

Glacial Meltwater Channels as Sole Source Aquifers in Rural Areas of East Central Illinois



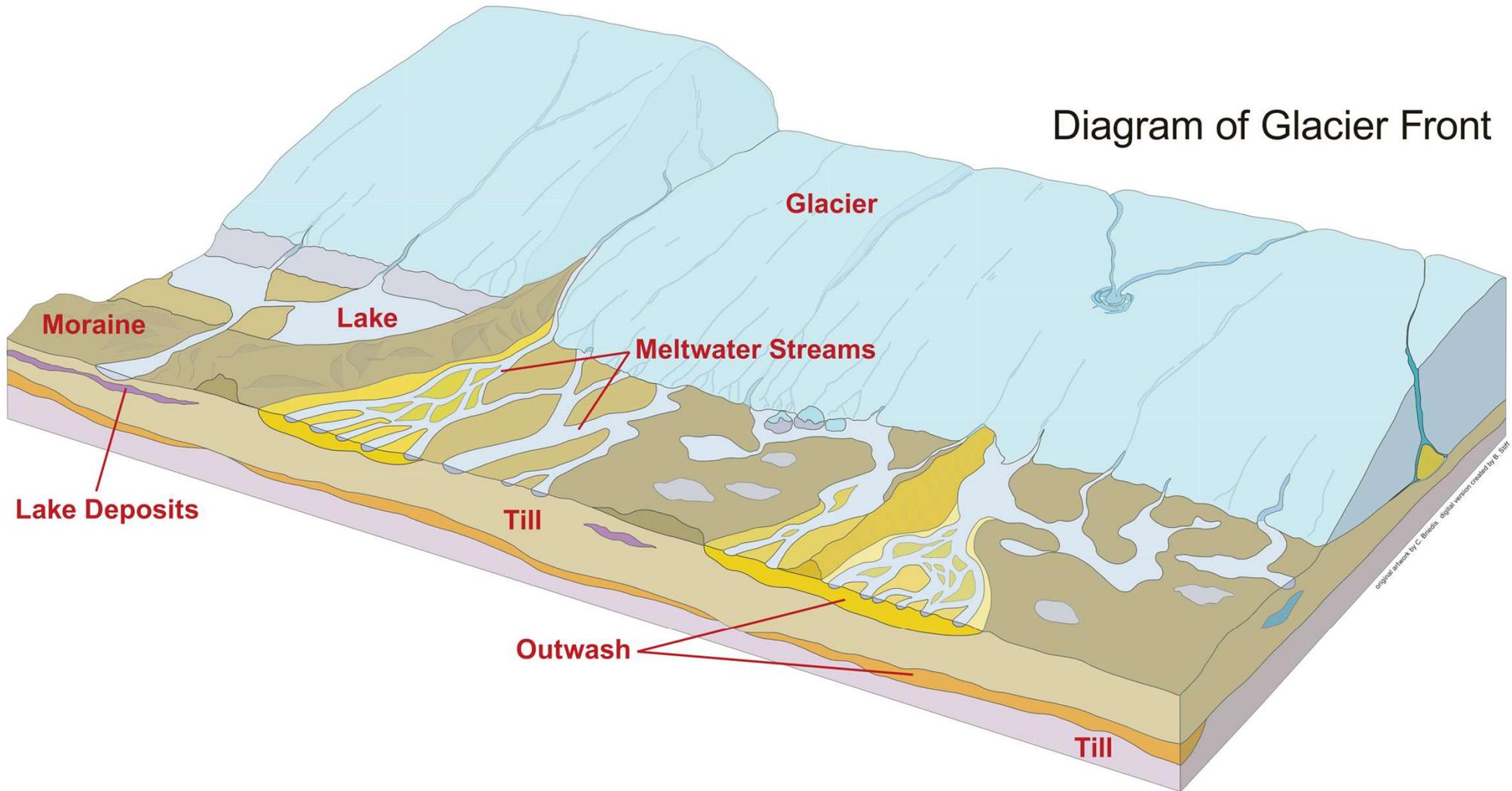
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Chicago Chapter

