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2000

PREFACE

This volume of the annual hydrologic data report of Massachusetts and Rhode Island is one of a series of annual reports that document hydrologic data gathered from the U.S Geological Survey's surface- and ground-water data-collection networks in each State, Puerto Rico, and the Trust Territories. These records of streamflow, ground-water levels, and quality of water provide the hydrologic information needed by State, local, and Federal agencies, and the private sector for developing and managing our Nation's land and water resources. Hydrologic data for Massachusetts and Rhode Island are contained in one volume. This report is the culmination of a concerted effort by dedicated personnel of the U.S. Geological Survey who collected, compiled, analyzed, verified, and organized the data, and who typed, edited, and assembled the report. In addition to the authors, who had primary responsibility for assuring that the information contained herein is accurate, complete, and adheres to Geological Survey policy and established guidelines, the following individuals contributed significantly to the collection, processing, and tabulation of the data:

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This report was prepared in cooperation with the States of Massachusetts and Rhode Island and with other agencies under the general supervision of Wayne H. Sonntag, Massachusetts-Rhode Island District Chief, and James B. Campbell, Subdistrict Chief, Rhode Island Office.

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SURFACE-WATER AND WATER-QUALITY STATIONS, IN DOWNSTREAM ORDER,
FOR WHICH RECORDS ARE PUBLISHED IN THIS VOLUME

(Letters after station name designate type of data: (d) discharge; (l) lake; (c) chemical; (b) biological; (m) microbiological;
(p) precipitation; (s) sediment; (t) water temperature' (st) stage only)

NORTH ATLANTIC SLOPE BASINS

MERRIMACK RIVER BASIN

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Merrimack River:

| | | |
|---|----------------|----|
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| | | |
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(well locations shown in fig. 2).

GROUND-WATER-QUALITY WELLS, BY COUNTY, FOR WHICH RECORDS ARE PUBLISHED IN THIS VOLUME
(National Water-Quality Assessment Sites)

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(well locations shown in fig. 3).

DISCONTINUED SURFACE-WATER DISCHARGE STATIONS

The following continuous-record surface-water discharge stations (gaging stations) in Massachusetts and Rhode Island have been discontinued. Daily streamflow records were collected and published for the period of record, expressed in water years, shown for each station.

Discontinued surface-water discharge stations

| Station Name | Station Number | Drainage Area (mi ²) | Period of Record (water years) |
|--|----------------|----------------------------------|--------------------------------|
| MERRIMACK RIVER BASIN | | | |
| Rocky Brook near Sterling, Mass. | 01095000 | 1.95 | 1947–67 |
| Boulder Brook near East Bolton, Mass. | 01096906 | 1.32 | 1975–78 |
| Boulder Brook at East Bolton, Mass. | 01096910 | 1.60 | 1972–81 |
| Sudbury River at Ashland, Mass. | 01097480 | 35.1 | 1994–95 |
| Beaverdam Brook at Natick, Mass. | 01098320 | 7.27 | 1978–79 |
| Course Brook at Natick, Mass. | 01098340 | 3.44 | 1978–79 |
| Pegan Brook at Natick, Mass. | 01098360 | .54 | 1978–79 |
| Snake Brook at Wayland, Mass. | 01098450 | 2.10 | 1978–79 |
| Lake Cochituate outlet at Framingham, Mass. | 01098500 | 21.1 | 1978–79 |
| Hager Pond outlet at Marlborough, Mass. | 01098710 | 1.80 | 1978–80 |
| East Meadow River near Haverhill, Mass. | 01100700 | 5.47 | 1963–74 |
| IPSWICH RIVER BASIN | | | |
| Maple Meadow Brook at Wilmington, Mass. | 01101300 | 4.04 | 1963–74 |
| CHARLES RIVER BASIN | | | |
| Charles River at Millis, Mass. | 01103305 | 84.0 | 1974–80 |
| Hobbs Brook at Mill Street near Lincoln, Mass. | 01104405 | 2.16 | 1998 |
| Cambridge Reservoir, Unnamed Tributary 1 near Lexington, Mass. | 01104410 | .35 | 1998 |
| Cambridge Reservoir, Unnamed Tributary 2 near Lexington, Mass. | 01104415 | .41 | 1998 |
| Cambridge Reservoir, Unnamed Tributary 3 near Lexington, Mass. | 01104420 | .73 | 1998 |
| Hobbs Brook at Kendal Green, Mass. | 01104440 | 8.47 | 1998 |
| Stony Brook, Unnamed Tributary 1 near Waltham, Mass. | 01104455 | .48 | 1998 |
| Stony Brook at Route 20 near Waltham, Mass. | 01104460 | 22.0 | 1998 |
| NEPONSET RIVER BASIN | | | |
| Mine Brook at Walpole, Mass. | 01104850 | 6.00 | 1967–68 |
| BLACKS CREEK BASIN | | | |
| Furnace Brook at Quincy, Mass. | 01105557 | 3.81 | 1973–80 |
| BOUND BROOK BASIN | | | |
| Bound Brook near Cohasset, Mass. | 01105660 | 4.86 | 1970–71 |
| NORTH RIVER BASIN | | | |
| Indian Head Brook near Hanson, Mass. | 01105700 | 4.30 | 1958–60 |
| Pudding Brook at East Pembroke, Mass. | 01105800 | 1.38 | 1958–62 |
| EEL RIVER BASIN | | | |
| Eel River near Plymouth, Mass. | 01105876 | 14.7 | 1970–71 |
| HERRING RIVER BASIN | | | |
| Herring River at North Harwich, Mass. | 01105880 | 9.4 | 1966–88 |
| RED BROOK BASIN | | | |
| Red Brook below Route 25 near Wareham, Mass. | 01105885 | 9.14 | 1981–86 |

