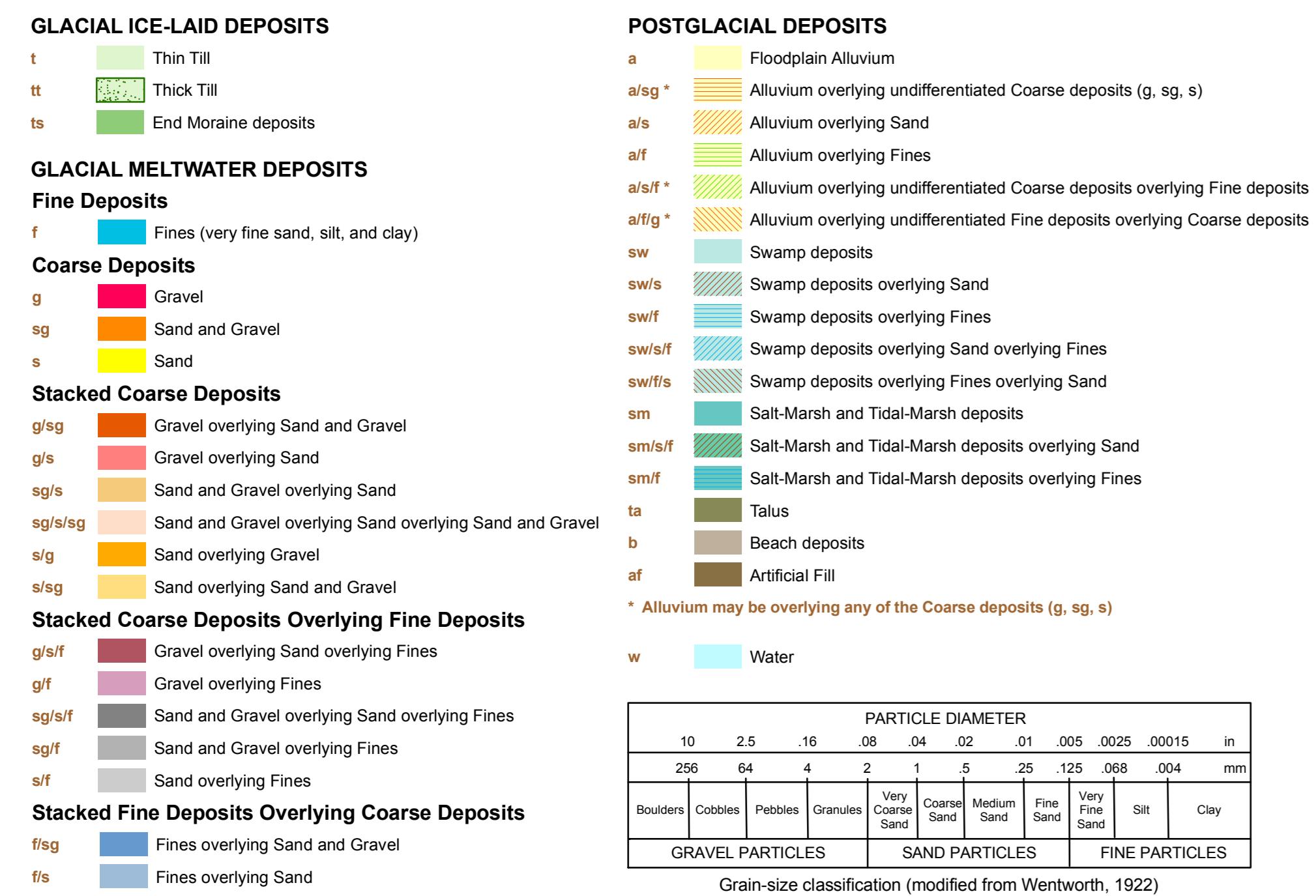


SURFICIAL MATERIALS GLACIAL AND POSTGLACIAL DEPOSITS WINDSOR LOCKS, CONNECTICUT



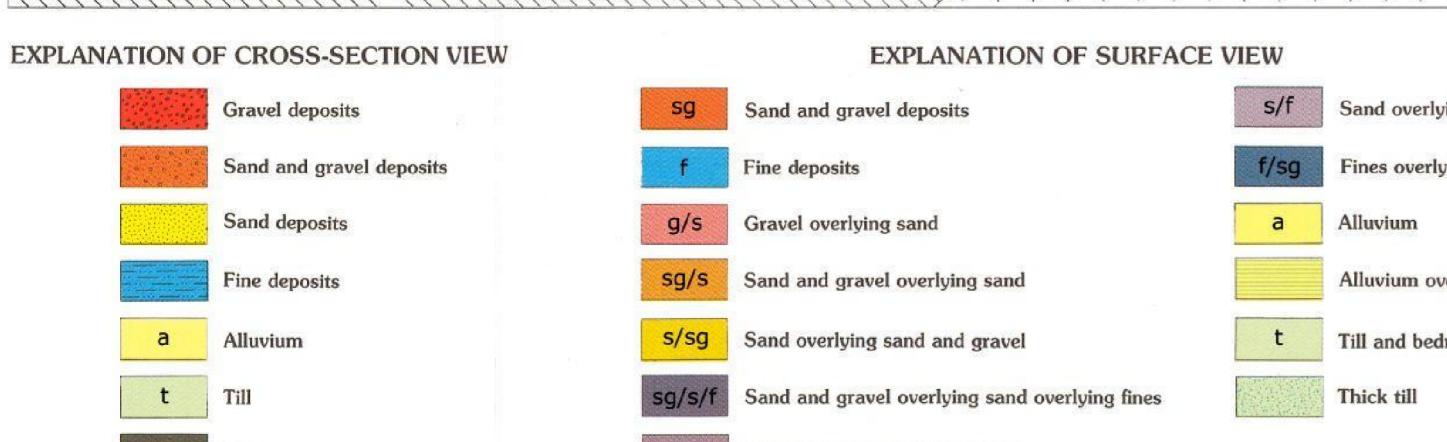
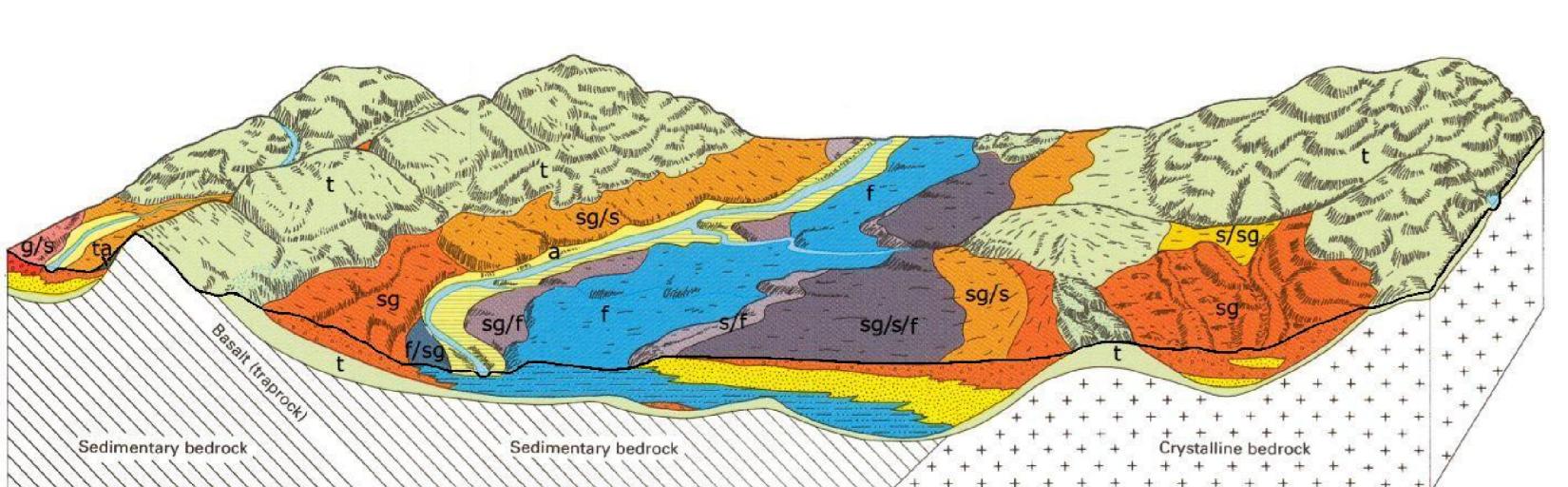
EXPLANATION

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 areal 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 areal distribution patterns of the surficial materials. The map of Connecticut's surficial materials is generally 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 the more widespread meltwater deposits in Connecticut, and Glacial Meltwater deposits (stratified deposits) which are predominantly occurring in valley and lowland areas. A mapping emphasis is placed on stratified meltwater deposits because their distribution and character have historically influenced development patterns throughout the state.

For a complete description of surficial materials map units, and further information concerning their thickness and modes of occurrence, please refer to the published Surficial Materials Map of Connecticut and the companion Quaternary Geologic Map of Connecticut and Long Island Sound Basin (see Data Sources).

Glacial Ice-Laid deposits (tills and moraine) were derived directly from the ice, and consist of remnant, generally nonstratified mixtures of grain-sizes ranging from clay to large boulders. The matrix of most tills is predominantly sand and silt and boulders can be sparse to abundant. Some tills contain