UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

PREPARED IN COOPERATION WITH THE
STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION

MISCELLANEOUS FIELD STUDIES MAP MF - 981-G

Limits used to determine contamination or impairment of ground water

Concentrations in milligrams per liter

Constituent [a]	Contamination lower limit [b]	Impairment lower limit [c]
Arsenic (As)	0.05	--
Cadmium (Cd)	.01	--
Chloride (Cl)	250.	20.
Chromium (Cr)	.05	--
Copper (Cu)	1.	--
Detergents (MBAS)	.5	d
Hydrocarbons (organohalides)	--	d
Lead (Pb)	.05	--
Nitrate + Nitrite (N)	10.[e]	2.3[f]
Sodium (Na)	20	--

[a] Includes all constituents evaluated in preparing this map. Other chemical, physical, biological, and radioactivity, characteristics were not considered.

[b] Water is considered to be contaminated if one or more constituents are in concentrations that exceed these limits; based on standards for public drinking water of the Connecticut Department of Health (Connecticut Assembly, 1975)

[c] Water quality is considered to be impaired if one or more constituents are in concentrations that exceed these limits. Lower limits have not been established for many constituents because of insufficient data.

[d] Not naturally present in water; presence indicates impairment

[e] Equivalent to 44 milligrams per liter NO_3

[f] Equivalent to 10 milligrams per liter NO_3

PLACES IN CONNECTICUT WHERE GROUND WATER IS KNOWN TO HAVE DETERIORATED IN QUALITY

Includes major aquifers, wells that yield impaired or contaminated water, and areas susceptible to salt-water intrusion.

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EXPLANATION

The data used to prepare this map include those resulting from analysis of water from wells sampled during a series of water-resources investigations by the U.S. Geological Survey in cooperation with the Connecticut Department of Environmental Protection and from analysis of water from public-supply wells sampled periodically by the Connecticut Department of Health. Some water samples from the same well differed in quality; analysis of the sample of poorest quality is indicated on the map.

Major aquifers: Aquifers having moderate to high yield, based on Meade (1978), without consideration of water quality. They include stratified-drift deposits that have one or more coarse-grained layers and that have a saturated thickness of 10 feet or more. They are known or inferred to be capable of yielding moderate to large amounts of water(50 to 2,000 gallons per minute) to individual wells. Areas underlain by such stratified-drift aquifers are most susceptible to ground-water contamination.

Areas susceptible to salt-water intrusion

Quality-of-water site: Dug, driven, or drilled well; letter indicates use of water

P Public supply
H Private domestic supply
O Commercial, industrial, institutional, agricultural or other

Impaired quality; well taps unconsolidated surficial deposits

Impaired quality; well taps bedrock

Contaminated; well taps unconsolidated surficial deposits

Contaminated; well taps bedrock

References: Connecticut General Assembly, 1975, Standards for quality of public drinking water: public act no. 75-513, section 19-13-B102.

Meade, D. B., 1978, Ground-water availability in Connecticut: Connecticut Geological and Natural History Survey, Natural Resources Atlas Series map, scale 1:125,000.

Scale 1:125,000
1 inch equals approximately 2 miles

5 0 5 10 MILES
5 0 5 10 15 KILOMETRES

Base by U.S. Geological Survey