Discontinued surface-water discharge stations--Continued.

| Station Name | Station Number | Drainage Area (mi ²) | Period of Record (water years) |
|--|----------------|----------------------------------|--------------------------------|
| WEWEANTIC RIVER BASIN | | | |
| Weweantic River at South Wareham, Mass. | 01105895 | 56.1 | 1970-71 |
| WEST BRANCH WESTPORT RIVER BASIN | | | |
| Adamsville Brook at Adamsville, R.I. | 01106000 | 8.01 | 1941-78, 1987 |
| TAUNTON RIVER BASIN | | | |
| Matfield River at Elmwood, Mass. | 01106500 | 40.5 | 1958-60 |
| Poor Meadow Brook at South Hanson, Mass. | 01106900 | 14.6 | 1958-60 |
| Dorchester Brook near Brockton, Mass. | 01107000 | 4.67 | 1963-74 |
| Taunton River at Titicut near Brockton, Mass. | 01107200 | 182 | 1920-25 |
| Fall Brook near Middleborough, Mass. | 01107400 | 9.32 | 1967 |
| Wading River at West Mansfield, Mass. | 01108500 | 19.5 | 1954-86 |
| PALMER RIVER BASIN | | | |
| West Branch Palmer River near Rehoboth, Mass. | 01109200 | 4.35 | 1962-74 |
| BLACKSTONE RIVER BASIN | | | |
| Kettle Brook at Worcester, Mass. | 01109500 | 31.6 | 1923-78 |
| Mumford River at East Douglas, Mass. | 01111000 | 29.1 | 1939-51 |
| West River below West Hill Dam near Uxbridge, Mass. | 01111200 | 27.9 | 1962-90 |
| Chepachet River at Chepachet, R.I. | 01111400 | 17.4 | 1965-73 |
| Chepachet River at Gazzaville, R.I. | 01111410 | 19.2 | 1973-75 |
| Blackstone River tributary at Woonsocket, R.I. | 01112700 | 2.31 | 1965-74 |
| PAWTUXET RIVER BASIN | | | |
| Mosquitohawk Brook near North Scituate, R.I. | 01115100 | 3.06 | 1965-74 |
| Pawtuxet River at Fiskeville, R.I. | 01115500 | 102 | 1915-25 |
| Nooseneck River at Nooseneck, R.I. | 01115630 | 8.23 | 1964-81 |
| Carr River near Nooseneck, R.I. | 01115770 | 6.73 | 1964-80 |
| Flat River near Coventry, R.I. | 01115900 | 9.13 | 1961-64 |
| Furnace Hill Brook at Cranston, R.I. | 01116300 | 4.19 | 1965-74 |
| ANNAQUATUCKET RIVER BASIN | | | |
| Annaquatucket River at Belleville, R.I. | 01117100 | 6.4 | 1961-64 |
| PAWCATUCK RIVER BASIN | | | |
| Beaver River at Kenyon, R.I. | 01117472 | 11.7 | 1975-79 |
| Meadow Brook near Carolina, R.I. | 01117600 | 5.53 | 1965-74 |
| THAMES RIVER BASIN | | | |
| Quinebaug River below East Brimfield Dam near Fiskdale, Mass. | 01123360 | 67.4 | 1973-90 |
| Quinebaug River at Westville, Mass. | 01123500 | 93.6 | 1940-62 |
| Quinebaug River below Westville Dam near Southbridge, Mass. | 01123600 | 99.0 | 1963-90 |
| French River below Hodges Village Dam at Hodges Village, Mass. | 01124350 | 31.2 | 1962-90 |
| Little River near Oxford, Mass. | 01124500 | 26.0 | 1939-90 |
| Browns Brook near Webster, Mass. | 01124750 | .49 | 1963-77 |
| French River at Webster, Mass. | 01125000 | 84.0 | 1949-81 |
| Bucks Horn Brook at Greene, R.I. | 01126200 | 5.52 | 1965-74 |

