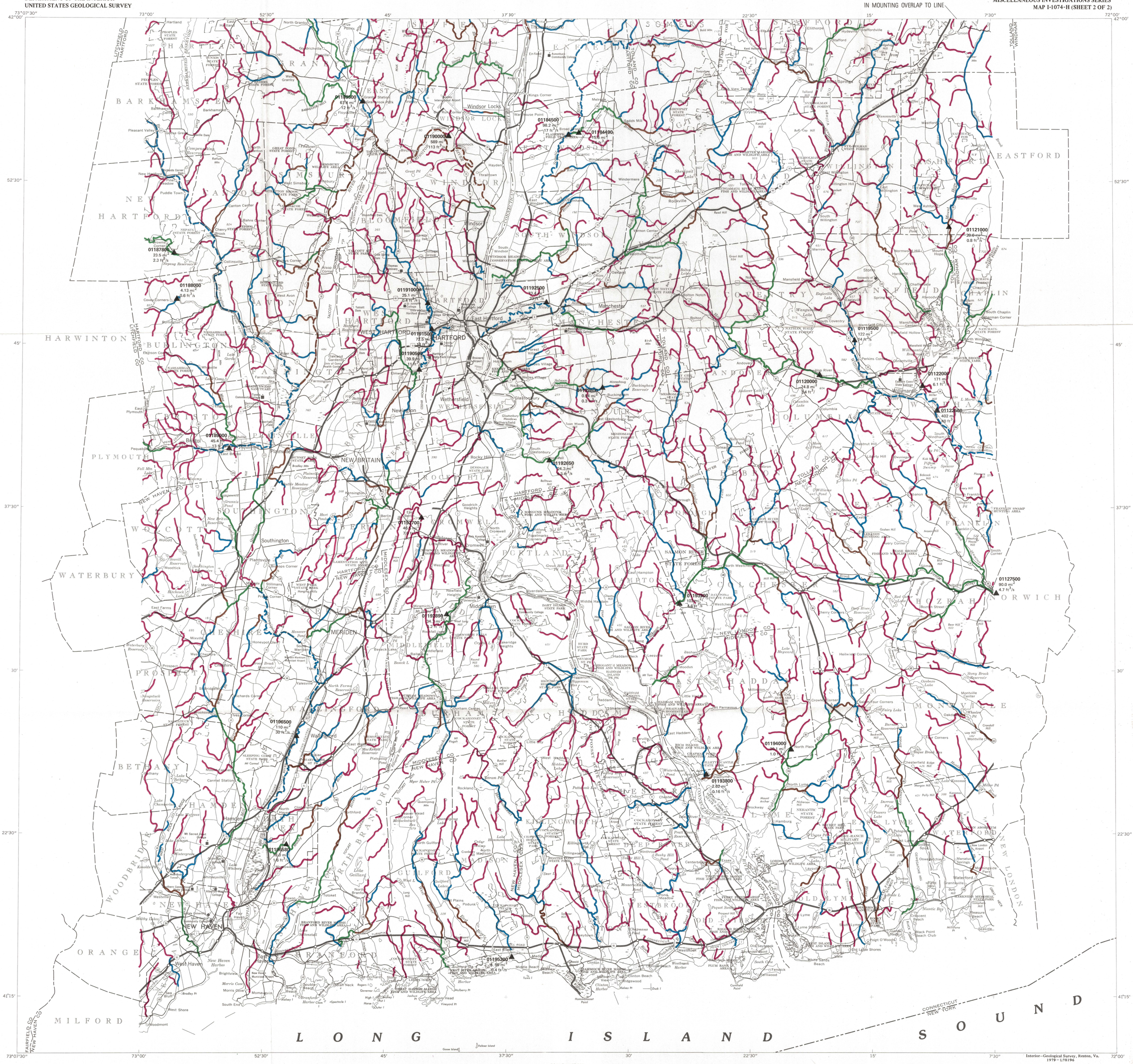
IN MOUNTING OVERLAP TO LINE




Base from U.S. Geological Survey

Interior—Geological Survey, Reston, Va.
1979—L78196

## EXPLANATION

This map shows the estimated 7-day, 10-year low flow of most streams in the Connecticut Valley Urban Area, based on the 1941–70 climatic years (April 1, 1941–March 31, 1971). The mean discharge for 7 consecutive days will be less than the 7-day, 10-year low flow at intervals averaging 10 years in length. Whereas annual low flows are important for the design for water-supply systems, in fisheries management, and for the classification of the waste dilution potential of streams—the 7-day, 10-year low flow is of special interest because legal indices for pollution control are referred to this characteristic. Streamflow of this frequency and duration is derived almost entirely from ground-water outflow unless there are diversions or release from upstream storage.

The 7-day, 10-year low flows shown on the map were determined from records of long-term gaging stations, correlation of short-term or partial-record sites with long-term gaging stations, and regional relationships between the total drainage area and flow per square mile from areas underlain by stratified drift and areas underlain by till and bedrock (Thomas and Cervione, 1970). No values are shown for tide-affected reaches or known regulated streams without flow data.

LOW FLOW IN CUBIC FEET PER SECOND ($ft^3/s$) – 1 cubic foot per second = 0.646 million gallons per day (Mgal/d)

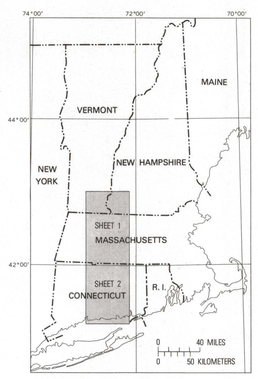
- Less than 0.1
- 0.1–0.5
- 0.5–1.0
- 1.0–5.0
- 5.0–10
- 10–50
- Greater than 50

**01121000**
28.6 mi²
▲0.8 ft³/s

CONTINUOUS-RECORD STREAM-GAGING STATION – Upper number is U.S. Geological Survey station number. Drainage area in square miles and observed 7-day, 10-year low flow for the reference period 1941–70 climatic years or present regulated conditions are listed below the station number.

## REFERENCE

Thomas, M. P., and Cervione, M. A., Jr., 1970, A proposed streamflow data program for Connecticut: Connecticut Water Resources Bull. 23, 18 p.




CONNECTICUT VALLEY URBAN AREA

(South half)

# MAP SHOWING ESTIMATED 7-DAY, 10-YEAR LOW FLOW OF STREAMS IN THE CONNECTICUT VALLEY URBAN AREA, CENTRAL NEW ENGLAND

By
R. A. Brackley and M. P. Thomas

1979

For sale by Branch of Distribution, U.S. Geological Survey, 1200 South Eads Street, Arlington, VA 22202