lenses of sorted sand and gravel, and occasionally, rare lenses of sorted sand and gravel 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 unsatisfactory for septic systems. Till blankets the bedrock surface in variable thickness, and commonly underlies stratified meltwater deposits (see Block Diagram). End moraine deposits (primarily ablation till) occur principally in southeastern Connecticut.

Glacial Meltwater deposits (stratified deposits) were laid down in glacial streams, lakes and ponds which occupied the valleys and lowlands of Connecticut as the last ice sheet melted away to the north. They are often composed of layers of well-to-poorly sorted sands, gravels, silts and clays with few to no boulders, and owing to their water-related depositional origins they have many


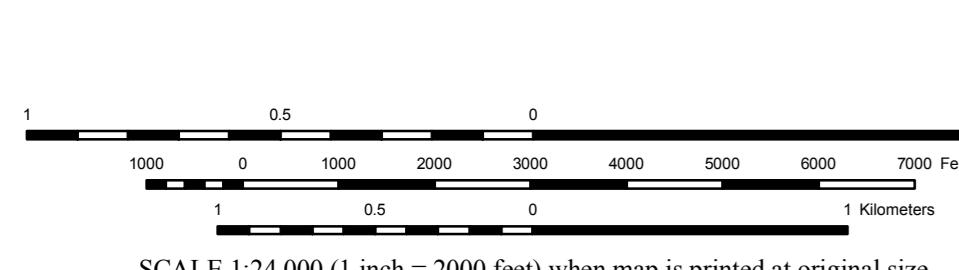


DATA SOURCES

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 Connecticut Quaternary and Surficial Materials digital data published in 1995 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 Connecticut Statewide Surficial Materials Map of Connecticut (Stone, J.R., Schaefer, J.P., London, E.H., and Thompson, W.B., 1992, U.S. Geological Survey special map, scale 1:24,000).

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 TerraAtlas® copyrighted data. Base map information is neither current nor complete.

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



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

