

# QUATERNARY GEOLOGY

## MADISON, CONNECTICUT

## LIST OF MAP UNITS

POSTGLACIAL DEPOSITS - late Holocene, late Wisconsin	GLACIAL MELTWATER DEPOSITS - late Wisconsin	Explanation of Map Symbols
Artificial Fill	Undifferentiated Meltwater Deposits	Red dashed line = Ice Margin Position
Coastal Beach and Dune Deposits	Deposits of Major Ice-Dammed Lakes	Red dash-dot line = Inferred Ice Margin Position
Tidal Marsh Deposits	Deposits of Major Sediment-Dammed Lakes	Blue dashed line = Esker
Floodplain Alluvium	Deposits of Related Series of Major Ice-Dammed Ponds	Blue dashed line with dots = Glacial Striation or Groove
Swamp Deposits	Deposits of Related Series of Major Sediment-Dammed Ponds	Blue dashed line with dots = Drumlin Axis and Center
Tale	Deposits of Proximal Meltwater Streams	Blue dashed line with dots = Meltwater Channel
Tale	Deposits of Distal Meltwater Streams	Purple dashed line = Glacial Lake Spillway
EARLY POSTGLACIAL DEPOSITS - early Holocene, late Wisconsin	GLACIAL ICE-LAKE DEPOSITS - late Wisconsin, Illinoian	Purple dashed line with dots = Inferred Glacial Spillway
Stream Terrace Deposits	Thin Till Deposits	Black dot = Location of Lower Till
Inland Dune Deposits	Thick Till Deposits	Black dot = Two-Till Outcrop
	End Moraine Deposits	Black dot = Debate: Boding Location
		Black dot = Weathered Bedrock Outcrop
		Black dot = Radiocarbon-Dated Locality
<b>Explanation of Map Symbols</b>	<b>Elevation Contours</b>	
Area of glaciofluvial sediments grading to glacial lake	100 FT. Interval	
Area of lake-bottom sediments	50 FT. Interval	
--- Drainage Divide - boundary between major geologic basins.		
--- Drainage Divide - Boundary within major geologic basin divide (in the north-drainage and north-drainage terraces)		

## EXPLANATION

**Figure 2: Scenario for morphogenesis development in ice-dammed (Top) and sediment-dammed basins (Bottom).** The mechanism of impoundment and the chronological and topographic positions of the deposits are related to the orientation of the basins relative to the direction of ice retreat. These relationships are reflected in the organization and color coding of the List of Map Units (after Stone and others, 2005).

**Topographic and Chronological Relationships:**

- North Ice-contact (collapsed):** The northernmost part of the valley, showing the initial ice contact and subsequent collapse.
- Delta:** A large, fan-shaped deposit at the mouth of the river, formed by the accumulation of glacial sediments.
- South Lake-Bottom:** A large, flat area of sediment at the southern end of the valley, formed by the accumulation of glacial sediments.
- North-Draining Basin:** A basin formed by the accumulation of glacial sediments, draining northward.
- Wide Basin:** A large, flat area of sediment, formed by the accumulation of glacial sediments.
- South-Draining Basin:** A basin formed by the accumulation of glacial sediments, draining southward.
- Narrow Basin:** A narrow, elongated basin formed by the accumulation of glacial sediments.

**Stratigraphic Column (from top to bottom):**

- Postglacial Deposits:** Fluvial-alluvium and swamp deposits, including stream-terrace, talus, dune, tidal-marsh, beach, channel fill, marine delta deposits, and artificial fill.
- Glacial Ice-Land Deposits:** Nonsorted and generally nonstratified till, thick till, and end moraine.
- Glacial Melwater Deposits:** Sorted and stratified delta, river bottom, lake bottom, and inland deposits.

