EXPLANATION

Coarse-grained stratified drift--Sorted sediments deposited by or in glacial meltwaters. Materials range principally from fine sand to gravel. Properly developed individual wells may yield more than 700 gallons per minute. Highest yields are generally obtained from wells tapping the thickest, most transmissive parts of this unit and from areas near major streams. In places contains minor amounts of finer-grained materials.

Fine-grained stratified drift--Sorted sediments deposited by or in glacial meltwaters. Material range principally from clay to very fine sand and may exceed 200 feet in thickness. The upper 15 feet of this unit may consist of saturated fine to very coarse sand. Properly developed individual wells generally yield less than 20 gallons per minute.

Coarse-grained stratified drift overlying fine-grained stratified drift--Saturated fine to very coarse sand ranging from 15 to about 80 feet in thickness, overlying clay to very fine sand. Properly developed individual wells may yield more than 400 gallons per minute. Highest yields are generally obtained from wells tapping the thickest, most transmissive parts of this unit and from areas near major streams. The lower, fine-grained stratified drift is generally unproductive.

"Buried" coarse-grained stratified drift--Saturated fine sand to gravel overlain by more than 15 feet of saturated clay to very fine sand. Properly developed individual wells generally yield less than 20 gallons per minute but yields of more than 250 gallons per minute can be obtained at some sites. Highest yields are generally obtained from wells tapping the thickest, most transmissive, and most extensive buried deposits.

Till and bedrock--Till, a nonsorted, nonstratified sediment deposited by glacial ice, is composed of clay, silt, sand, gravel, and boulders mixed in various proportions. Variable thicknesses of till discontinuously mantle the bedrock and over a large part of the basin the till is overlain by extensive deposits of stratified drift. Till, where saturated, is a minor aquifer capable of yielding only small quantities of water to dug wells.

Bedrock underlies the entire basin and is generally overlain by stratified drift, till, or both. Areas where bedrock is exposed at the land surface are not separately delineated. Bedrock aquifers are the principal source of water for on-site domestic supply. The distribution of major rock types and yields of wells tapping them are shown on plate C

Contact between stratified drift and till or bedrock.

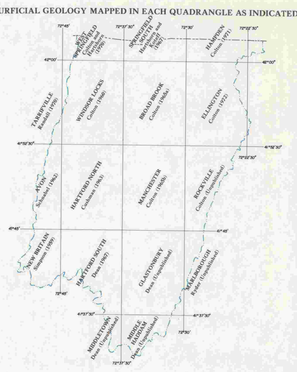
40 Line of equal saturated thickness of stratified drift--Shown in most areas of coarse-grained stratified drift and a few selected areas of "buried" coarse-grained stratified drift. Values shown are in feet. Interval between lines is 30 feet along margins and 40 feet elsewhere.

Basin drainage divide

Well or test hole penetrating "buried" coarse-grained stratified drift--Shown only in areas where the extent of this aquifer could not be delineated.

3.8 Well or test hole where transmissivity of coarse-grained stratified drift has been estimated. Number is estimated transmissivity in thousand feet squared per day (2.1 equals 2,100 feet squared per day). Letter symbols indicate method used to estimate transmissivity: p is from analysis of pumping-test data, and s is from analysis of specific capacity data. All other values are from logs where estimated hydraulic conductivity values were assigned to the described sediments.

SURFICIAL GEOLOGY MAPPED IN EACH QUADRANGLE AS INDICATED

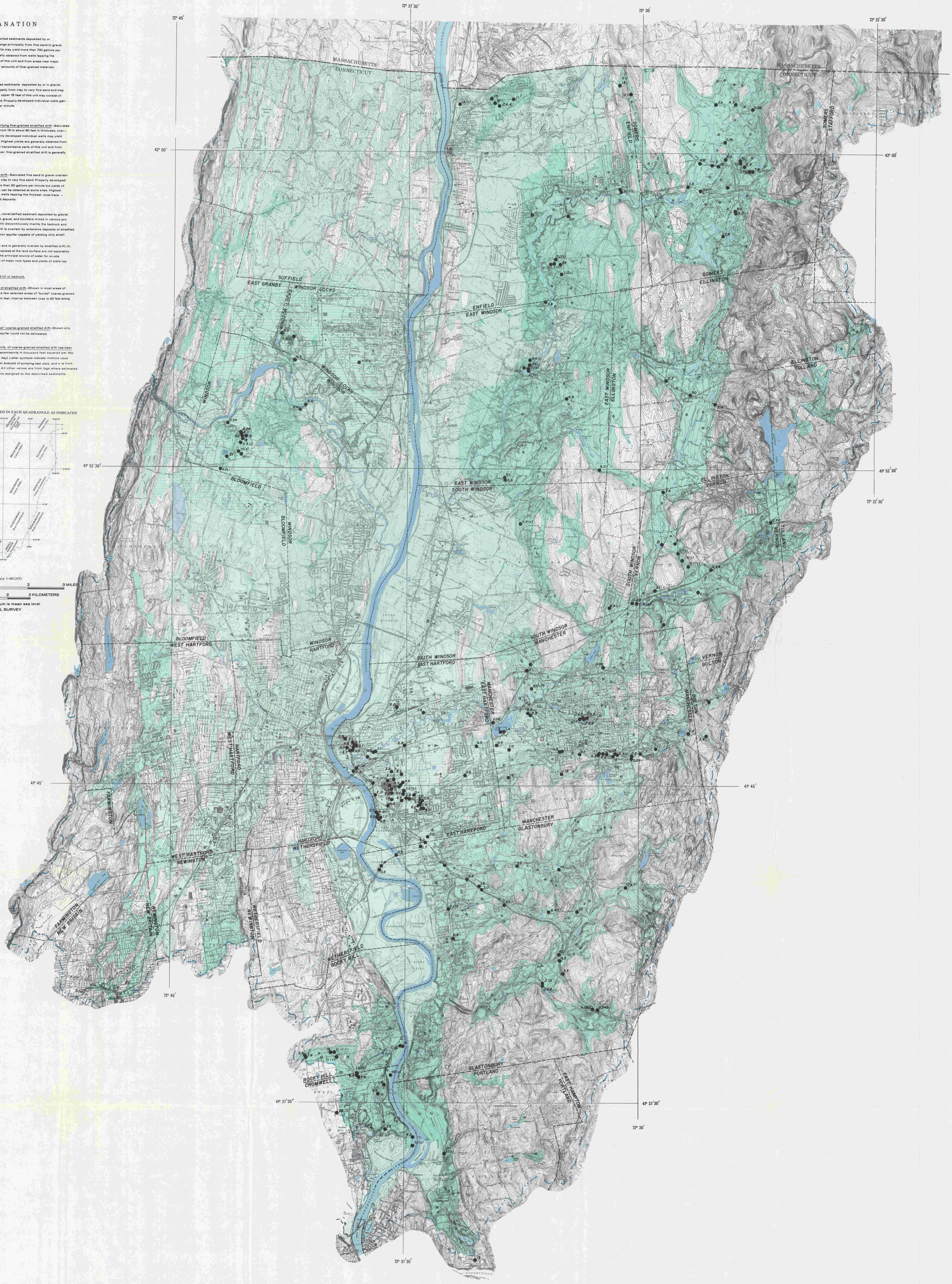


Map Scale 1:48,000

1 ½ 0 1 2 3 MILES

1 .5 0 1 2 3 KILOMETERS

CONTOUR INTERVAL 10 FEET Datum is mean sea level
BASE BY U. S. GEOLOGICAL SURVEY



GEOHYDROLOGIC MAP OF THE UPPER CONNECTICUT RIVER BASIN