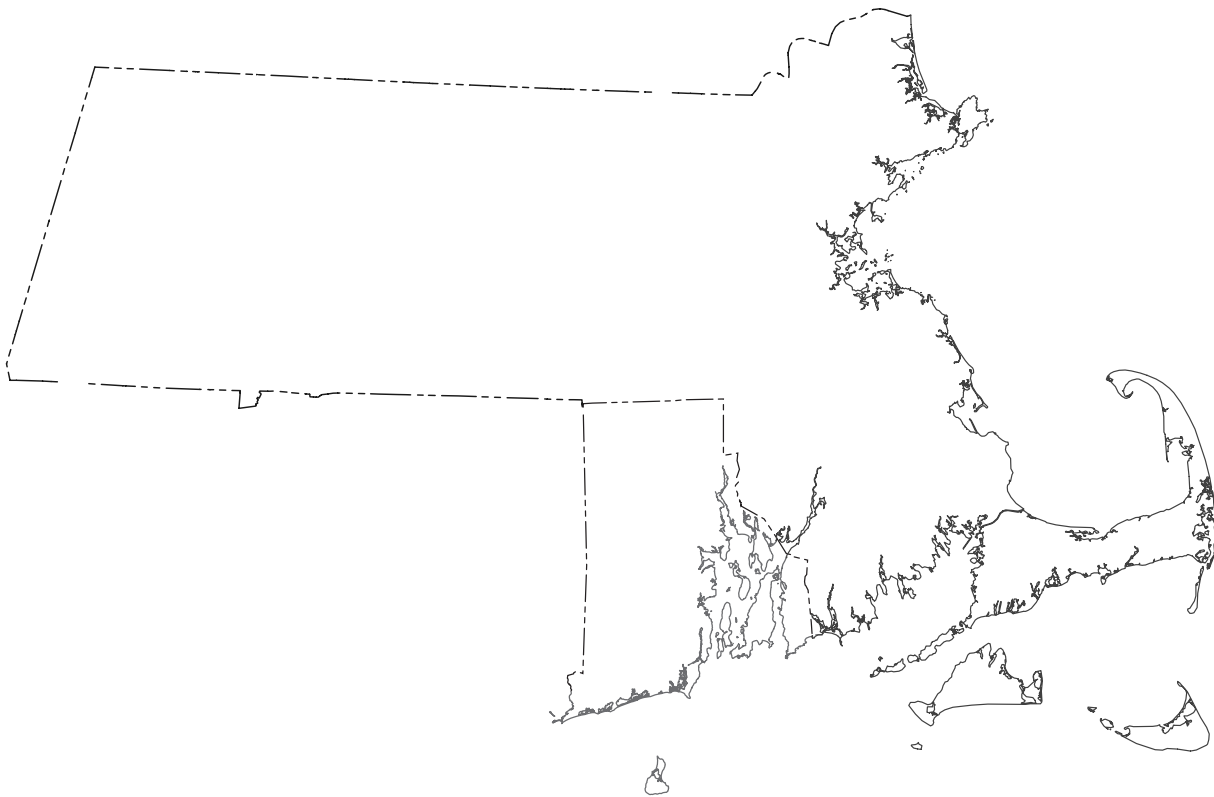


U.S. Department of the Interior
U.S. Geological Survey

Water Resources Data Massachusetts and Rhode Island Water Year 2004

By R.S. Socolow, L.Y. Comeau, and Domenic Murino, Jr.

Water-Data Report MA-RI-04-1



Prepared in cooperation with the
States of Massachusetts and Rhode Island and with other agencies



U.S. DEPARTMENT OF THE INTERIOR
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2005

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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CONTENTS

| | Page |
|--|------|
| Preface..... | iii |
| List of Stations, in Downstream Order, for which Records are Published in this Volume | vii |
| List of Ground-Water Wells, by County, for which Records are Published in this Volume | x |
| List of Discontinued Surface-Water Discharge Stations..... | xii |
| List of Discontinued Surface-Water-Quality Stations..... | xv |
| Introduction..... | 1 |
| Cooperation..... | 8 |
| Summary of Hydrologic Conditions | 8 |
| Streamflow | 8 |
| Reservoir Storage | 8 |
| Water Quality | 11 |
| Ground-Water Levels | 11 |
| Floods and Droughts | 11 |
| Floods | 11 |
| Droughts | 11 |
| Downstream Order and Station Number..... | 14 |
| Numbering System for Wells and Miscellaneous Sites | 14 |
| Special Networks and Programs | 15 |
| Explanation of Stage- and Water-Discharge Records | 16 |
| Data Collection and Computation..... | 16 |
| Data Presentation..... | 17 |
| Station Manuscript | 17 |
| Data Table of Daily Mean Values..... | 18 |
| Statistics of Monthly Mean Data..... | 18 |
| Summary Statistics | 18 |
| Identifying Estimated Daily Discharge | 19 |
| Accuracy of Field Data and Computed Results | 20 |
| Other Data Records Available..... | 20 |
| Explanation of Precipitation Records | 20 |
| Data Collection and Computation..... | 20 |
| Data Presentation..... | 20 |
| Explanation of Water-Quality Records | 21 |
| Collection and Examination of Data | 21 |
| Water Analysis | 21 |
| Surface-Water-Quality Records | 21 |
| Classification of Records..... | 21 |
| Accuracy of the Records | 21 |
| Arrangement of Records | 22 |
| On-Site Measurements and Sample Collection..... | 22 |
| Water Temperature | 22 |
| Sediment..... | 22 |
| Laboratory Measurements..... | 23 |
| Analyses of Pesticides in Surface- and Ground-Water Samples (Schedule 2001) | 23 |
| Analyses of Pesticides in Volatile-Organic Compounds in Ground-Water Samples (Schedule 2020) | 24 |
| Data Presentation..... | 25 |
| Remarks Codes..... | 26 |
| Water-Quality Control Data | 26 |
| Blank Samples..... | 26 |
| Reference Samples | 27 |
| Replicate Samples | 27 |
| Spike Samples | 27 |
| Explanation of Ground-Water-Level Records..... | 27 |
| Site Identification Numbers..... | 27 |
| Data Collection and Computation..... | 27 |

| | |
|--|-----|
| Data Presentation..... | 28 |
| Water-Level Tables..... | 28 |
| Hydrographs..... | 29 |
| Ground-Water-Quality Data..... | 29 |
| Data Collection and Computation..... | 29 |
| Laboratory Measurements..... | 29 |
| Access to USGS Water Data..... | 29 |
| Retrieval of Hydrographs and Historical Data from the USGS Database..... | 29 |
| Definition of Terms..... | 30 |
| Remarks Codes..... | 31 |
| Dissolved Trace-Element Concentrations..... | 31 |
| Change in National Trends Network Procedures..... | 31 |
| Station Records, Surface Water..... | 33 |
| Discharge at Partial-Record Stations and Miscellaneous Sites..... | 241 |
| Station Records, Ground Water..... | 250 |
| Ground-Water Levels in Massachusetts..... | 250 |
| Ground-Water Levels in Rhode Island..... | 289 |
| Index..... | 307 |

