

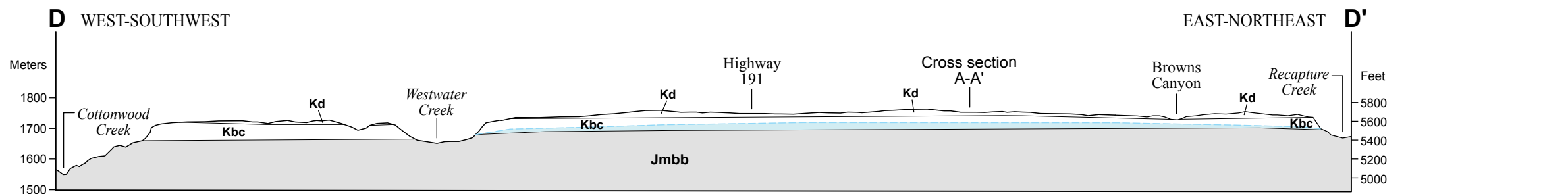
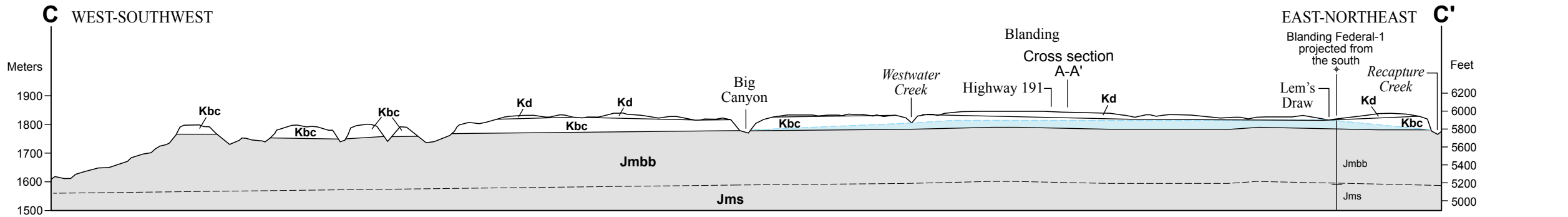
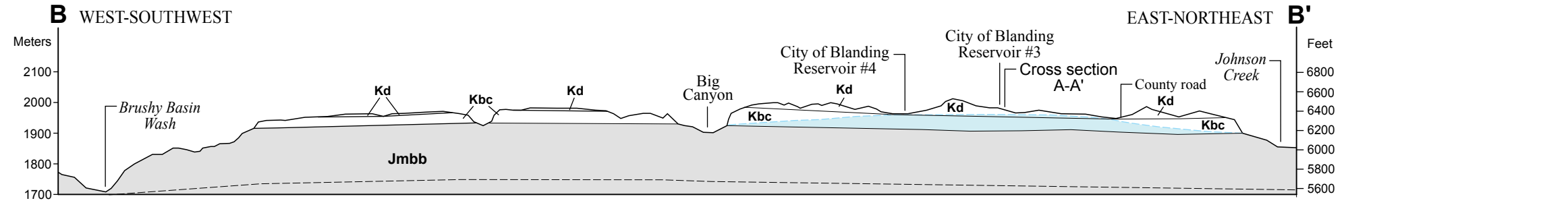
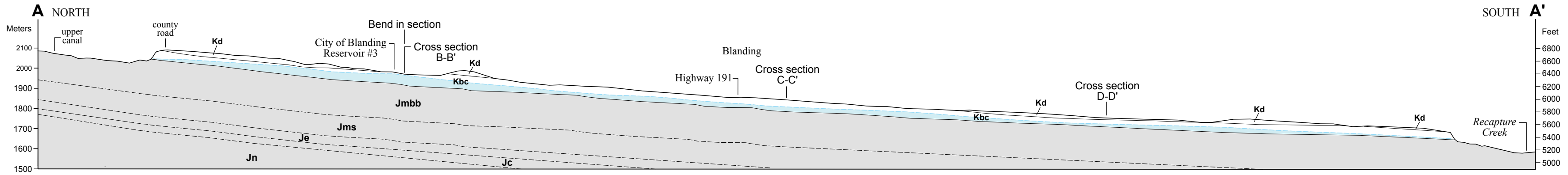
GEOLOGIC MAP OF THE BLANDING AREA, SAN JUAN COUNTY, UTAH

