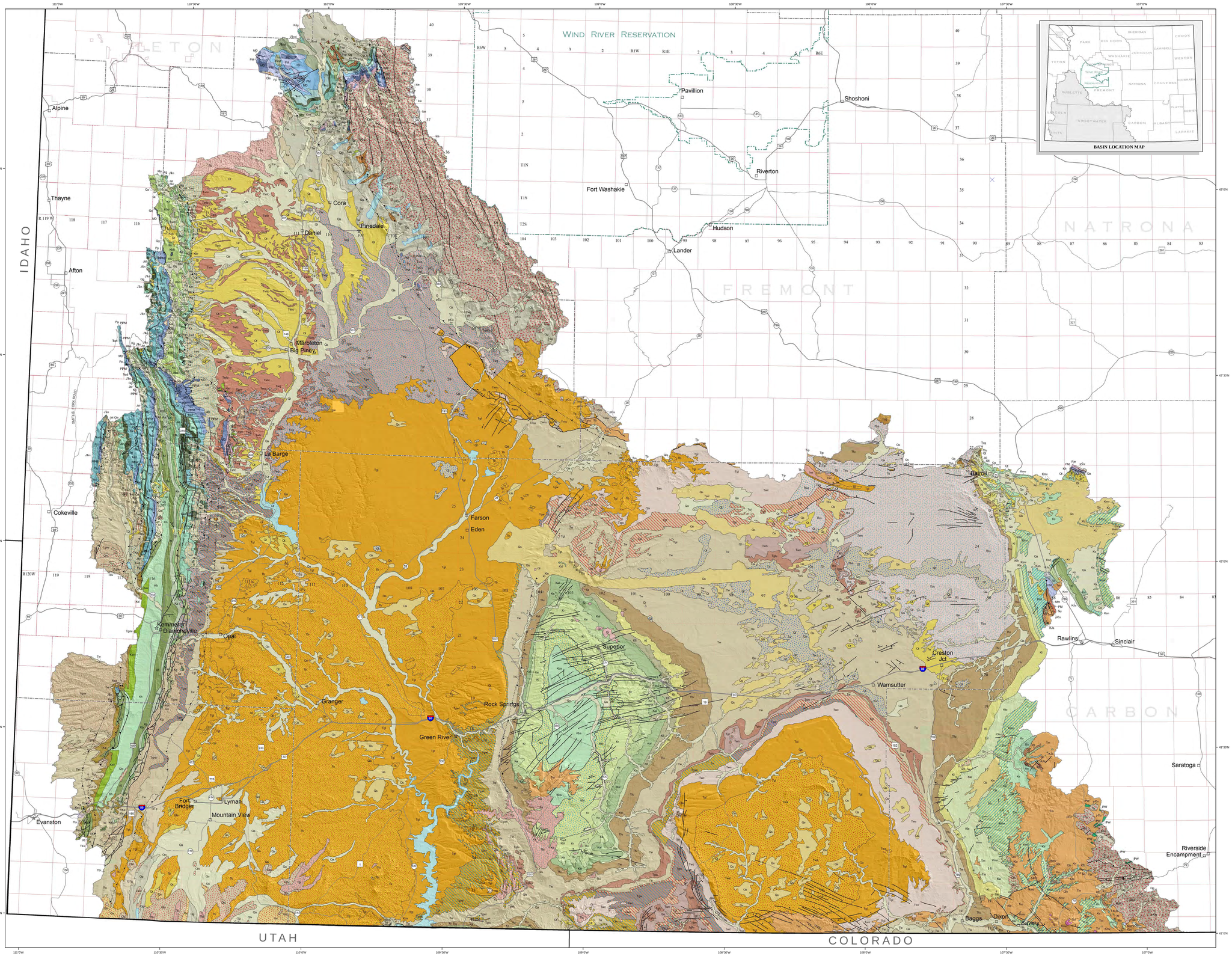
Geology - Interpreting the past - providing for the future

GEOLOGIC MAP OF THE GREATER GREEN RIVER BASIN, WYOMING



EXPLANATION

MAP SYMBOLS

Formation contact

Normal fault—Dotted where concealed; bar and ball on downthrown block; no designation on fault trace indicates undetermined motion

Thrust fault—Dotted where concealed; sawteeth on upthrown (tectonically higher) block

Shear zone

County seat
City or town
Lake or reservoir
Interstate highway
U.S. highway
State highway
County or other road
Wind River Reservation boundary
County boundary
State boundary

GEOLOGIC UNITS
(Geology enlarged from 1:500,000 scale to improve readability)

CENOZOIC

Quaternary

- Qa — Alluvium and colluvium
- Qg — Gravel, pediment, and fan deposits
- Qgl — Glacial deposits
- Qls — Landslide deposits
- Qs — Dune sand and loess
- Qp — Playa lake and other lacustrine deposits
- Qsu — Surficial deposits, undifferentiated
- Qi — Alkalic extrusive and intrusive igneous rocks

Quaternary and Tertiary

- QTg — Terrace gravel (Pleistocene and/or Pliocene)