Former Member, Champaign
County Board
Member, Mahomet Aquifer
Council

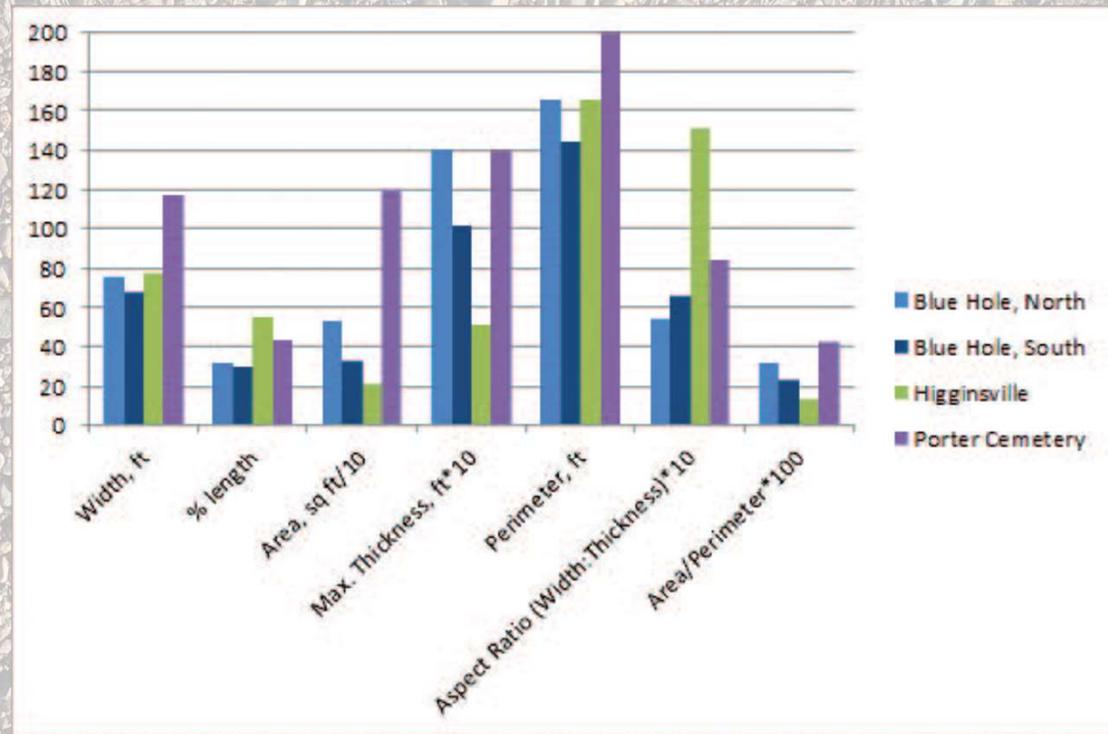
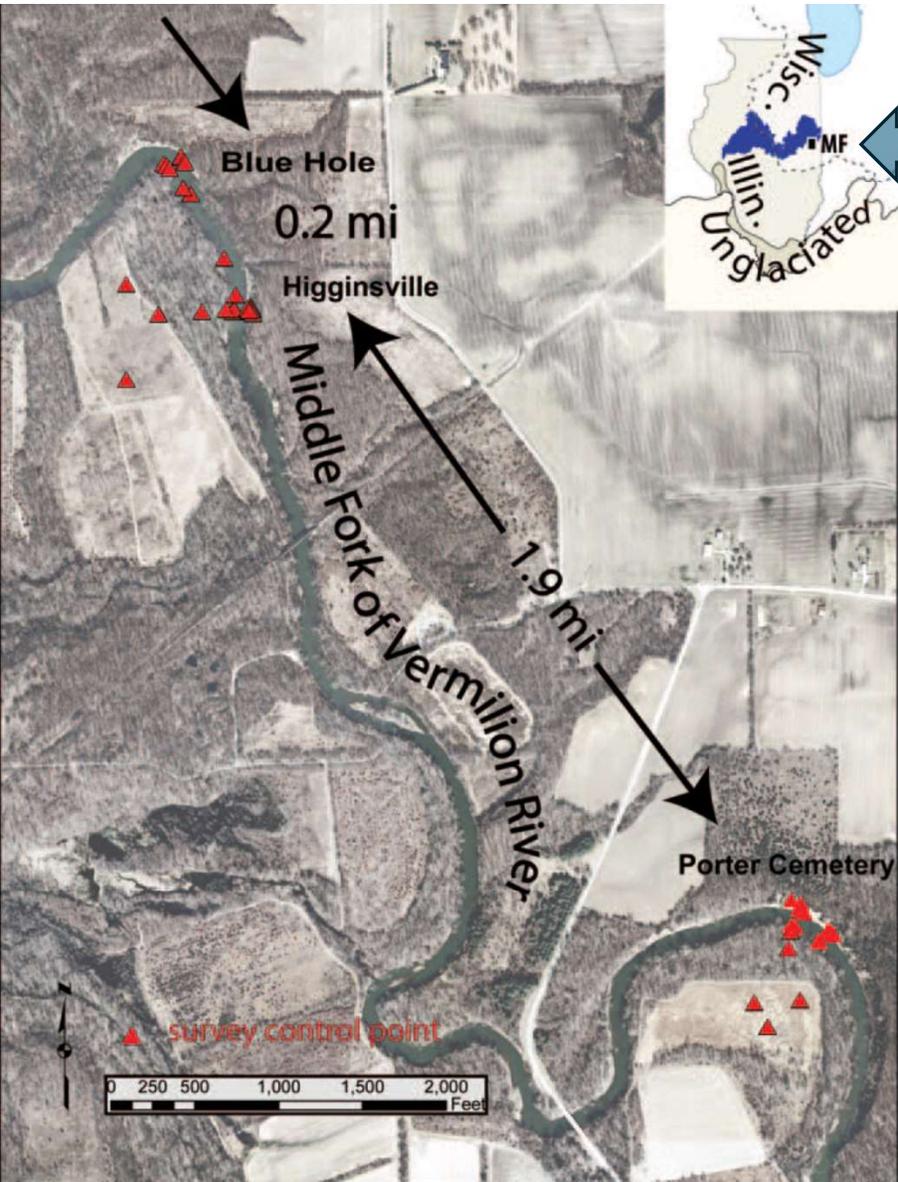
**Champaign County CO2
Sequestration Activities
Task Force (3CSATF)**