by Stefan Kirby

Digital compilation by Scott Horn

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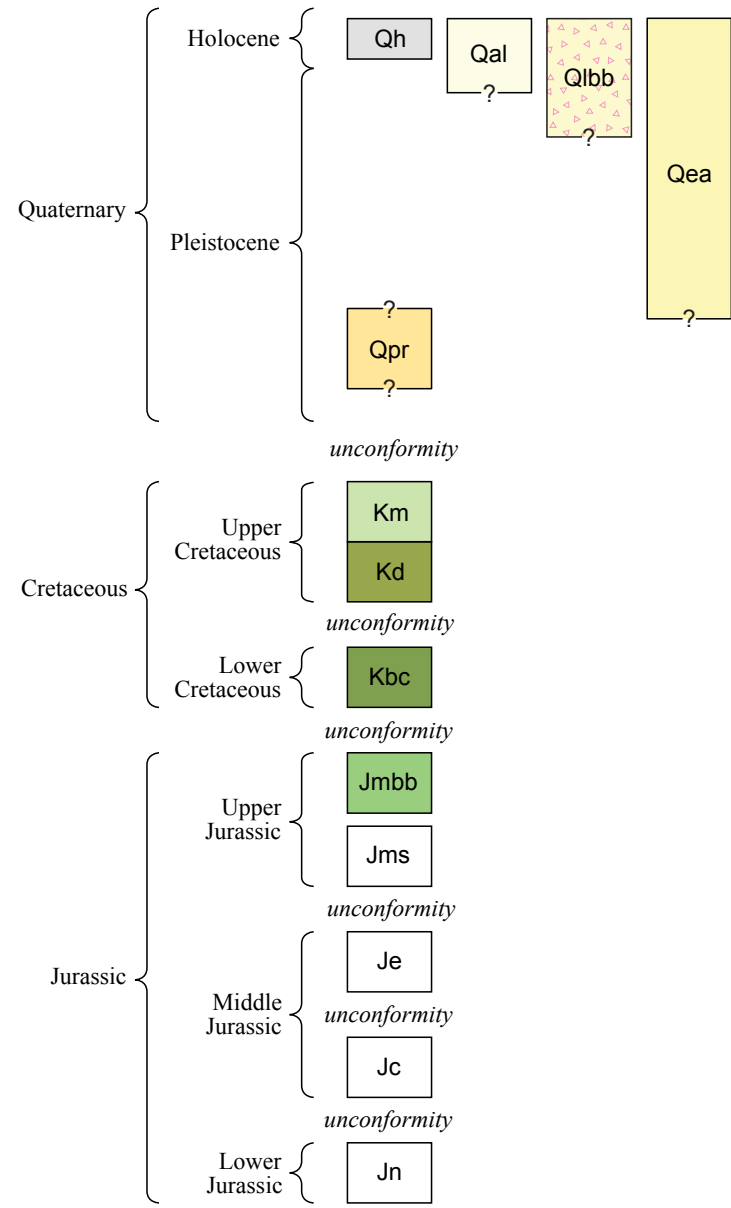
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- Rocks of the principal aquifer
- Units below the principal aquifer
- Saturated area of the principal aquifer based on potentiometric surface in plate 4