ILLUSTRATIONS

| | Page |
|--|------|
| Figure 1. Map showing location of gaging stations..... | 2 |
| 2. Map showing location of observation wells..... | 6 |
| 3. Graphs showing comparison of discharge at three long-term index stations during the 2004 water year with median discharge for 1971–2000..... | 9 |
| 4. Maps showing monthly surface-water conditions during the 2004 water year in Massachusetts and Rhode Island..... | 10 |
| 5. Graphs showing comparison of monthly water levels in selected observation wells during the 2004 water year with average, maximum, and minimum monthly water levels for periods of record..... | 12 |
| 6. Maps showing monthly ground-water conditions during the 2004 water year in Massachusetts and Rhode Island..... | 13 |
| 7. Diagram showing system for numbering wells..... | 14 |

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; (st) stage only; (l) lake; (c) chemical;
(t) water temperature; (at) air temperature; (b) biological; (m) microbiological; (s) sediment; (p) precipitation)

| NORTH ATLANTIC SLOPE BASINS | Page |
|--|-------------------|
| MERRIMACK RIVER BASIN | |
| Merrimack River: | |
| North Nashua River (head of Nashua River) at Fitchburg, Mass. (d) | 01094400..... 33 |
| North Nashua River near Leominster, Mass. (d) | 01094500..... 34 |
| Nashua River: | |
| Stillwater River near Sterling, Mass. (d, c, t, s, p) | 01095220..... 35 |
| Quinapoxet River at Canada Mills near Holden, Mass. (d, c, t) | 01095375..... 41 |
| Squannacook River near West Groton, Mass. (d)..... | 01096000..... 46 |
| Nashua River at East Pepperell, Mass. (d)..... | 01096500..... 47 |
| Assabet River (head of Concord River) at Maynard, Mass. (d) | 01097000..... 48 |
| Fort Pond Brook: | |
| Nashoba Brook near Acton, Mass. (d)..... | 01097300..... 49 |
| Sudbury River at Saxonville, Mass. (d) | 01098530..... 50 |
| Concord River below River Meadow Brook, at Lowell, Mass. (d)..... | 01099500..... 51 |
| Merrimack River below Concord River, at Lowell, Mass. (d, c, t, s)..... | 01100000..... 52 |
| Shawsheen River at Hanscom Field near Bedford, Mass. (d, p) | 01100568..... 54 |
| Shawsheen River near Wilmington, Mass. (d) | 01100600..... 56 |
| PARKER RIVER BASIN | |
| Parker River at Byfield, Mass. (d) | 01101000..... 57 |
| IPSWICH RIVER BASIN | |
| Ipswich River at South Middleton, Mass. (d) | 01101500..... 58 |
| Ipswich River near Ipswich, Mass. (d) | 01102000..... 59 |
| SAUGUS RIVER BASIN | |
| Saugus River at Saugus Ironworks at Saugus, Mass. (d)..... | 01102345..... 60 |
| MYSTIC RIVER BASIN | |
| Aberjona River (head of Mystic River) at Winchester, Mass. (d, c, t, m, s)..... | 01102500..... 61 |
| CHARLES RIVER BASIN | |
| Miscoe Brook near Franklin, Mass. (d) | 01103220..... 65 |
| Charles River at Medway, Mass. (d)..... | 01103280..... 66 |
| Charles River at Dover, Mass. (d)..... | 01103500..... 67 |
| Mother Brook at Dedham, Mass. (d) | 01104000..... 68 |
| Charles River at Wellesley, Mass. (d)..... | 01104200..... 69 |
| Charles River at Waltham, Mass. (d)..... | 01104500..... 70 |
| Charles River above Watertown Dam at Watertown, Mass. (c, t, s) | 01104615..... 71 |
| Muddy River at Brookline, Mass. (st, p)..... | 01104683..... 73 |
| NEPONSET RIVER BASIN | |
| Neponset River at Norwood, Mass. (d)..... | 01105000..... 76 |
| East Branch Neponset River at Canton, Mass. (d)..... | 01105500..... 77 |
| Neponset River at Greenlodge Street near Canton, Mass. (d) | 01105554..... 78 |
| Neponset River at Milton Village, Mass. (d) | 01105556..... 79 |
| WEYMOUTH FORE RIVER BASIN | |
| Town Brook at Diversion Tunnel at Quincy, Mass. (st, p)..... | 01105584..... 80 |
| Town Brook at Quincy, Mass. (d)..... | 01105585..... 83 |
| WEYMOUTH BACK RIVER BASIN | |
| Whitmans Pond (head of Weymouth Back River): | |
| Old Swamp River near South Weymouth, Mass. (d)..... | 01105600..... 84 |
| Whitmans Pond, Whitmans Pond Dam at East Weymouth, Mass. (l)..... | 01105606..... 85 |
| Whitmans Pond Flood By-Pass at East Weymouth, Mass. (d)..... | 01105607..... 86 |
| Whitmans Pond Fish Ladder at East Weymouth, Mass. (d) | 01105608..... 87 |
| Whitmans Pond Combined Flood By-Pass and Fish Ladder at East Weymouth, Mass. (d) | 011056081..... 88 |
| NORTH RIVER BASIN | |
| Indian Head River (head of North River) at Hanover, Mass. (d)..... | 01105730..... 89 |
| JONES RIVER BASIN | |
| Jones River at Kingston, Mass. (d) | 01105870..... 90 |
| QUASHNET RIVER BASIN | |
| Quashnet River at Waquoit Village, Mass. (d) | 011058837..... 91 |

