U.S. Department of the Interior
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Scientific Investigations Map 3461
Pamphlet accompanies map

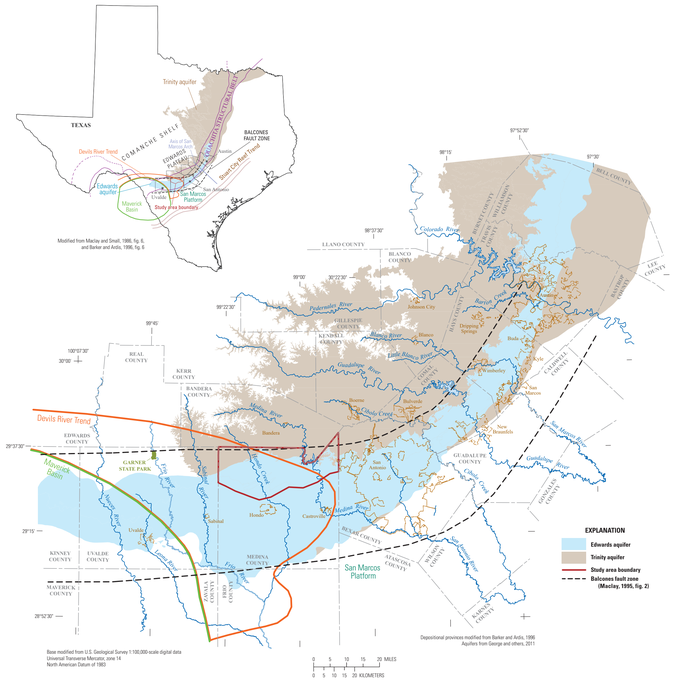

Figure 1. Location of the study area relative to the State of Texas, Medina County, the surficial extent of the rocks that compose the Edwards and Trinity aquifers, and the surficial extent of the Balcones fault zone.