DISCONTINUED SURFACE-WATER DISCHARGE STATIONS

Discontinued surface-water discharge stations--Continued.

| Station Name | Station Number | Drainage Area (mi ²) | Period of Record (water years) |
|--|----------------|----------------------------------|--------------------------------|
| CONNECTICUT RIVER BASIN | | | |
| Tarbell Brook near Winchendon, Mass. | 01161500 | 17.8 | 1916–82 |
| Otter River near Gardner, Mass. | 01163000 | 20.0 | 1916–17 |
| Millers River at South Royalston, Mass. | 01164000 | 189 | 1939–90 |
| East Branch Tully River near Athol, Mass. | 01165000 | 50.5 | 1916–90 |
| Lake Rohunta Outlet near Athol, Mass. | 01165300 | 20.3 | 1965–85 |
| Moss Brook at Wendell Depot, Mass. | 01165500 | 12.1 | 1909–10, 1916–82 |
| Whetstone Brook at Depot Road at Wendell Depot, Mass. | 01166105 | 5.22 | 1985–91 |
| Deerfield River near Rowe, Mass. | 01168151 | 254 | 1974–97 |
| Unnamed Channel to Wilder Brook at Buckland, Mass. | 01168639 | 0.01 | 1993–95 |
| Wilder Brook at Buckland, Mass. | 01168640 | 0.07 | 1993–95 |
| Fort River near Amherst, Mass. | 01171300 | 36.3 | 1966–96 |
| Bassett Brook near Northampton, Mass. | 01171800 | 5.56 | 1963–74 |
| Natty Pond Brook Templeton Rd (DS) near Hubbardston, Mass. | 01172680 | 1.63 | 1985–88 |
| Natty Pond Brook near Hubbardston, Mass. | 01172800 | 5.48 | 1985–88 |
| Moose Brook near Barre, Mass. | 01173260 | 4.63 | 1963–74 |
| Hop Brook near New Salem, Mass. | 01174000 | 3.39 | 1947–82 |
| East Branch Fever Brook near Petersham, Mass. | 01174050 | 4.85 | 1984–85 |
| Dickey Brook near Cooleyville, Mass. | 01174570 | 1.19 | 1985–89 |
| Dickey Brook tributary near Cooleyville, Mass. | 01174575 | 1.06 | 1985–89 |
| Cadwell Creek near Pelham, Mass. | 01174600 | 0.60 | 1962–94 |
| Cadwell Creek near Belchertown, Mass. | 01174900 | 2.55 | 1961–97 |
| Mill River at Springfield, Mass. | 01178000 | 33.2 | 1939–51 |
| Westfield River at West Chesterfield, Mass. | 01178500 | 110 | 1946–51 |
| Sykes Brook at Knightville, Mass. | 01180000 | 1.73 | 1945–74 |
| Middle Branch Westfield River at Goss Heights, Mass. | 01180500 | 52.7 | 1910–90 |
| Walker Brook near Becket Center, Mass. | 01180800 | 2.94 | 1963–77 |
| Great Brook near Westfield, Mass. | 01183450 | 22.6 | 1973–82 |
| Fall River below Otis Reservoir near Otis, Mass. | 01185100 | 16.5 | 1969–82 |
| HOUSATONIC RIVER BASIN | | | |
| Town Brook at Bridge Street at Lanesborough, Mass. | 01197015 | 10.6 | 1980–83 |
| Marsh Brook at Lenox, Mass. | 01197300 | 2.12 | 1963–74 |
| Green River near Great Barrington, Mass. | 01198000 | 51.0 | 1951–71, 1994–96 |
| Schenob Brook near Sheffield, Mass. | 01198030 | 23.3 | 1971–72 |
| Willard Brook near Sheffield, Mass. | 01198070 | 3.20 | 1971–72 |
| Hubbard Brook at Sheffield, Mass. | 01198075 | 25.8 | 1971–72 |
| Ironworks Brook, East Road, at Sheffield, Mass. | 01198122 | 11.2 | 1994–96 |
| Housatonic River near Ashley Falls, Mass. | 01198125 | 465 | 1994–96 |
| Konkapot River at Ashley Falls, Mass. | 01198200 | 61.1 | 1994–96 |
| HUDSON RIVER BASIN | | | |
| Dry Brook at Adams, Mass. | 01331400 | 7.67 | 1963–74 |
| North Branch Hoosic River at North Adams, Mass. | 01332000 | 40.9 | 1931–90 |