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

| NORTH ATLANTIC SLOPE BASINS--Continued | Page |
|--|---------------------------|
| SLOCUMS RIVER BASIN | |
| Paskamanset River near South Dartmouth, Mass. (d) | 01105933 92 |
| TAUNTON RIVER BASIN | |
| Taunton River near Bridgewater, Mass. (d) | 01108000 93 |
| Wading River (head of Threemile River) near Norton, Mass (d) | 01109000 94 |
| Threemile River at North Dighton, Mass. (d) | 01109060 95 |
| Segreganset River near Dighton, Mass. (d) | 01109070 96 |
| TEN MILE RIVER BASIN | |
| Ten Mile River at Pawtucket Avenue, at East Providence, R.I. (d) | 01109403 97 |
| BLACKSTONE RIVER BASIN | |
| Kettle Brook (head of Blackstone River): | |
| Kettle Brook at Rockland Street near Auburn, Mass. (d) | 01109439 98 |
| Blackstone River, West Main Street, at Millbury, Mass. (d) | 01109730 99 |
| Quinsigamond River at North Grafton, Mass. (d) | 01110000 100 |
| Blackstone River at Northbridge, Mass. (d) | 01110500 101 |
| Mumford River at Uxbridge, Mass. (d) | 01111050 103 |
| Clear River (head of Branch River): | |
| Nipmuc River near Harrisville, R.I. (d) | 01111300 104 |
| Chepachet River west of Gazza Road at Gazzaville, R.I. (d) | 01111410 105 |
| Branch River at Forestdale, R.I. (d) | 01111500 106 |
| Mill River at Harris Pond Outlet at Woonsocket, R.I. (d) | 01112268 107 |
| Peters River at Rt. 114 Bridge at Woonsocket, R.I. (d) | 01112382 108 |
| Blackstone River at Woonsocket, R.I. (d) | 01112500 109 |
| Catamint Brook at Cumberland, R.I. (d) | 01113695 110 |
| Abbot Run at Valley Falls, R.I. (d) | 01113760 111 |
| Blackstone River at Roosevelt Ave. at Pawtucket, R.I. (d) | 01113895 112 |
| MOSHASSUCK RIVER BASIN | |
| Moshassuck River at Providence, R.I. (d) | 01114000 113 |
| WOONASQUATUCKET RIVER BASIN | |
| Woonasquatucket River at Centerdale, R.I. (d) | 01114500 114 |
| PAWTUXET RIVER BASIN | |
| Scituate Reservoir (head of Pawtuxet River): | |
| Peepthead Brook at Elmdale Road near North Scituate, R.I. (d, c, t) | 01115098 115 |
| Huntinghouse Brook at Elmdale Road at North Scituate, R.I. (c, t) | 01115110 120 |
| Moswansicut Stream near North Scituate, R.I. (c, t) | 01115170 124 |
| Quonapaug Brook at Rt. 116, North Scituate, R.I. (c, t) | 01115183 128 |
| Ponaganset River near South Foster, R.I. (d, c, t) | 01115187 132 |
| Dolly Cole Brook at Old Danielson Park at South Foster, R.I. (c, t) | 01115190 137 |
| Hemlock Brook at King Road near Foster, R.I. (c, t) | 01115265 141 |
| Bear Tree Brook near Clayville, R.I. (c, t) | 01115275 145 |
| Cork Brook at Rockland Scituate Rd. near Clayville, R.I. (c, t) | 01115280 149 |
| Wilbur Hollow Brook at Old Plainfield Pike near Clayville, R.I. (c, t) | 01115297 153 |
| Pawtuxet River: | |
| South Branch Pawtuxet River at Washington, R.I. (d) | 01116000 157 |
| Pawtuxet River at Cranston, R.I. (d) | 01116500 158 |
| POTOWOMUT RIVER BASIN | |
| Hunt River near East Greenwich, R.I. (d) | 01117000 159 |
| PAWCATUCK RIVER BASIN | |
| Chipuxet River (head of Pawcatuck River) at West Kingston, R.I. (d) | 01117350 160 |
| Queen River, 1,400 ft Upstream from William Reynolds Rd, at Exeter, R.I. (d) | 011173545 161 |
| Climatological Station near Exeter, R.I. (at, p) | 413550071342901 163 |
| Queen River at Liberty Road at Liberty, R.I. (d) | 01117370 168 |
| Usquepaug River at RT 138 at Usquepaug, R.I. (d) | 01117410 169 |
| Usquepaug River near Usquepaug, R.I. (d) | 01117420 171 |
| Chickasheen Brook at West Kingston, R.I. (d) | 01117424 172 |

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

| NORTH ATLANTIC SLOPE BASINS--Continued | Page |
|---|--------------------------|
| PAWCATUCK RIVER BASIN--Continued | |
| Pawcatuck River at Route 2 at Kenyon, R.I. (d)..... | 01117430..... 174 |
| Beaver River near Usquepaug, R.I. (d)..... | 01117468..... 176 |
| Beaver River, Shannock Hill Road, near Shannock, R.I. (d)..... | 01117471..... 177 |
| Pawcatuck River at Wood River Junction, R.I. (d)..... | 01117500..... 179 |
| Meadow Brook near Carolina, R.I. (d)..... | 01117600..... 180 |
| Wood River near Arcadia, R.I. (d)..... | 01117800..... 182 |
| Climatological Station near Arcadia, R.I. (at, p)..... | 413223071423001..... 183 |
| Wood River at Hope Valley, R.I. (d, c, t)..... | 01118000..... 187 |
| Pawcatuck River at Burdickville, R.I. (d)..... | 01118010..... 192 |
| Ashaway River at Ashaway, R.I. (d)..... | 01118360..... 194 |
| Shunock River near North Stonington, Conn. (d)..... | 01118400..... 196 |
| Pawcatuck River at Westerly, R.I. (d)..... | 01118500..... 198 |
| THAMES RIVER BASIN | |
| Shetucket River (head of Thames River): | |
| Quinebaug River below East Brimfield Dam at Fiskdale, Mass. (d)..... | 01123360..... 199 |
| Quinebaug River below Westville Dam near Southbridge, Mass. (d)..... | 01123600..... 200 |
| CONNECTICUT RIVER BASIN | |
| Connecticut River: | |
| Millers River near Winchendon, Mass. (d)..... | 01162000..... 201 |
| Priest Brook near Winchendon, Mass. (d)..... | 01162500..... 202 |
| Otter River at Otter River, Mass. (d, c, t, s)..... | 01163200..... 203 |
| Millers River at Erving, Mass. (d)..... | 01166500..... 206 |
| Deerfield River at Charlemont, Mass. (d)..... | 01168500..... 207 |
| North River at Shattuckville, Mass. (d, c, t, s)..... | 01169000..... 208 |
| South River near Conway, Mass. (d, c, t, s)..... | 01169900..... 211 |
| Deerfield River near West Deerfield, Mass. (d)..... | 01170000..... 214 |
| Green River near Colrain, Mass. (d, c, t, s)..... | 01170100..... 215 |
| Connecticut River at Montague City, Mass. (d)..... | 01170500..... 218 |
| Mill River at Northampton, Mass. (d, c, t, s)..... | 01171500..... 219 |
| Connecticut River at Interstate 391 Bridge at Holyoke, Mass. (d)..... | 01172010..... 222 |
| Ware River (head of Chicopee River) near Barre, Mass. (d)..... | 01172500..... 223 |
| Ware River at intake works, near Barre, Mass. (d)..... | 01173000..... 224 |
| Ware River at Gibbs Crossing, Mass. (d)..... | 01173500..... 225 |
| Quabbin Reservoir (head of Swift River): | |
| East Branch Swift River near Hardwick, Mass. (d)..... | 01174500..... 226 |
| West Branch Swift River near Shutesbury, Mass. (d)..... | 01174565..... 227 |
| Swift River at West Ware, Mass. (d, l)..... | 01175500..... 228 |
| Sevenmile River (head of Quaboag River) near Spencer, Mass. (d)..... | 01175670..... 229 |
| Quaboag River at West Brimfield, Mass. (d)..... | 01176000..... 230 |
| Chicopee River at Indian Orchard, Mass. (d)..... | 01177000..... 231 |
| Westfield River: | |
| Westfield River at Knightville, Mass. (d)..... | 01179500..... 232 |
| West Branch Westfield River at Huntington, Mass. (d)..... | 01181000..... 233 |
| Westfield River near Westfield, Mass. (d)..... | 01183500..... 234 |
| West Branch Farmington River near New Boston, Mass. (d)..... | 01185500..... 235 |
| HOUSATONIC RIVER BASIN | |
| East Branch Housatonic River at Coltsville, Mass. (d)..... | 01197000..... 236 |
| Housatonic River near Great Barrington, Mass. (d)..... | 01197500..... 237 |
| HUDSON RIVER BASIN | |
| Hudson River: | |
| Hoosic River at Adams, Mass. (d)..... | 01331500..... 238 |
| Hoosic River near Williamstown, Mass. (d)..... | 01332500..... 239 |
| Green River at Williamstown, Mass. (d)..... | 01333000..... 240 |

