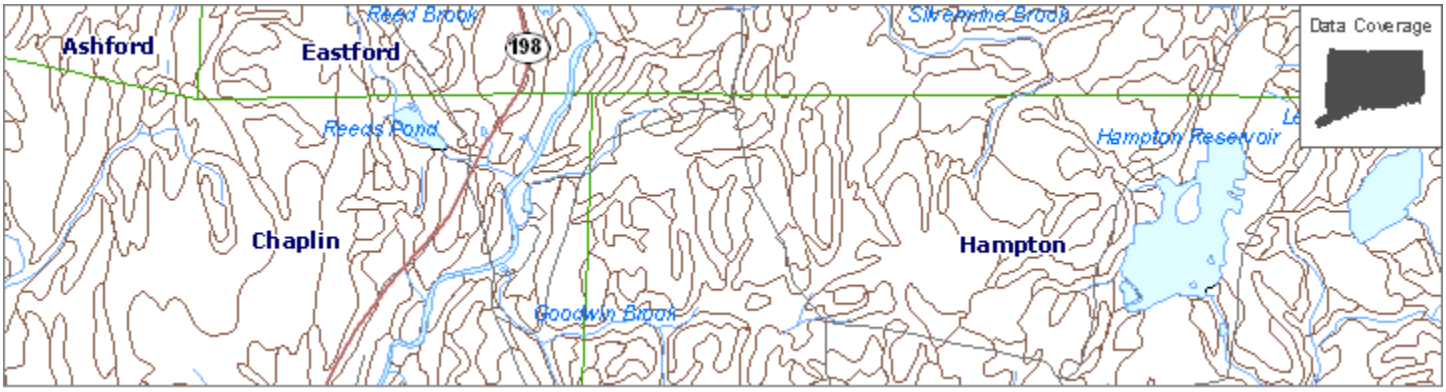
Soils



Description

The Soil Survey Geographic (SSURGO) database provides information on the location, distribution, and characteristics of various kinds of soils on the landscape as part of the National Cooperative Soil Survey.

Purpose

The survey was made to provide information about the soils and miscellaneous areas in the survey area. The information includes a description of the soils and miscellaneous areas and their location and a discussion of their suitability, limitations, and management for specified uses. Interpretations are dynamic and periodically revised to reflect improved soils data, new technology and the needs of the soil survey users. In Connecticut, there are approximately 70 soil properties and 90 interpretations that are contained within the soils database. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They dug many holes to study the soil profile, which is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity. The soils and miscellaneous areas in the survey area are in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. The soil polygon boundaries indicate a transition between map units.

Legend Description

The legend describes soil map unit boundaries.

Soil Map Unit

A soil map unit represents an area dominated by one to three major soil components. They are usually a named soil series, like Paxton or Canton, but can also be a miscellaneous area such as rock outcrop or urban land, and potentially many minor components both similar and dissimilar. Usually the named

component or components represent no less than 70 % of the map unit. On a map, Soil Map Units are typically labeled with a Map Symbol code used to identify each map unit. Refer to the Soil map unit list to look up these values.

For example, soil map unit *75C Hollis-Chatfield-Rock outcrop complex,* contains 35% Hollis, 30% Chatfield, 15% Rock outcrop and the other 20% may include Charlton, Leicester, Sutton, Brimfield, an unnamed soil with a sandy subsoil and an unnamed soil with red parent material.

Use Limitations

This data set is not designed for use as a primary regulatory tool in permitting or siting decisions, but may be used as a reference source. This is public information and may be interpreted by organizations, agencies, units of government, or others based on needs; however, they are responsible for the appropriate application. Federal, State, or local regulatory bodies are not to reassign to the Natural Resources Conservation Service any authority for the decisions that they make. The Natural Resources Conservation Service will not perform any evaluations of these maps for purposes related solely to State or local regulatory programs.

Related Information

Soil survey interpretations are predictions of soil characteristics for specified land management practices. Below are descriptions of soil survey interpretations available through CT ECO.

Farmland Soils - CT ECO Complete Resource Guide
Hydric Soils - CT ECO Complete Resource Guide
Inland Wetland Soils - CT ECO Complete Resource Guide
Soil Drainage Class - CT ECO Complete Resource Guide
Soil Flooding Class - CT ECO Complete Resource Guide
Soil Potential Ratings for Subsurface Sewage Disposal Systems - CT ECO Complete Resource Guide
Soil Parent Materials - CT ECO Complete Resource Guide

Data Collection Date

The original data was collected from published surveys from 1962 to 1981, field mapping from 1985 through 2001 and additional attribute documentation to 3/23/2007.

Status

This information is updated as needed. The previously published county soil surveys (published between 1962 and 1981) are superseded by this official soil information. County soil surveys are for historical use only.

Map Scale

The source map scale is 1:12,000 (1 inch = 1,000 feet). This information is designed to be viewed and analyzed at this map scale. The minimum size delineation is 3 acres.

Contact

State Soil Scientist, USDA, Natural Resources Conservation Service, 334 Merrow Rd., Suite A, Tolland, CT 08084. Phone: 860-871-4011 or visit the Connecticut NRCS office website.

Additional Documentation

Soils - CT ECO Basic Data Guide

Soil map unit list - CT ECO Basic Data Guide that lists soils present in Connecticut.

Soil map unit GIS Metadata – Contains technical documentation describing the Soil map units data and the data sources, process steps, and standards used to collect, digitize, and store this information in a geographic information system (GIS).

Soil interpretation GIS Metadata – Contains technical documentation describing the data table that defines soil interpretation such as Hydric Soils, Inland Wetland Soils, and Potential for Subsurface Disposal Systems. This lookup table is related to the soil map unit data and used to create the various soil interpretations included in CT ECO.

The Soil Survey of Connecticut is a static electronic published document available from the Connecticut Natural Resources Conservation Service. It is formatted similar to the previously published county soil surveys and is available in PDF format.

The Soil Data Mart (SDM) provides direct link for downloading spatial and tabular data for analysis in Geographic Information Systems. Users can view metadata, download data; generate PDF format tabular reports for selected map units and subscribe for updates. The site is updated and maintained online as the single authoritative source of soil survey information.

The Web Soil Survey (WSS) provides electronic access to full soil survey report soil data and information produced by the National Cooperative Soil Survey. It provides access to the largest natural resource information system in the world with over 2300 soil surveys. Users can navigate to geographic locations by address, latitude/longitude and others, delineate custom “areas of interest”, and download and print custom interpretive reports and maps

The Soils Data Viewer (SDV) is a tool built as an extension to ArcMap that allows a user to create soil-based interpretive maps. The application can also be run independent of ArcMap, but output is then limited to a tabular report. The soil survey attribute database associated with the spatial soil map is a complicated database with more than 50 tables. Soil Data Viewer provides users access to soil interpretations and soil properties while shielding them from the complexity of the soil database assessment and management..

The National Soil Survey Handbook, a guide that provides the main operational and procedural guidance for the soil survey program.

The Soil Survey Manual, a single volume book which provides the major principles and practices needed for making and using soil surveys and for assembling and using data related to them. The Manual is intended primarily for use by soil scientists engaged in the classification and mapping of soils and in the interpretation of soil surveys.

Other soils information is available including soil characterization data, geochemistry databases, soil geography, mapping tools and more at NRCS Soils.

Originators

USDA, Natural Resources Conservation Service (NRCS)

GIS Data Download

Soils data downloadable from DEEP GIS Data originated from the Soils Data Mart (SDM) where additional soils data is available.

Connect GIS and AutoCAD software to this information online using the Soils CT ECO Map Service.