May 29, 2025

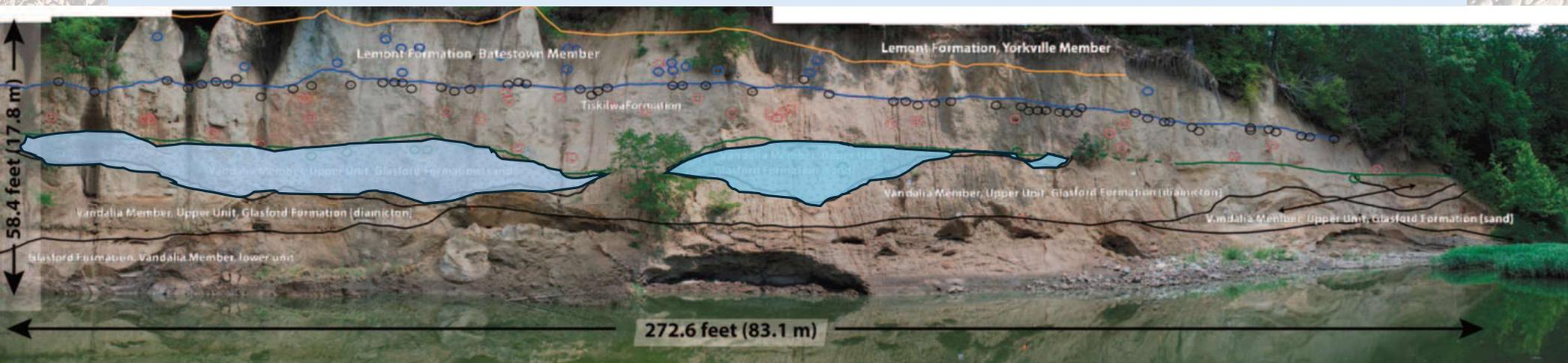
Diagram of Glacier Front



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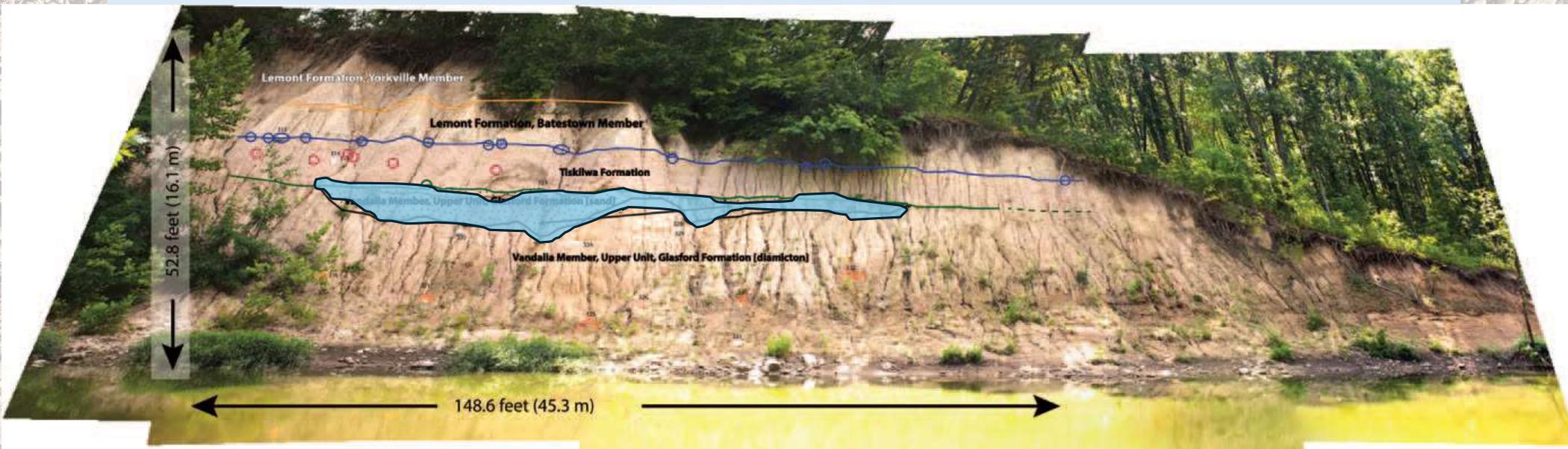


Clast pavements and buried channel deposits in an outcrop at the Blue Hole site along the Middle Fork of the Vermilion River