GROUND-WATER-LEVEL WELLS AND POND-LEVEL GAGES, BY COUNTY,
FOR WHICH RECORDS ARE PUBLISHED IN THIS VOLUME

| MASSACHUSETTS | Page | MASSACHUSETTS--Continued | Page |
|---|------|---|------|
| BARNSTABLE COUNTY | | HAMPDEN COUNTY--Continued | |
| Barnstable well AIW 230 | 250 | Westfield well WVW 62 | 268 |
| Barnstable well AIW 247 | 250 | Westfield well WVW 152 | 268 |
| Bourne well BHW 198 | 250 | Wilbraham well XJW 55 | 268 |
| Brewster well BMW 21 | 251 | HAMPSHIRE COUNTY | |
| Brewster well BMW 22 (recorder) | 251 | Cummington well CYW 13 | 269 |
| Chatham well CGW 138 | 252 | Granby well GKW 68 | 269 |
| Mashpee well MIW 29 | 252 | Pelham well PDW 23 (recorder) | 270 |
| Sandwich well SDW 252 | 252 | Pelham well PDW 24 | 271 |
| Sandwich well SDW 253 | 253 | Ware well WEW 43 | 271 |
| Truro well TSW 1 | 253 | Westhampton well WXW 20 | 271 |
| Truro well TSW 89 | 253 | MIDDLESEX COUNTY | |
| Wellfleet well WNW 17 | 254 | Acton well ACW 158 (recorder) | 272 |
| BERKSHIRE COUNTY | | Billerica well BCW 363 | 272 |
| Becket well A3W 12 | 254 | Concord well CTW 165 | 273 |
| Cheshire well CJW 2 | 254 | Concord well CTW 167 | 273 |
| Great Barrington well GMW 2 | 255 | Lexington well LTW 104 | 273 |
| Otis well OTW 7 | 255 | Townsend well TRW 13 | 274 |
| Pittsfield well PTW 51 (recorder) | 256 | Wakefield well WAW 38 (recorder) | 274 |
| Sheffield well SJW 58 | 257 | Wayland well WKW 2 | 275 |
| BRISTOL COUNTY | | Westford well WWW 160 | 275 |
| Attleboro well ATW 83 | 257 | Wilmington well XMW 78 (recorder) | 276 |
| Freetown well F3W 23 | 257 | Winchester well XOW 14 | 276 |
| New Bedford well NGW 116 | 258 | NANTUCKET COUNTY | |
| Norton well N4W 37 | 258 | Nantucket well NBW 228 | 277 |
| Seekonk well SHW 275 | 258 | NORFOLK COUNTY | |
| Taunton well TAW 337 | 259 | Dedham well DDW 231 | 277 |
| DUKES COUNTY | | Dover well DVW 10 | 277 |
| Edgartown well ENW 52 | 259 | Foxborough well FXW 3 | 278 |
| ESSEX COUNTY | | Kingsbury Pond 420717071221301 (recorder) | 278 |
| Andover well AJW 462 | 260 | Norfolk well NNW 27 (recorder) | 279 |
| Georgetown well GCW 168 | 260 | Weymouth well XGW 2 | 280 |
| Haverhill well HLW 23 (recorder) | 261 | Weymouth well XGW 3 | 280 |
| Newbury well NIW 27 (recorder) | 262 | Weymouth well XGW 4 | 280 |
| Topsfield well TQW 1 | 263 | PLYMOUTH COUNTY | |
| Wenham well WPW 76 | 263 | Duxbury well D4W 79 (recorder) | 281 |
| FRANKLIN COUNTY | | Duxbury well D4W 80 | 282 |
| Colrain well CSW 8 | 264 | East Bridgewater well EBW 30 | 282 |
| Deerfield well DFW 44 | 264 | Hanson well HGW 76 | 282 |
| Hawley well HMW 8 | 264 | Lakeville well LKW 14 (recorder) | 283 |
| Orange well ORW 63 | 265 | Middleborough well MTW 82 | 283 |
| Sunderland well S6W 7 | 265 | Plymouth well PWW 22 | 284 |
| Sunderland well S6W 68 | 265 | Plymouth well PWW 494 | 284 |
| HAMPDEN COUNTY | | Wareham well WFW 51 | 284 |
| Blandford well BEW 9 | 266 | WORCESTER COUNTY | |
| Chicopee well CMW 95 | 266 | Hardwick well HHW 1 | 285 |
| Granville well GLW 5 | 266 | Hardwick well HHW 31 | 285 |
| Granville well GLW 6 | 267 | Northbridge well NXW 54 | 285 |
| Montgomery well M7W 19 | 267 | Petersham well PHW 16 | 286 |
| Southwick well SVW 95 | 267 | | |

GROUND-WATER-LEVEL WELLS AND POND-LEVEL GAGES, BY COUNTY,
FOR WHICH RECORDS ARE PUBLISHED IN THIS VOLUME

| MASSACHUSETTS--Continued | Page | RHODE ISLAND--Continued | Page |
|------------------------------------|-------------|--|-------------|
| WORCESTER COUNTY--Continued | | PROVIDENCE COUNTY--Continued | |
| Southborough well SSW 12..... | 286 | Burrillville well BUW 398..... | 293 |
| Sterling well SYW 1..... | 286 | Cranston City well CRW 439..... | 293 |
| Sterling well SYW 177..... | 287 | Cumberland well CUW 265..... | 294 |
| Templeton well TMW 3..... | 287 | Foster well FOW 40..... | 294 |
| Webster well WLW 1..... | 287 | Foster well FOW 290..... | 294 |
| West Boylston well WSW 26..... | 288 | Lincoln well LIW 84..... | 295 |
| West Brookfield well WUW 2..... | 288 | North Smithfield well NSW 21..... | 295 |
| Winchendon well XNW 13..... | 288 | Providence well PRW 48..... | 296 |
| RHODE ISLAND | | WASHINGTON COUNTY | |
| KENT COUNTY | | Charlestown well CHW 18..... | 296 |
| Coventry well COW 342..... | 289 | Charlestown well CHW 586..... | 297 |
| Coventry well COW 411..... | 289 | Charlestown well CHW 587..... | 297 |
| Coventry well COW 466..... | 289 | Exeter well EXW 6..... | 298 |
| Warwick well WCW 59..... | 290 | Exeter well EXW 158..... | 298 |
| West Greenwich well GWG 181..... | 290 | Exeter well EXW 238..... | 298 |
| West Greenwich well GWG 206..... | 290 | Exeter well EXW 278..... | 299 |
| NEWPORT COUNTY | | Exeter well EXW 475 (recorder)..... | 299 |
| Little Compton well LTW 142..... | 291 | Exeter well EXW 554 (recorder)..... | 300 |
| Portsmouth well POW 551..... | 291 | Hopkinton well HOW 67..... | 300 |
| Tiverton well TIW 274..... | 291 | New Shoreham well NHW 258..... | 301 |
| PROVIDENCE COUNTY | | North Kingston well NKW 255..... | 301 |
| Burrillville well BUW 187..... | 292 | Richmond well RIW 417 (recorder)..... | 302 |
| Burrillville well BUW 395..... | 292 | Richmond well RIW 600 (recorder)..... | 303 |
| Burrillville well BUW 396..... | 292 | Richmond well RIW 785 (recorder)..... | 304 |
| Burrillville well BUW 397..... | 293 | South Kingstown well SNW 6 (recorder)..... | 305 |
| | | South Kingstown well SNW 1198..... | 306 |
| | | Westerly well WEW 522 (recorder)..... | 306 |