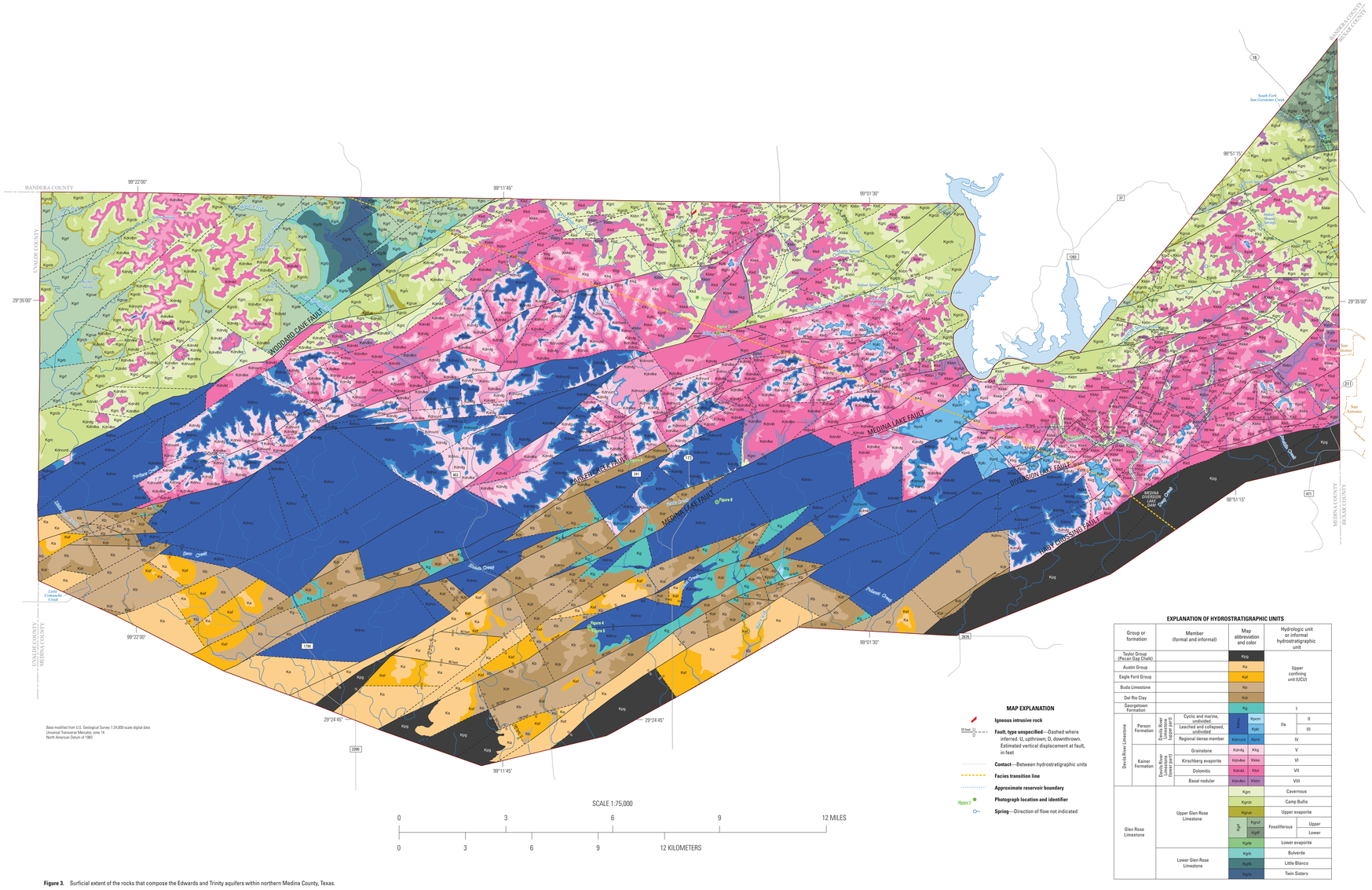

Figure 3. Surficial extent of the rocks that compose the Edwards and Trinity aquifers within northern Medina County, Texas.

EXPLANATION OF HYDROSTRATIGRAPHIC UNITS

Group or formation	Member (formal and informal)	Map abbreviation and color	Hydrologic unit or informal hydrostratigraphic unit
Taylor Group (Pecan Gap Chalk)		Kpg	Upper confining unit (UCU)
Austin Group		Ka	
Eagle Ford Group		Kef	
Buda Limestone		Kb	
Del Rio Clay		Kdr	
Georgetown Formation		Kg	I
Person Formation (Devils River Limestone)	Cyclic and marine, undivided	Kpcm	IIa, II, III
	Leached and collapsed, undivided	Kpdc	
	Regional dense member	Kdrvurd, Kpnrd	IV
Kainer Formation (Devils River Limestone)	Grainstone	Kdrvlg, Klag	V
	Kirschberg evaporite	Kdrvke, Klake	VI
	Dolomitic	Kdrvkd, Kkd	VII
	Basal nodular	Kdrvbn, Kbbn	VIII
Glen Rose Limestone	Upper Glen Rose Limestone	Kgrc	Cavernous
		Kgrcb	Camp Bullis
		Kgrua	Upper evaporite
		Kgrgf: Kgrgul, Kgrgfl	Fossiliferous: Upper, Lower
		Kgrle	Lower evaporite
	Lower Glen Rose Limestone	Kgrb	Bulverde
		Kgrlb	Little Blanco
		Kgrts	Twin Sisters

Figure 4. *Toucasia* sp. (rudists) at the top of the Devils River Limestone, northern Medina County, Texas (photograph by Allan K. Clark, U.S. Geological Survey, July 7, 2019).

Figure 5. The Del Rio Clay (Washita Group), northern Medina County, Texas (photograph by Robert R. Morris, U.S. Geological Survey, July 18, 2019).

Figure 6. Late Cretaceous igneous intrusive rocks exposed along County Road 241, northern Medina County, Texas (photograph by Allan K. Clark, U.S. Geological Survey, December 4, 2019).

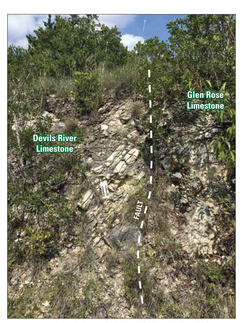

Figure 7. A high-angle fault juxtaposing the Glen Rose Limestone (Trinity Group) against the Devils River Limestone (informal dolomite member) along Highway 173 (4.47 miles south of the Bandera and Medina County line), northern Medina County, Texas (photograph by Allan K. Clark, U.S. Geological Survey, December 4, 2019).

Figure 8. Channel porosity in the Devils River Limestone, northern Medina County, Texas (photograph by Allan K. Clark, U.S. Geological Survey, February 26, 2019).

Figure 9. A sample of evaporite with vug and boxwork porosity in the cavernous hydrostratigraphic unit of the upper zone of the Trinity aquifer, northern Medina County, Texas (photograph by Allan K. Clark, U.S. Geological Survey, February 4, 2019).

Figure 10. Evaporitic beds of the cavernous hydrostratigraphic unit of the upper zone of the Trinity aquifer, northern Medina County, Texas (photograph by Allan K. Clark, U.S. Geological Survey, February 4, 2019).

Figure 11. Burrow porosity at the contact of hydrostratigraphic unit VIII of the Edwards aquifer (Kainer Formation of the Edwards Group) and the cavernous hydrostratigraphic unit of the upper zone of the Trinity aquifer (Glen Rose Limestone of the Trinity Group), northern Medina County, Texas (photograph by Allan K. Clark, U.S. Geological Survey, May 23, 2018).

Geologic Framework and Hydrostratigraphy of the Edwards and Trinity Aquifers Within Northern Medina County, Texas

By
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2020

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