DISCONTINUED SURFACE-WATER DISCHARGE STATIONS

xv

The following continuous-record surface-water-quality stations have been discontinued. Daily records of temperature (temp.), specific conductance (S.C.), pH (pH), dissolved oxygen (D.O.) or sediment (sed.) were collected and published for the period of record, expressed in water years, shown for each station. Those stations currently being operated as water-quality partial-record stations (sampled quarterly or more frequently) are shown with an asterisk (*) beside the station number.

Discontinued continuous-record surface-water-quality stations

| Station Name | Station Number | Drainage Area (mi ²) | Type of record | Period of record (water years) |
|--|----------------|----------------------------------|-----------------------|--------------------------------|
| MERRIMACK RIVER BASIN | | | | |
| North Nashua River near Lancaster, Mass. | 01094700 | 128 | Temp., S.C., pH, D.O. | 1969–74 |
| Merrimack River above Concord River at Lowell, Mass. | 01096570 | 3956 | Temp., S.C., pH, D.O. | 1968–72 |
| Boulder Brook near East Bolton, Mass. | 01096906 | 1.32 | Temp., S.C. | 1971–78 |
| Boulder Brook at East Bolton, Mass. | 01096910 | 1.60 | Temp., S.C. | 1971–78 |
| Nashoba Brook near Acton, Mass. | 01097300 | 12.8 | Temp., S.C. | 1972–74, 1976–78 |
| Merrimack River at West Newbury, Mass. | 01100750 | -- | Temp., S.C., pH, D.O. | 1969–76 |
| CHARLES RIVER BASIN | | | | |
| Charles River at Dover, Mass. | 01103500 | 183 | Temp., S.C. | 1975–81 |
| Hobbs Brook at Mill Street near Lincoln, Mass. | 01104405 | 2.16 | Temp., S.C. | 1998 |
| Cambridge Reservoir, Unnamed Tributary 1 near Lexington, Mass. | 01104410 | .35 | Temp., S.C. | 1998 |
| Cambridge Reservoir, Unnamed Tributary 2 near Lexington, Mass. | 01104415 | .41 | Temp., S.C. | 1998 |
| Cambridge Reservoir, Unnamed Tributary 3 near Lexington, Mass. | 01104420 | .73 | Temp., S.C. | 1998 |
| Hobbs Brook at Kendal Green, Mass. | 01104440 | 8.47 | Temp., S.C. | 1998 |
| Stony Brook, Unnamed Tributary 1 near Waltham, Mass. | 01104455 | .48 | Temp., S.C. | 1998 |
| Stony Brook at Route 20 near Waltham, Mass. | 01104460 | 22.0 | Temp., S.C. | 1998 |
| NORTH RIVER BASIN | | | | |
| Indian Head River at Hanover, Mass. | 01105730 | 30.3 | Temp., S.C. | 1970–71 |
| JONES RIVER BASIN | | | | |
| Jones River at Kingston, Mass. | 01105870 | 15.7 | Temp., S.C. | 1970–71 |
| EEL RIVER BASIN | | | | |
| Eel River near Plymouth, Mass. | 01105876 | 14.7 | Temp. S.C. | 1970–71 1971 |
| WEWEANTIC RIVER BASIN | | | | |
| Weweantic River at South Wareham, Mass. | 01105895 | 56.1 | Temp., S.C. | 1970–71 |
| WEST BRANCH WESTPORT RIVER BASIN | | | | |
| Adamsville Brook at Adamsville, Mass. | 01106000 | 8.01 | Temp., S.C. | 1973–74 |
| PALMER RIVER BASIN | | | | |
| West Branch Palmer River near Rehoboth, Mass. | 01109200 | 4.35 | Temp., S.C. | 1973–74 |
| BLACKSTONE RIVER BASIN | | | | |
| Blackstone River at Millville, Mass. | *01111230 | 263 | Temp., S.C., pH, D.O. | 1969–81 |
| Blackstone River at Woonsocket, R.I. | 01112500 | 416 | Temp. | 1962–67 |