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 |
| NORTH COASTAL BASIN | | | |
| Mill Brook at Rockport, Mass. | 01102029 | .55 | 1999–2000 |
| Sawmill Brook near Rockport, Mass. | 011020308 | .53 | 1999–2000 |
| 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 |
| Charles River above Watertown Dam at Watertown, Mass. | 01104615 | 271 | 2000 |
| 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 |

DISCONTINUED SURFACE-WATER DISCHARGE STATIONS

xiii

Discontinued surface-water discharge stations--Continued

| Station Name | Station Number | Drainage area (mi ²) | Period of record (water years) |
|--|----------------|-------------------------------------|--------------------------------------|
| 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 |
| 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 at Westville, Mass. | 01123500 | 93.6 | 1940–62 |
| French River below Hodges Village Dam at Hodges Village, Mass. | 01124350 | 31.2 | 1962–90 |
| Little River near Oxford, Mass. | 01124500 | 27.4 | 1939–90 |
| Browns Brook near Webster, Mass. | 01124750 | .49 | 1963–77 |
| French River at Webster, Mass. | 01125000 | 86.0 | 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 | .01 | 1993-95 |
| Wilder Brook at Buckland, Mass. | 01168640 | .07 | 1993-95 |
| Fort River near Amherst, Mass. | 01171300 | 36.3 | 1966-96 |
| Bassett Brook near Northampton, Mass. | 01171800 | 5.56 | 1963-74 |
| Connecticut River below Holyoke Dam at Holyoke, Mass. | 01172003 | 8,309 | 1984-2002 |
| 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 | .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 | 3,956 | 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 | 9,623 | 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 |

Water Resources Data for Massachusetts and Rhode Island, 2004

By R.S. Socolow, L.Y. Comeau, and Domenic Murino, Jr.

INTRODUCTION

The Water Resources Discipline of the U.S. Geological Survey (USGS), in cooperation with State agencies, obtains a large amount of data pertaining to the water resources of Massachusetts and Rhode Island each water year. These data, accumulated during many water years, constitute a valuable database for developing an improved understanding of the water resources of the States. To make these data readily available to interested parties outside the Geological Survey, the data are published annually in this report series entitled "Water Resources Data-Massachusetts and Rhode Island."

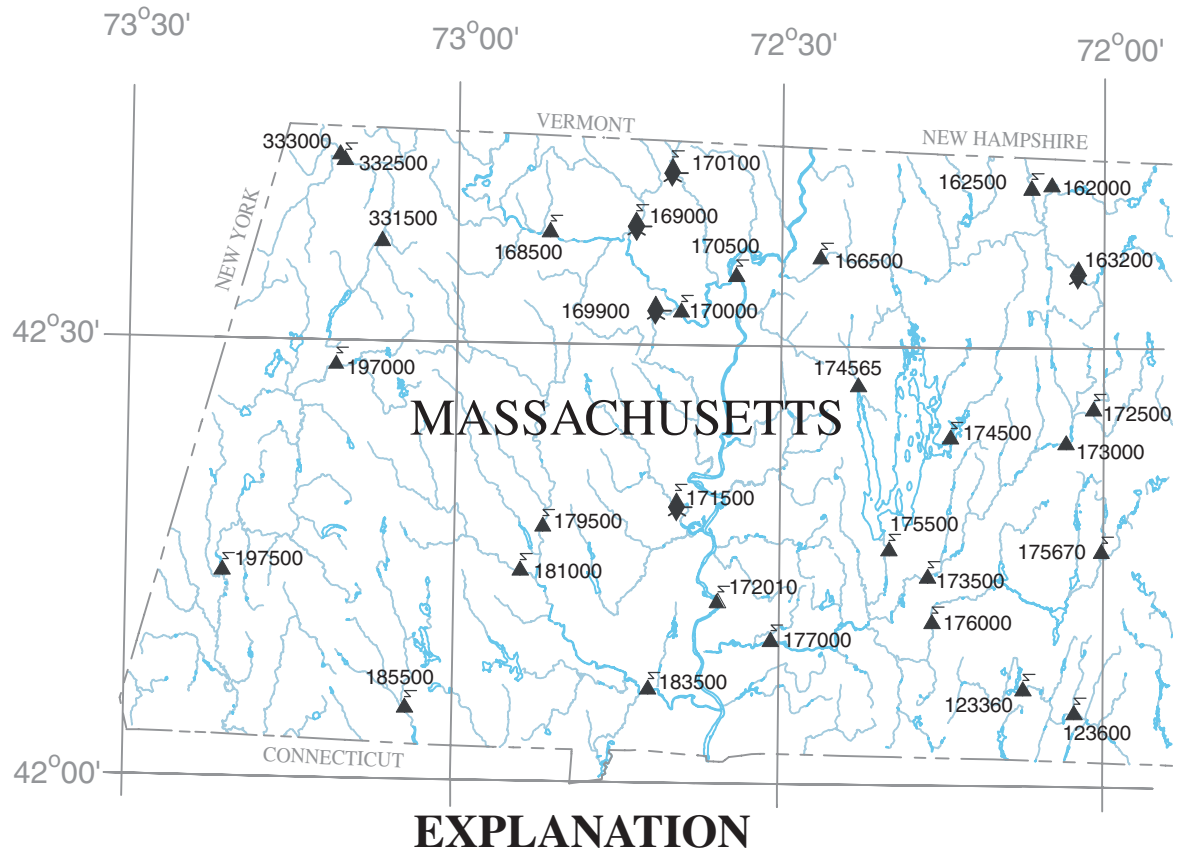
Hydrologic data are also available through the Massachusetts-Rhode Island Water Science Center home page on the World Wide Web (<http://ma.water.usgs.gov>). Historical data and real-time data (for sites equipped with satellite gage-height telemeter) are also available. The home page also contains a link to the U.S. Geological Survey national home page where streamflow data from locations throughout the United States can be retrieved (<http://waterdata.usgs.gov/nwis>). Please be advised that hydrographs for surface-water discharge stations and ground-water-level observation wells are available only through the USGS Web page. Refer to the tutorial, "Retrieval of Hydrographs and Historical Data from the USGS Database" on page 29.

This report includes records of stage, discharge, and water quality of streams; contents and elevation of lakes and ponds; and water levels of ground-water wells. This volume contains discharge records for 112 gaging stations; stage records for 2 gaging stations; stage records for 2 ponds; month-end contents of 1 reservoir; precipitation totals at 6 gaging stations; water quality for 21 gaging stations; air temperature at 2 climatological stations; and water levels for 131 observation wells. Locations of these sites are shown in figures 1 and 2. Hydrologic data were collected at many sites that were not involved in the systematic data-collection program; these data are published as miscellaneous discharge measurements, miscellaneous surface-water-quality, and miscellaneous ground-water-quality data. The data in this report represent that part of the National Water Information System (NWIS) operated by the U.S. Geological Survey and cooperating State and Federal agencies in Massachusetts and Rhode Island.