3X vertical exaggeration on all cross sections
Thin unconsolidated Quaternary units and the Mancos Shale not shown
Units below the Brushy Basin Member include: Jms, Salt Wash Member of the Morrison Formation; Je, Entrada Sandstone; Jc, Carmel Formation; Jn, Navajo Sandstone
For description of units below the Brushy Basin Member see Hintze and Stokes (1963), Haynes and others (1972), and Doelling (2004)

CORRELATION OF MAP UNITS



DESCRIPTION OF MAP UNITS

- Qh Artificial cut and fill – Clay to boulder-size material; variable thickness; latest Holocene.
- Qal Stream alluvium – Sand, silt, clay, and gravel; thickness varies but commonly less than 9 m (30 ft); Holocene.
- Qlb Slumps and landslides – Hummocky deposits and slumped material; most common on slopes of the Brushy Basin Member of the Jurassic Morrison Formation; variable thickness; Holocene to upper Pleistocene.
- Qea Mixed eolian and alluvial deposits – Eolian sand deposits with interspersed alluvial gravels, sands, and silts; variable thickness usually less than 6 m (20 ft); Holocene to middle Pleistocene.
- Qpr Pediment remnant deposits – Alluvial gravel, cobbles, and boulders; deposited as alluvial fans on flanks of the Abajo Mountains; up to 12 m (40 ft) thick; lower Pleistocene.
- Km Mancos Shale – Marine shale, lesser siltstone, and sandstone. Within the study area only the base of the Mancos Shale is present, up to 9 m (30 ft) thick; Upper Cretaceous.
- Kd Dakota Sandstone – Sandstone, conglomerate, and interbedded mudstone and shale; thickness varies from 5 to 15 m (15-50 ft); Upper Cretaceous.
- Kbc Burro Canyon Formation – Sandstone, conglomerate, and mudstone; thickness averages 29 m (95 ft); Lower Cretaceous.
- Jmbb Brushy Basin Member of the Morrison Formation – Siltstone, mudstone, lesser sandstone and conglomerate, and minor limestone. Within the study area only the upper 60 m (200 ft) are exposed; Upper Jurassic.
- Jms Salt Wash Member of the Morrison Formation – Interbedded sandstone and siltstone and mudstone. Not exposed in the study area. Thickness is estimated from borehole data and Haynes and others (1972) at ~ 110 m (360 ft). Shown only on cross sections.
- Je Entrada Sandstone – Crossbedded sandstone. Not exposed in the study area. Thickness is estimated from borehole data and Haynes and others (1972) at ~ 50 m (160 ft). Shown only on cross sections.
- Jc Carmel Formation – Silty shale, siltstone, and sandstone. Not exposed in the study area. Thickness is estimated from borehole data and Haynes and others (1972) at ~ 30 m (100 ft). Shown only on cross sections.
- Jn Navajo Sandstone – Crossbedded sandstone. Not exposed in the study area. Thickness is estimated from borehole data and Haynes and others (1972) at least 120 m (400 ft). Shown only on cross sections.

LITHOLOGIC COLUMN

SYSTEM	SERIES	FORMATION AND MEMBERS	SYMBOL	THICKNESS Meters (Feet)	LITHOLOGY
QUAT.	Upper	Surficial deposits	Q	<12 (<40)	
		Mancos Shale	Km	0-9 (0-30)	
		Dakota Sandstone	Kd	5-15 (15-50)	
CRET.	Upper	Burro Canyon Formation	Kbc	24-36 (80-120)	
		Brushy Basin Member	Jmbb	>60 (>200)	
JURASSIC	Upper	Brushy Basin Member	Jmbb	>60 (>200)	
		Salt Wash Member	Jms		
		Entrada Sandstone	Je		
JURASSIC	Middle	Carmel Formation	Jc		
		Navajo Sandstone	Jn		

Modified from Doelling (2004).

MAP SYMBOLS

- Contact – Solid where definitely located; dashed where gradational
- A—A' Line of cross section
- Location of measured section shown on plate 2
- Strike and dip of bedding
- Water body