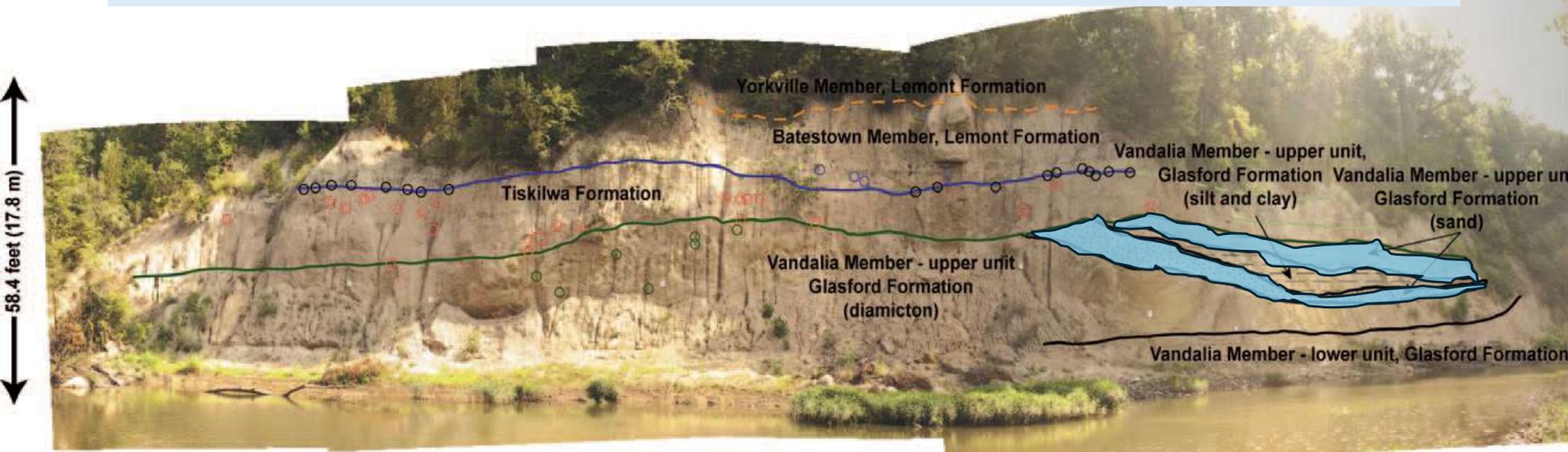
Location	Width, ft	Channel Width as % Length of Outcrop	Area, sq ft	Max. Thickness, ft	Perimeter, ft
Blue Hole, North	75.24	32	526.46	14.02	165.97
Blue Hole, South	67.28	30	327.41	10.18	144.08
Higginsville	77.20	55	212.35	5.10	165.86
Porter Cemetery	116.80	43	1199.71	13.94	282.20