This series of annual reports for Massachusetts and Rhode Island began with the 1961 water year with a report that contained only data relating to the quantities of surface water. For the 1964 water year, a similar report was introduced that contained only data relating to water quality. Beginning with the 1975 water year, the report format was changed to present, in one volume, data on quantities of surface water, quality of surface and ground water, and ground-water levels.

Prior to introduction of this series and for several water years concurrent with it, water-resources data for Massachusetts and Rhode Island were published in U.S. Geological Survey Water-Supply Papers. Data on stream discharge and stage and on lake or reservoir contents and stage, through September 1960, were published annually under the title "Surface-Water Supply of the United States, Parts 1A and 1B." For the 1961 through 1970 water years, the data were published in two 5-year reports. Data on chemical quality, temperature, and suspended sediment for the 1941 through 1970 water years were published annually under the title "Quality of Surface Waters of the United States," and water levels for the 1939 through 1974 water years were published under the title "Ground-Water Levels in the United States." The above-mentioned Water-Supply Papers may be consulted in the libraries of the principal cities of the United States and may be purchased from the Books and Open-File Reports Section, U.S. Geological Survey, Box 25425, Denver, CO 80225.

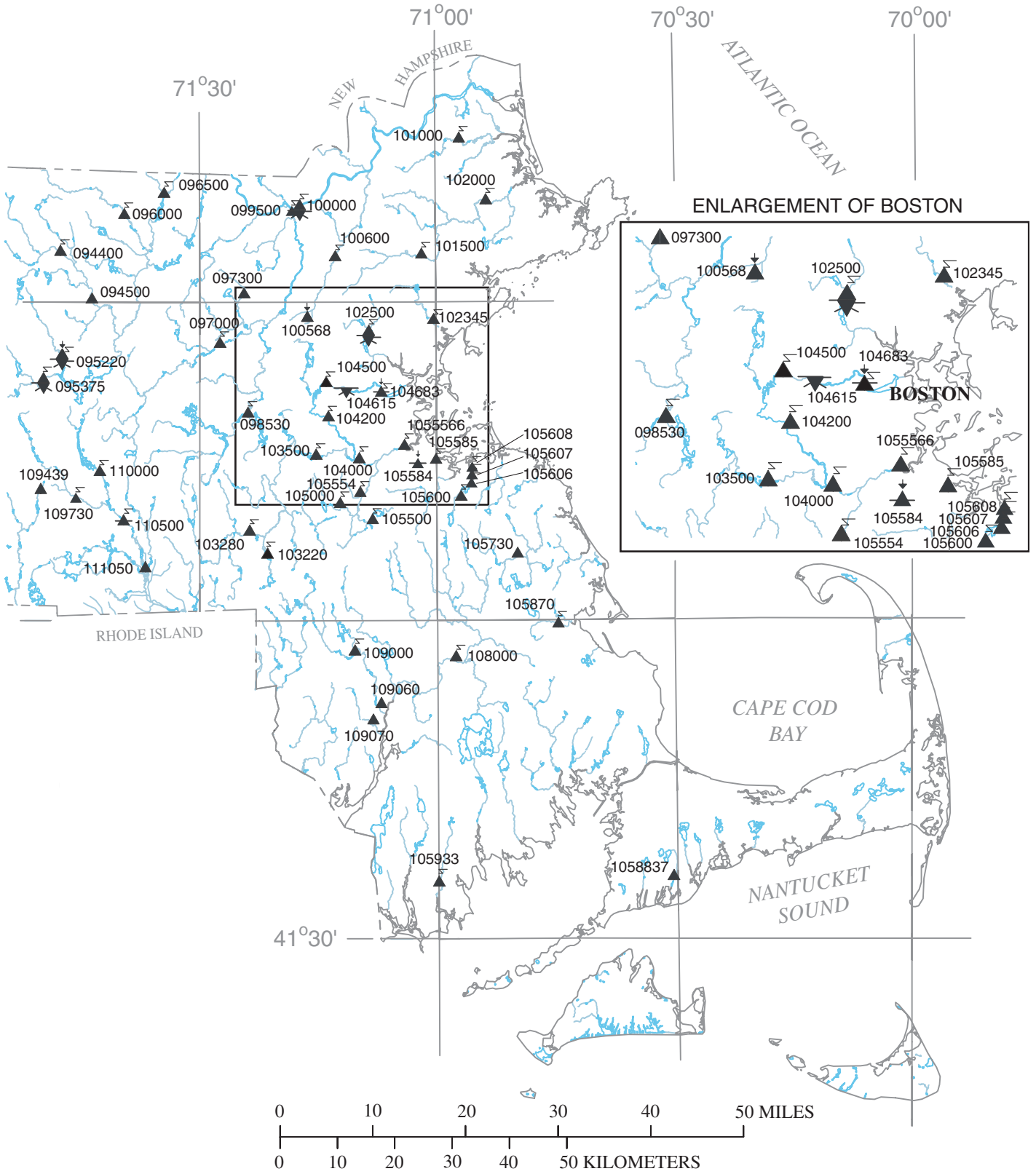
Publications similar to this report are published annually by the USGS for all States. These official Survey reports have an identification number consisting of the two-letter State abbreviation, the last two digits of the water year, and the volume number. For example, this volume is identified as "U.S. Geological Survey Water-Data Report MA-RI-04-1." For archiving and general distribution, the reports for 1971-74 water years also are identified as water-data reports. These water-data reports are for sale in paper copy or in microfiche by the National Technical Information Service, U.S. Department of Commerce, Springfield, VA 22161. Additional information, including current prices, for ordering specific reports may be obtained from the Water Science Center Office at the address given on the back of the title page or by telephone by calling (800) 696-4042.



- ▲ WATER-DISCHARGE STATION WITH SATELLITE OR PHONE TELEMETER AND DATA ON THE WEB PAGE
- ▲ WATER-DISCHARGE STATION
- ▲ STREAM STAGE ONLY
- ▼ WATER-QUALITY STATION
- ▼ CHEMICAL-MEASUREMENT SITE
- ▼ TEMPERATURE-MEASUREMENT SITE
- ▼ MICROBIOLOGICAL-MEASUREMENT SITE
- ▼ SEDIMENT-MEASUREMENT SITE
- ▲ STATION WITH PRECIPITATION MEASUREMENT
- ◆ AIR TEMPERATURE AND PRECIPITATION MEASUREMENT SITE

GAGING-STATION NUMBERS ARE IN ABBREVIATED FORM: THE FIRST TWO DIGITS (01) ARE OMITTED, FOR EXAMPLE STATION NUMBER 01176000 IS SHOWN ON MAP AS 176000

Figure 1. Location of gaging stations.



