

GLACIAL ICE-LAID DEPOSITS

t Thin Till
 tt Thick Till
 ts End moraine deposits

GLACIAL AND POSTGLACIAL DEPOSITS

f Fines (very fine sand, silt, and clay)

Coarse Deposits

g Gravel
 sg Sand and Gravel
 s Sand

Stacked Coarse Deposits

g/s/g Gravel overlying Sand and Gravel
 g/s Gravel overlying Sand
 sg/s Sand and Gravel overlying Sand
 sg/s/sg Sand and Gravel overlying Sand overlying Sand and Gravel
 s/g Sand overlying Gravel
 s/sg Sand overlying Sand and Gravel

Stacked Coarse Deposits Overlying Fine Deposits

g/s/f Gravel overlying Sand overlying Fines
 g/f Gravel overlying Fines
 sg/s/f Sand and Gravel overlying Sand overlying Fines
 sg/f Sand and Gravel overlying Fines
 s/f Sand overlying Fines

Stacked Fine Deposits Overlying Coarse Deposits

f/sg Fines overlying Sand and Gravel
 f/s Fines overlying Sand

POSTGLACIAL DEPOSITS

a Floodplain Alluvium
 a/sg * Alluvium overlying undifferentiated Coarse deposits (g, sg, s)
 a/s Alluvium overlying Sand
 a/sg Alluvium overlying Fines
 a/s/f * Alluvium overlying undifferentiated Coarse deposits overlying Fine deposits
 a/f/g * Alluvium overlying undifferentiated Fine deposits overlying Coarse deposits
 sw Swamp deposits
 sw/sg Swamp deposits overlying Sand
 sw/f Swamp deposits overlying Fines
 sw/s/f Swamp deposits overlying Sand overlying Fines
 sw/s/f/s Swamp deposits overlying Fines overlying Sand
 sm Salt-Marsh and Tidal-Marsh deposits
 sm/s/f Salt-Marsh and Tidal-Marsh deposits overlying Sand
 sm/f Salt-Marsh and Tidal-Marsh deposits overlying Fines
 ta Talus
 bf Beach deposits
 a Artificial Fill

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

Water

PARTICLE DIAMETER											
10	2.5	16	08	04	02	01	005	0025	00015	in	
256	64	4	2	1	5	25	.125	.068	.004	mm	
Boulders	Cobbles	Pebbles	Granules	Very Coarse Sand	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Silt	Clay	
GRAVEL PARTICLES						SAND PARTICLES				FINE PARTICLES	

Grain size classification (modified from Wentworth, 1922)

Unconsolidated glacial and postglacial deposits, that range from a few feet to several hundred feet in thickness, overlie the bedrock surface of Connecticut (see Block Diagram). This map portrays the real extent and subsurface grain-size (textural) distributions of these surficial materials. The map legend is designed to highlight the relationship between the depositional origins and the distribution and 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-Laid deposits (tills and moraine) which are generally exposed in the uplands, and are the most widespread surficial deposit in Connecticut; and Glacial Meltwater deposits (stratified deposits) which are most commonly concentrated in valleys and lowlands. A mapping emphasis is placed on stratified meltwater deposits because their distribution and character have historically influenced development patterns throughout the state.

Glacial Ice-Laid deposits (tills and moraine) were derived directly from the ice and consist of nonsorted, generally nonstratified mixtures of grain-sizes ranging from clay to large boulders. The matrix of tills is predominantly sand and silt and boulders can be sparse to abundant. Some tills contain lenses of sorted sand and gravel and occasionally masses of laminated fine-grained sediment. The lack of sorting and stratification typical of ice-laid deposits often makes them poorly drained, difficult to dig in or plow, mediocre sources of groundwater and unsuitable for septic systems. They are commonly found in variable thicknesses and commonly underlies stratified meltwater deposits (see Block Diagram). End moraine deposits (primarily ablation till) occur principally in southeastern Connecticut.

characteristics that are favorable for development. Because water is a better sorting agent than ice, glacial meltwater deposits are commonly better sorted, more permeable, and better aquifers than ice-laid deposits. They can be good sources of construction aggregate, and are relatively easy to excavate and build highways and buildings on.

Postglacial Sediments (primarily floodplain alluvium and swamp deposits) are less widely distributed and are typically thinner than the glacial deposits that they overlie, but they are locally important ecological, agricultural, commercial, and recreational resources. Talus, a sort of rockfall at the base of steep bedrock (primarily trap rock) cliffs, provides a cool damp ecological niche. Beach, marsh and swamp deposits are key ecological elements of coastal and poorly drained inland settings. Deposits of floodplain alluvium are largely composed of sands, gravels and silts that have been reworked from glacial deposits and mixed with organic matter which increases their fertility. Despite their flood-prone nature, low, flat, fertile floodplains have historically been attractive for agricultural uses and development related to water-dependant commerce.

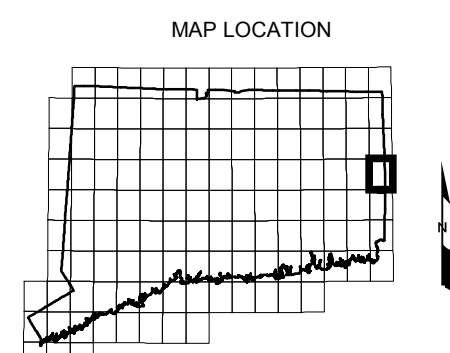


BASE MAP DATA - Based on data originally from 1:24,000-scale USGS 7.5 minute topographic quadrangle maps published between 1969 and 1992. It includes political boundaries, railroads, airports, hydrography, geographic names and geographic places. Streets and street names are from Tele Atlas® copyrighted data. Base map information is neither current nor complete.

This map is intended to be printed at its original dimensions in order to maintain the 1:24,000 scale (1 inch = 2000 feet).

OTHER GEOLOGIC MAPS - This map is also available for individual USGS topographic quadrangles of Connecticut. Other bedrock, surficial, and quaternary (glacial) geology quadrangle maps and reports published by the Connecticut Geological and Natural History Survey, USGS, and others are also available from CT DEP.

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.



State Plane Coordinate System of 1983, Zone 3526
Lambert Conformal Conic Projection
North American Datum of 1983

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



STATE OF CONNECTICUT
DEPARTMENT OF
ENVIRONMENTAL PROTECTION
79 Elm Street
Hartford, CT 06106-5127

Map created by CT DEP
August 2009
Map is not colorfast
Protect from light and moisture

