

POSTGLACIAL LAICE-DAID DEPOSITS

- Thin Till
- Thick Till
- End Moraine deposits

ACIALIAL MELT-WATER DEPOSITS

- Fines (very fine sand, silt, and clay)
- Gravel
- Sand and Gravel
- Sand

Deposits

- Gravel overlying Sand and Gravel
- Gravel overlying Sand
- Sand and Gravel overlying Sand
- Sand and Gravel overlying Sand overlying Sand and Gravel
- Sand overlying Gravel
- Sand overlying Sand and Gravel
- Gravel overlying Sand overlying Fines
- Gravel overlying Sand overlying Fines
- Sand and Gravel overlying Sand overlying Fines
- Sand and Gravel overlying Fines
- Sand overlying Fines

COASTAL DEPOSITS

- Floodplain Alluvium
- Alluvium overlying undifferentiated Coarse deposits (s.g. s)
- Alluvium overlying Sand
- Alluvium overlying Fines
- Alluvium overlying Fines overlying Coarse deposits overlying Fines
- Alluvium overlying undifferentiated Fine deposits overlying Coarse deposits
- Swamp deposits
- Swamp deposits overlying Sand
- Swamp deposits overlying Fines
- Swamp deposits overlying Sand overlying Fines
- Swamp deposits overlying Fines overlying Sand
- Salt-Marsh and Tidal-Marsh deposits
- Salt-Marsh and Tidal-Marsh deposits overlying Sand
- Salt-Marsh and Tidal-Marsh deposits overlying Fines
- Talus
- Beach deposits
- Artificial Fill

Particle Diameter and Fine Particles Table:

PARTICLE DIAMETER		FINE PARTICLES											
		10	2.5	.16	.08	.04	.02	.01	.005	.0025	.0015		
2500	64	4	2	1	0	0	0	0	0	0	0	mm	
Boulders	Cobbles	Pebbles	Gravel	Very Coarse Sand	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Silt	Clay			
GRAVEL PARTICLES						SAND PARTICLES						FINE PARTICLES	

* Alluvium may be overlying any of the Coarse deposits (s.g. s)

Unconsolidated glacial and postglacial deposits, that range from a few feet to several hundred feet in thickness, overlie the bedrock surface. A schematic map of the Connecticut map portion of the map shows the distribution of these deposits, and the extent and subsurface grain-size (textural) characteristics of these surficial materials. The diagram is designed to highlight the relationship between the depositional origins and the textural character of the materials portrayed. Most of Connecticut's surficial material is glacially derived, and can be divided into two broad depositional categories: Glacial Ice-lead deposits (fills and moraine) which are generally composed of till, sand, gravel, and fines; and Glacial Meltwater deposits (stratified deposits) which are most commonly concentrated in valleys and lowlands. A. A. (sand) and B. B. (silt) are the two main meltwater deposit types. The distribution and character have historically influenced development patterns throughout the state.

Glacial Ice-Laid deposits (tilts and moraine) were derived directly from the ice and consist of nonsorted, generally nonconsolidated sand, silt, clay, gravel, and boulders. The composition of most tills is predominantly sand and silt and boulders can range in size from millimeters to meters. These deposits are unstratified and contain clasts of sand and gravel and occasionally masses of laminated fine-grained sediment. The lack of sorting and stratification typical of ice-laid deposits is due to their deposition by direct glacial action. In some places, medians sources of groundwater and unsuitable for septic systems. They are also commonly underlain stratified meltwater deposits (see Block Diagram). End moraine deposits (primarily ablation till) occur

SURFICIAL MATERIALS DATA – Surficial materials shown on this map are from the Surficial Material Poly dataset which contains polygon data intended to be used at 1:24,000 scale. Based on the data source, the data are not intended to be used at 1:62,500 scale. The data were compiled by the Connecticut Department of Environmental Protection, in cooperation with the U.S. Geological Survey. These data were digitized from the 1:24,000-scale compilation sheets prepared for the Connecticut State and Federal Geologic Maps of Connecticut (USGS, Schaffer, J.P., London, E.H. and Thompson, W.B., 1992, U.S. Geological Survey special map, 2 sheets, scale 1:125,000).

QUATERNARY GEOLOGY AND SURFICIAL MATERIALS DATA - 1:24,000-scale digital spatial data of Connecticut Quaternary Geology and Surficial materials combined into one dataset. The data were compiled by the Connecticut Department of Environmental Protection, in cooperation with the U.S. Geological Survey. These data were digitized from the 1:24,000-scale compilation sheets prepared for both the Surficial Materials Map of Connecticut (USGS, Schaffer, J.P., London, E.H. and Thompson, W.B., 1992, U.S. Geological Survey special map of Connecticut and Long Island Sound, Boston and others, 2005, 1:125,000).

MAP LOCATION

0 Miles

0 1000 2000 3000 4000 5000 6000 7000 Feet

0 1 2 Kilometers

SCALE: 1:24,000 (1 inch = 2000 feet) when map is printed at original size

State Plane Coordinate System of 1983, Zone 30 East
Lambert Conformal Conic Projection
North American Datum of 1983

Melwater deposits are depicted using four basic texturally-based map units: gravel, sand and gravel, sand, and fines. To the extent that it is known or can be inferred, the subsurface texture and thickness of these units is indicated by the use of different line thickness. In many places similar conditions persisted for the entire time that a melwater deposit was being laid down, and a single map unit (e.g. s-sand) is sufficient to describe the entire melwater sequence. Areal and vertical texture/variability can occur within the melwater sequence, but this is not shown. The thickness of the melwater sediment varies with each melwater setting (stream, delta, lake, etc.), and settings can change over time. High-energy depositional environments near glacial margins (proximal) tend to favor coarser textures, whereas low-energy depositional environments near glacial margins make back, less energy is available and finer grained silt and clay become predominant. Where more complex stratigraphic relationships existed because of changing conditions during deposition, "stacked" map units are used to characterize the melwater sequence. The thickness of the melwater sequence varies by region. Where postglacial deposits overlie melwater deposits, this relationship is also shown (e.g. a/s - alluvium overlying sand).

EXPLANATION OF SURFACE VIEW			
sg	Sand and gravel deposits	s/f	Sand overlying fines
f	Fine deposits	f/sg	Fines overlying sand and gravel
q/s	Gravel overlying sand	a	Alluvium
sg/k	Sand and gravel overlying sand		Alluvium overlying fines
s/sg	Sand overlying sand and gravel	t	Till and bedrock
sg/s/f	Sand and gravel overlying sand overlying fines		Thick till
sg/f	Sand and gravel overlying fines		

MAPS AND DIGITAL DATA - Go to the CT ECO website for this map and a variety of others. Go to the CT DEP website for the digital spatial data shown on this map.

MAP LOCATION

1 Miles

State Plane Coordinate System of 1983, Zone 3501
Lambert Conformal Conic Projection
North American Datum of 1983