WATER RESOURCES DATA FOR MASSACHUSETTS AND RHODE ISLAND, 2004

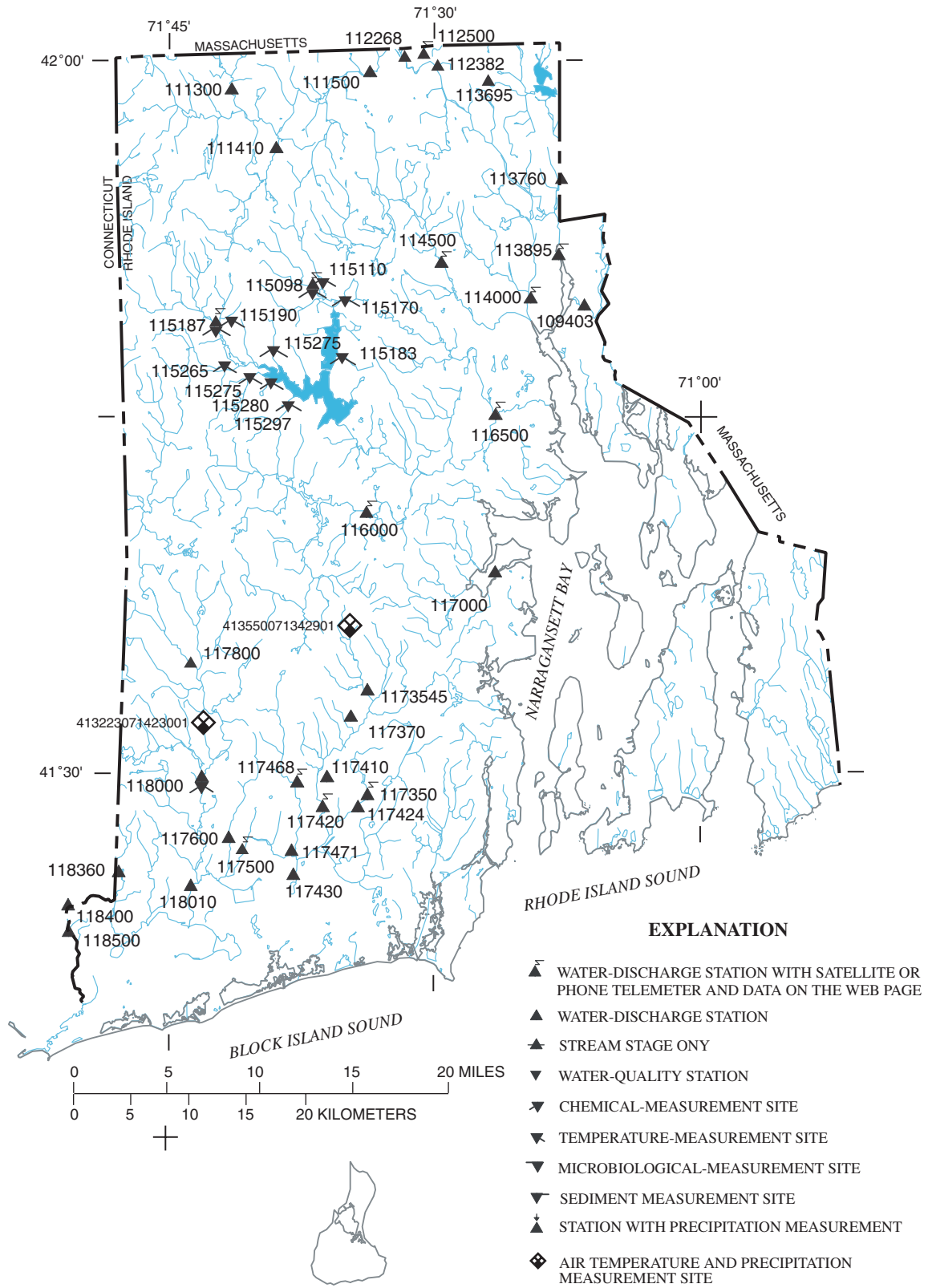


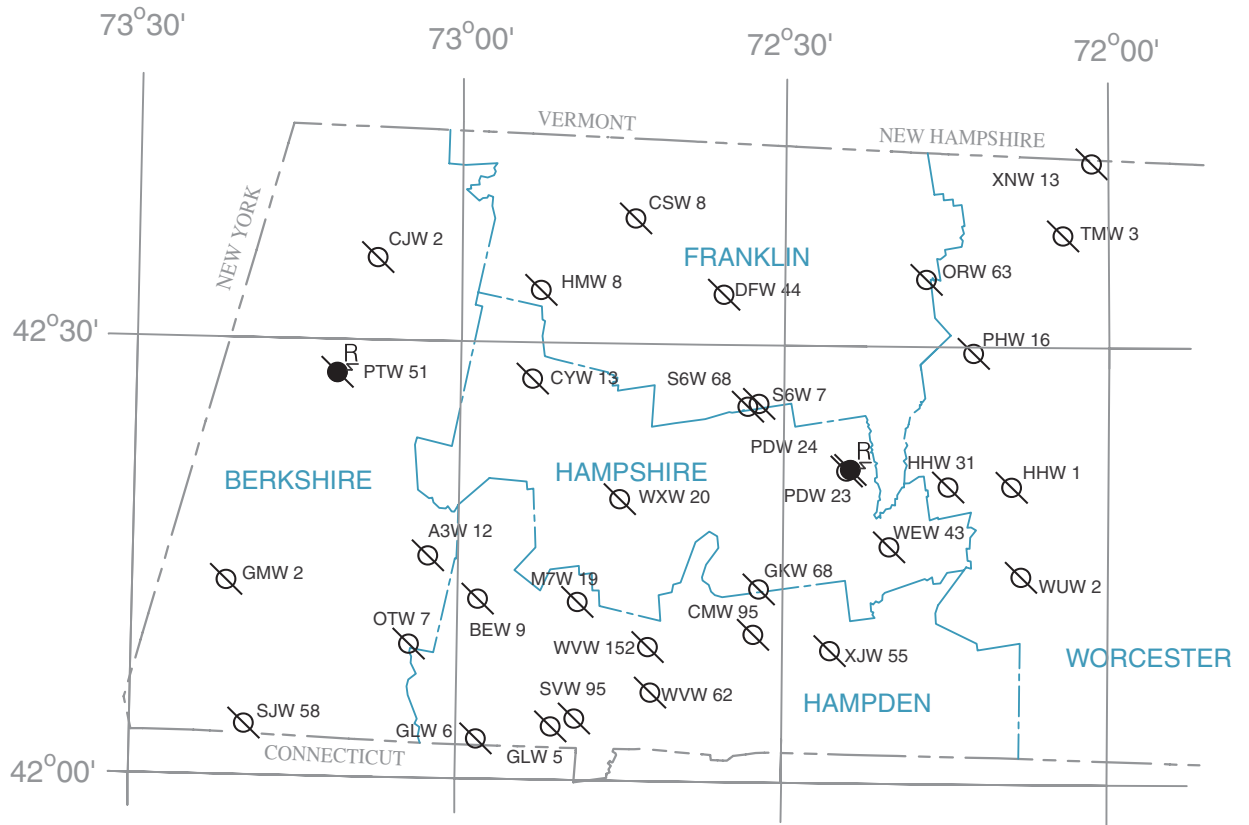
Figure 1—Continued. Location of gaging stations.



Fish ladder above USGS streamflow gaging station at outlet to Whitmans Pond in East Weymouth, MA, 01105608.



