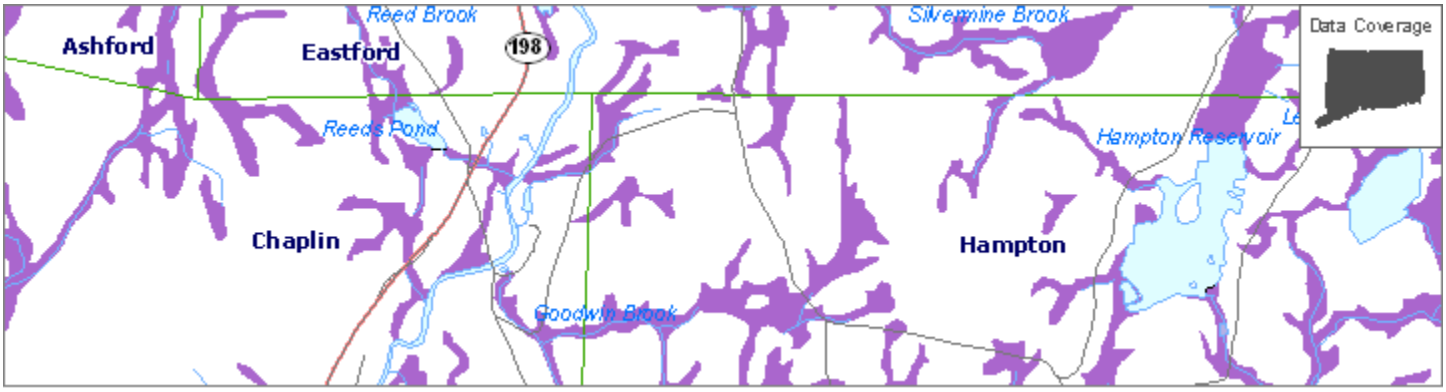
Hydric Soils



Description

Hydric soils are defined as soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part. Under natural conditions, these soils are either saturated or inundated long enough during the growing season to support the growth and reproduction of hydrophytic vegetation.

Purpose

Hydric soils have a number of agricultural and nonagricultural applications. These include assistance in land-use planning, conservation planning, and assessment of potential wildlife habitat. A combination of the hydric soil, hydrophytic vegetation, and hydrology properties define wetlands as described in the National Food Security Act Manual (Soil Conservation Service, 1994) and the Corps of Engineers (COE) Wetlands Delineation Manual (Environmental Laboratory, 1987) and COE Regional Supplements for the Clean Water Act Section 404 permit program. Section 404 requires a permit from the COE for the discharge of dredged or fill material into the waters of the United States, including wetlands.

The three essential characteristics of wetlands are hydrophytic vegetation, hydric soils, and wetland hydrology Criteria for each of the characteristics must be met for areas to be identified as wetlands. Undrained hydric soils that have natural vegetation should support a dominant population of ecological wetland plant species. Hydric soils that have been converted to other uses should be capable of being restored to wetlands. The National Technical Committee for Hydric Soils (NTCHS) definition identifies general soil properties that are associated with wetness. In order to determine whether a specific soil is a hydric soil or nonhydric soil, however, more specific information, such as information about the depth and duration of the water table, is needed. Thus, criteria that identify those estimated soil properties unique to hydric soils have been established (Federal Register, 2002). These criteria are used to identify map unit components that normally are associated with wetlands. The criteria used are selected estimated soil properties that are described in "Soil Taxonomy" (Soil Survey Staff, 1999) and "Keys to Soil Taxonomy" (Soil Survey Staff, 2006) and in the "Soil Survey Manual" (Soil Survey Division Staff, 1993).

Legend Description

Soil map units are not homogenous units. They contain both similar and dissimilar soils. Hydric soil map units are dominated by Hydric soils, but have inclusions of non-hydric soils. Non-hydrdic soil map units may contain inclusions of Hydric soils. This legend indicates those types of soils that are dominated by Hydric Soils. All other soils, typically shown as a white background, are not dominated by Hydric Soils, with the exception of areas classified as Not Rated.

Hydric Soils

Soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part. Under natural conditions, these soils are either saturated or inundated long enough during the growing season to support the growth and reproduction of hydrophytic vegetation.

Not Rated

Soils have characteristics that show extreme variability from one location to another. Often these areas are urban land complexes or miscellaneous areas. An on-site investigation is required to determine soil conditions present at the site.

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
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

Hydric Soils – CT ECO Basic Data Guide

Soils – CT ECO Complete Resource Guide

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.

CT Soil Map Units Dominated by Hydric Soils lists, defines and describes hydric soils.

For additional technical documents on field indicators and hydric criteria see Hydric Soils.

1987 Corps of Engineers Wetlands Delineation Manual is a Federal delineation manual used in the Clean Water Act Section 404 regulatory program for the identification and delineation of wetlands.

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.

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