DISCONTINUED SURFACE-WATER DISCHARGE STATIONS

Discontinued continuous-record surface-water-quality stations--Continued

| Station Name | Station Number | Drainage Area (mi ²) | Type of record | Period of record (water years) |
|---|----------------|----------------------------------|-------------------------|--------------------------------|
| PAWTUXET RIVER BASIN | | | | |
| Pawtuxet River at Cranston, R.I. | *01116500 | 200 | Temp., S.C. | 1962-81 |
| POTOWOMUT RIVER BASIN | | | | |
| Hunt River near Davisville, R.I. | 01116910 | 17.3 | Temp. | 1962-65 |
| Hunt River near East Greenwich, R.I. | 01117000 | 23.0 | Temp., S.C. | 1977-81 |
| PAWCATUCK RIVER BASIN | | | | |
| Chipuxet River at West Kingston, R.I. | 01117350 | 9.99 | Temp., S.C. | 1974-83 |
| Usquepaug River near Usquepaug, R.I. | 01117420 | 36.1 | Temp., S.C. | 1975-83 |
| Beaver River near Usquepaug, R.I. | 01117468 | 8.87 | Temp. S.C. | 1979-83 1979-80, 1982-83 |
| Beaver River at Kenyon, R.I. | 01117472 | 11.7 | Temp., S.C. | 1976-79 |
| THAMES RIVER BASIN | | | | |
| Quinebaug River near Dudley, Mass. | 01123990 | 156 | Temp., S.C., pH, D.O. | 1969-81 |
| Browns Brook near Webster, Mass. | 01124750 | .49 | Temp., S.C. | 1972-77 |
| CONNECTICUT RIVER BASIN | | | | |
| Millers River at South Royalston, Mass. | 01164000 | 189 | Temp. | 1966 |
| Deerfield River near West Deerfield, Mass. | 01170000 | 557 | Temp., S.C. | 1969-70 |
| Moose Brook near Barre, Mass. | 01173260 | 4.63 | Temp., S.C. | 1972-73 |
| Hop Brook near New Salem, Mass. | 01174000 | 3.39 | Temp., S.C. | 1972-73 |
| Chicopee River at Chicopee Falls, Mass. | 01177100 | 711 | Temp., S.C., pH D.O. | 1973-81 1973-76, 1978-81 |
| Connecticut River at West Springfield, Mass. | 01177200 | 9623 | Temp., S.C., pH, D.O. | 1972-75, 1977, 1979-81 |
| Walker Brook near Becket Center, Mass. | 01180800 | 2.94 | Temp., S.C. | 1972-77 |
| Westfield River at West Springfield, Mass. | 01183600 | 513 | Temp., S.C., pH, D.O. | 1972-76 |
| Connecticut River at Agawam, Mass. | 01183750 | -- | Temp., S.C., D.O. pH | 1969-81 1969-76, 1979-81 |
| HOUSATONIC RIVER BASIN | | | | |
| Housatonic River near Great Barrington, Mass. | 01197500 | 282 | Sed. | 1979-80, 1994-96 |