Clast pavements and buried channel deposits in an outcrop at the Higginsville site along the Middle Fork of the Vermilion River



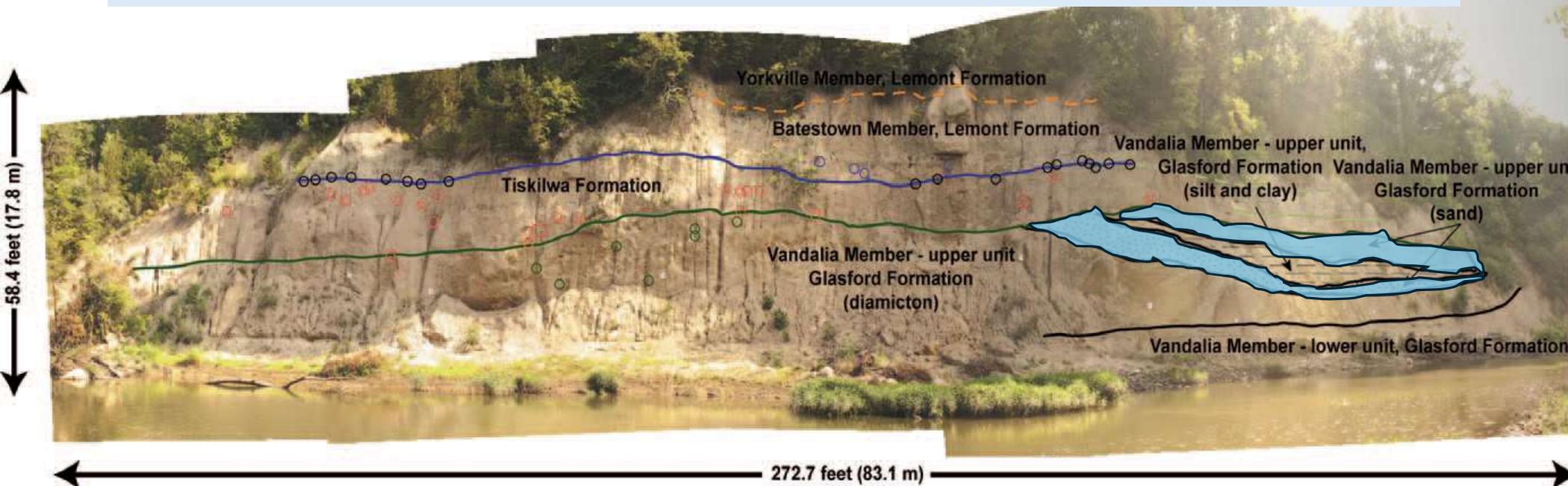
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Blue Hole, South	67.28	30	327.41	10.18	144.08
Higginsville	77.20	55	212.35	5.10	165.86
Porter Cemetery	116.80	43	1199.71	13.94	282.20

Clast pavements and buried channel deposits in an outcrop at the Porter Cemetery site along the Middle Fork of the Vermilion River



Location	Width, ft	Channel Width as % Length of Outcrop	Area, sq ft	Max. Thickness, ft	Perimeter, ft
Blue Hole, North	75.24	32	526.46	14.02	165.97
Blue Hole, South	67.28	30	327.41	10.18	144.08
Higginsville	77.20	55	212.35	5.10	165.86
Porter Cemetery	116.80	43	1199.71	13.94	282.20

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- Limited occurrence, ‘hit or miss’,
- Are not laterally extensive,
- Range in thickness 5 to 14 ft thick [1.5-4.2 m],
- Provide limited amounts of water ~ 10 g/min [38 l/m] varying duration