Tertiary

- Ti — Intrusive and extrusive igneous rocks
- Tbf — Basalt flows and intrusive igneous rocks
- Tm — Miocene rocks
- Tmu — Upper Miocene rocks
- Tbr — Bishop Conglomerate
- Twr — White River Formation
- Twru — Upper conglomerate member
- Toe — Oligocene and/or upper and middle Eocene rocks
- Tip — Ice Point Conglomerate
- Twa — Washakie Formation
- Tb — Bridger Formation
- Tcg — Crooks Gap Conglomerate
- Tgw — Green River and Wasatch Formations
- Tgc — Granitic conglomerate above or in upper part of Wasatch Formation
- Tgl — Laney Member of Green River Formation
- Twc — Cathedral Bluffs Tongue of Wasatch Formation
- Tgw — Wilkins Peak Member of Green River Formation
- Tgwt — Wilkins Peak Member and Tipton Shale Member or Tongue of Green River Formation
- Tgt — Tipton Shale Member or Tongue of Green River Formation
- Twn — Niland Tongue of Wasatch Formation
- Twg — New Fork Tongue of Wasatch Formation and Fontenelle Tongue or Member of Green River Formation
- Tglu — Luman Tongue of Green River Formation
- Twd — Diamictite and sandstone of Wasatch Formation
- Tw — Main body of Wasatch Formation
- Twlc — La Barge and Chappo Members of Wasatch Formation
- Twbs — Transitional unit between Battle Spring and Wasatch Formations
- Tbs — Battle Spring Formation
- Tg — Bass Peak Formation and equivalents
- Tcp — Conglomerate of Roaring Creek
- Th — Hoback Formation
- Tdb — Devils Basin Formation
- Tfu — Fort Union Formation

CENOZOIC AND MESOZOIC

Tertiary and Cretaceous

- TKe — Evanston Formation
- TKp — Pinyon Conglomerate

MESOZOIC

Cretaceous

- Kl — Lance Formation
- Kfh — Fox Hills Sandstone
- Kfl — Fox Hills Sandstone and Lewis Shale
- Kle — Lewis Shale
- Kmv — Mesaverde Group
- Kal — Almond Formation
- Ke — Ericson Sandstone
- Kr — Rock Springs Formation
- Kbl — Blair Formation
- Kav — Adaville Formation
- Kh — Hilliard Shale
- Kbb — Blind Bull Formation
- Ksb — Sohare Formation and Bacon Ridge Sandstone
- Kba — Baxter Shale
- Kc — Cody Shale
- Ks — Steele Shale
- Ksn — Steele Shale and Niobrara Formation
- Kn — Niobrara Formation
- Kf — Frontier Formation
- Kmt — Frontier Formation, and Mowry and Thermopolis Shales
- Ksss — Sage Junction, Quealy, Cokeville, Thomas Fork, and Smiths Formations
- Ka — Aspen Shale
- Kbr — Bear River Formation
- Kmt — Mowry and Thermopolis Shales
- Kg — Gannett Group

Cretaceous and Jurassic

- KJ — Cloverly and Morrison Formations
- KJs — Cloverly, Morrison, and Sundance Formations
- KJg — Cloverly, Morrison, Sundance, and Gypsum Spring Formations

Jurassic

- Jst — Stump Formation, Preuss Sandstone or Redbeds, and Twin Creek Limestone
- Jsg — Sundance and Gypsum Spring Formations

Jurassic and Triassic

- Jn — Nugget Sandstone
- JTRn — Nugget Sandstone, and Chugwater and Dinwoody Formations

Triassic

- TRad — Ankareh Formation, Thaynes Limestone, Woodside Shale, and Dinwoody Formation
- TRc — Chugwater Formation or Group
- TRcd — Chugwater and Dinwoody Formations

MESOZOIC AND PALEOZOIC

- MzPz — Mesozoic and Paleozoic rocks, undifferentiated

PALEOZOIC

Permian

- Pp — Phosphoria Formation and related rocks

Pennsylvanian

- IPm — Mafic intrusive rocks

Permian, Pennsylvanian, and Mississippian

- PM — Tensleep Sandstone and Amsden Formation
- PIPM — Wells and Amsden Formations

Mississippian

- Mm — Madison Limestone or Group

Mississippian and Devonian

- MD — Madison Limestone and Darby Formation

Mississippian, Devonian, Ordovician, and Cambrian

- Pzr — Madison Limestone, Darby Formation, Bighorn Dolomite, Gallatin Limestone, Gros Ventre Formation, and Flathead Sandstone

Ordovician

- OC — Bighorn Dolomite, Gallatin Limestone, Gros Ventre Formation, and Flathead Sandstone

Cambrian

- Єu — Gallatin Limestone, Gros Ventre Formation and equivalents, and Flathead Sandstone

PRECAMBRIAN

- Pc — Precambrian rocks, undifferentiated

DATA REFERENCE

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Map Projection: Lambert Conformal Conic
False Easting: 500000, False Northing: 200000
Central Meridian: -107.5 degrees West
Standard Parallel 1: 41 degrees North
Standard Parallel 2: 45 degrees North
Latitude of Origin: 41 degrees North
Linear Unit: Meter
Horizontal Datum: North American Datum of 1983 (NAD 83)
Ellipsoid: Geodetic Reference System 80

Magnetic Declination = 10° 55' E
at center of map
(Feb. 12, 2013)

Scale 1:350,000

0 10 20 30 40 50 Miles

0 20 40 60 80 Kilometers

Geology modified from Love and Christiansen (1985)

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