**Map Details:**

- Scale:** 0 to 2 miles.
- North Arrow:** Points to the top of the map.
- Map Units:** Labeled with numbers 1 through 10, corresponding to the stratigraphic column.
- Topographic Features:** Shaded areas represent elevation, with labels for 0, 125, 250, 500, 750, 1000, 1250, 1500, 1750, 2000, 2250, 2500, 2750, 3000, 3250, 3500, 3750, 4000, 4250, 4500, 4750, 5000, 5250, 5500, 5750, 6000, 6250, 6500, 6750, 7000, 7250, 7500, 7750, 8000, 8250, 8500, 8750, 9000, 9250, 9500, 9750, 10000, 10250, 10500, 10750, 11000, 11250, 11500, 11750, 12000, 12250, 12500, 12750, 13000, 13250, 13500, 13750, 14000, 14250, 14500, 14750, 15000, 15250, 15500, 15750, 16000, 16250, 16500, 16750, 17000, 17250, 17500, 17750, 18000, 18250, 18500, 18750, 19000, 19250, 19500, 19750, 20000, 20250, 20500, 20750, 21000, 21250, 21500, 21750, 22000, 22250, 22500, 22750, 23000, 23250, 23500, 23750, 24000, 24250, 24500, 24750, 25000, 25250, 25500, 25750, 26000, 26250, 26500, 26750, 27000, 27250, 27500, 27750, 28000, 28250, 28500, 28750, 29000, 29250, 29500, 29750, 30000, 30250, 30500, 30750, 31000, 31250, 31500, 31750, 32000, 32250, 32500, 32750, 33000, 33250, 33500, 33750, 34000, 34250, 34500, 34750, 35000, 35250, 35500, 35750, 36000, 36250, 36500, 36750, 37000, 37250, 37500, 37750, 38000, 38250, 38500, 38750, 39000, 39250, 39500, 39750, 40000, 40250, 40500, 40750, 41000, 41250, 41500, 41750, 42000, 42250, 42500, 42750, 43000, 43250, 43500, 43750, 44000, 44250, 44500, 44750, 45000, 45250, 45500, 45750, 46000, 46250, 46500, 46750, 47000, 47250, 47500, 47750, 48000, 48250, 48500, 48750, 49000, 49250, 49500, 49750, 50000, 50250, 50500, 50750, 51000, 51250, 51500, 51750, 52000, 52250, 52500, 52750, 53000, 53250, 53500, 53750, 54000, 54250, 54500, 54750, 55000, 55250, 55500, 55750, 56000, 56250, 56500, 56750, 57000, 57250, 57500, 57750, 58000, 58250, 58500, 58750, 59000, 59250, 59500, 59750, 60000, 60250, 60500, 60750, 61000, 61250, 61500, 61750, 62000, 62250, 62500, 62750, 63000, 63250, 63500, 63750, 64000, 64250, 64500, 64750, 65000, 65250, 65500, 65750, 66000, 66250, 66500, 66750, 67000, 67250, 67500, 67750, 68000, 68250, 68500, 68750, 69000, 69250, 69500, 69750, 70000, 70250, 70500, 70750, 71000, 71250, 71500, 71750, 72000, 72250, 72500, 72750, 73000, 73250, 73500, 73750, 74000, 74250, 74500, 74750, 75000, 75250, 75500, 75750, 76000, 76250, 76500, 76750, 77000, 77250, 77500, 77750, 78000, 78250, 78500, 78750, 79000, 79250, 79500, 79750, 80000, 80250, 80500, 80750, 81000, 81250, 81500, 81750, 82000, 82250, 82500, 82750, 83000, 83250, 83500, 83750, 84000, 84250, 84500, 84750, 85000, 85250, 85500, 85750, 86000, 86250, 86500, 86750, 87000, 87250, 87500, 87750, 88000, 88250, 88500, 88750, 89000, 89250, 89500, 89750, 90000, 90250, 90500, 90750, 91000, 91250, 91500, 91750, 92000, 92250, 92500, 92750, 93000, 93250, 93500, 93750, 94000, 94250, 94500, 94750, 95000, 95250, 95500, 95750, 96000, 96250, 96500, 96750, 97000, 97250, 97500, 97750, 98000, 98250, 98500, 98750, 99000, 99250, 99500, 99750, 100000, 100250, 100500, 100750, 101000, 101250, 101500, 101750, 102000, 102250, 102500, 102750, 103000, 103250, 103500, 103750, 104000, 104250, 104500, 104750, 105000, 105250, 105500, 105750, 106000, 106250, 106500, 106750, 107000, 107250, 107500, 107750, 108000, 108250, 108500, 108750, 109000, 109250, 109500, 109750, 110000, 110250, 110500, 110750, 111000, 111250, 111500, 111750, 112000, 112250, 112500, 112750, 113000, 113250, 113500, 113750, 114000, 114250, 114500, 114