Fish ladder at dam near USGS streamflow gaging station on Hunt River near East Greenwich, RI, 0111700.



EXPLANATION





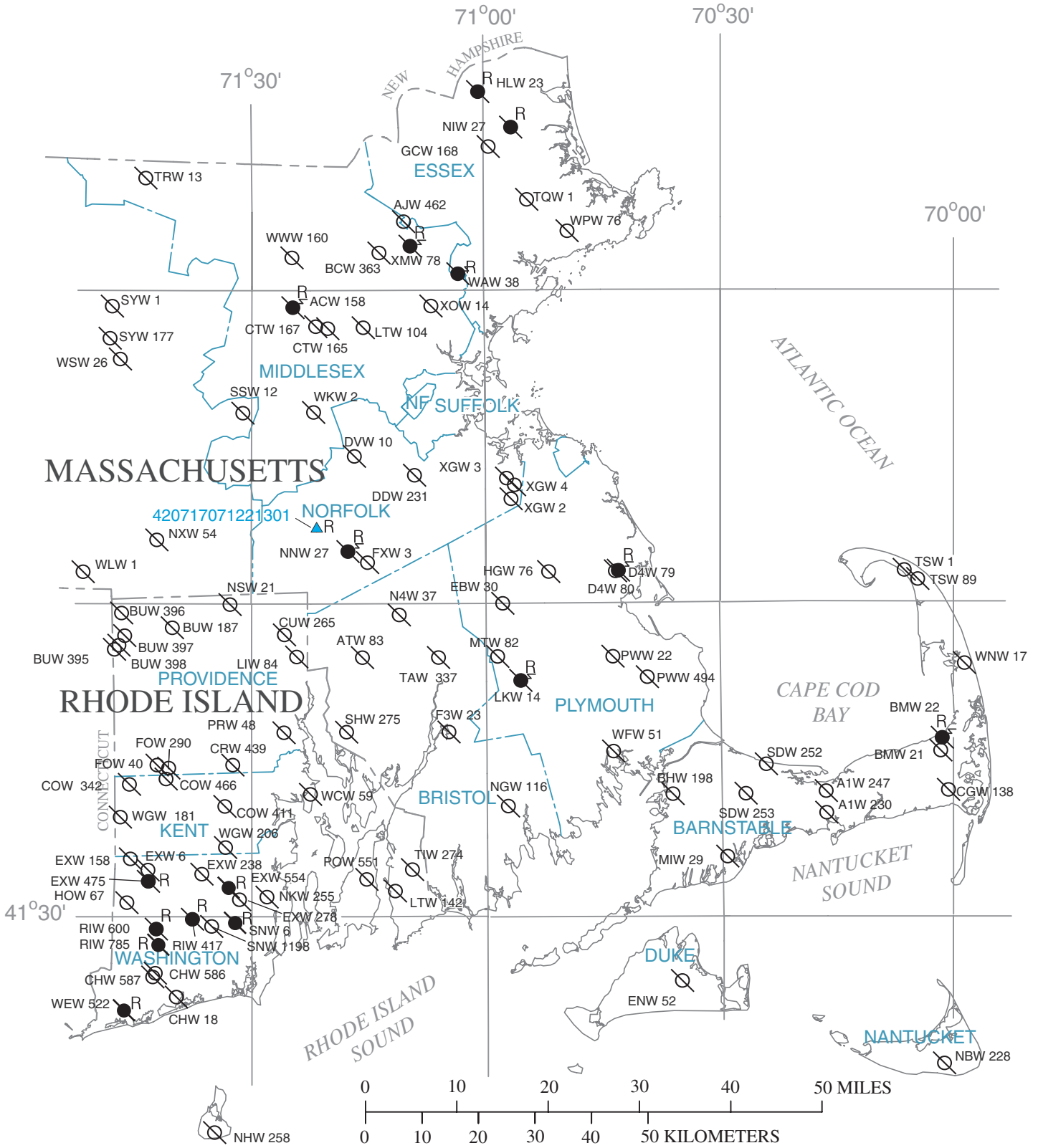
- GMW 2  OBSERVATION WELL AND LOCAL WELL NUMBER MEASURED MONTHLY
- NIW 27  OBSERVATION WELL WITH RECORDER
- PTW 51  OBSERVATION WELL WITH RECORDER AND SATELLITE-TELEMETERED DATA ON WEB PAGE
- 420717071221301  LAKE-LEVEL GAGE AND NUMBER WITH RECORDER

Figure 2. Location of observation wells.



COOPERATION

The USGS and agencies of the States of Massachusetts and Rhode Island have had cooperative agreements for the collection of streamflow records since 1909 and 1941, respectively, and for water-quality records since 1954. Organizations that assisted in collecting the data in this report through cooperative agreement with the Survey during the 2004 water year were:

Massachusetts:

*Department of Conservation and Recreation,
Katherine M. Abbot, Commissioner
Division of Water Supply Protection,
J.M. McGinn, Director
Division of Planning and Engineering,
Karst Hooeboom, Deputy Commissioner
Office of Water Resources,
M.L. Gildesgame, Acting Director;*

*Department of Environmental Protection,
R.W. Gollidge, Jr., Commissioner
Division of Watershed Management,
Glenn Haas, Director
Division of Municipal Services
Steven McCurdy, Director;*

*Town of Dartmouth,
Manuel Branco, Water Superintendent*

*Town of Franklin,
W.A. Fitzgerald, Director, Department of Public Works*

*Town of Weymouth,
Bradley Hayes, Superintendent, Water Department
Upper Blackstone Water Pollution Abatement District
T.K. Walsh, Director*

Rhode Island:

*Water Resources Board,
Kathleen M. Crawley, Acting General Manager
D.W. Varin, Chairman*

*Department of Environmental Management,
Fred Vincent, Acting Director,
Providence Water Supply Board,
Robert Kilduff, General Manager and Chief Engineer
A. Parillo, Chairman*

*Ocean State Power
Tracey Koprusak, Administrative Manager*

*Rhode Island Emergency Management Agency
MG Reginald A. Centracchio, Director*

Assistance in the form of funds or services was given by the U.S. Army Corps of Engineers, in collecting records for three gaging stations published in the report. Assistance in the form of services was given by the Cape Cod Commission, Barnstable County, Nantucket Land Council, Nantucket County, and Cooperative Extension, Martha's Vineyard, Dukes County, Massachusetts, in measuring observation wells on Cape Cod, Nantucket Island, and Martha's Vineyard Island, Massachusetts.

SUMMARY OF HYDROLOGIC CONDITIONS

Streamflow

Runoff was generally normal (between lowest and highest 25 percent of record) and above normal (highest 25 percent of record) at most gaging stations in Massachusetts and Rhode Island from October 2003 through January 2004. Runoff dropped to below normal (lowest 25 percent of record) in February and March. Runoff increased to normal and above-normal conditions in April and was generally normal during May through July. Runoff increased to normal and above-normal conditions in August and September 2004 in Massachusetts and Rhode Island.

Annual peak discharges occurred throughout most of Massachusetts and Rhode Island during two precipitation events in April. Peak flows occurred in most streams in eastern, northeastern, and northwestern Massachusetts from April 1 to April 4. Peak flows occurred in most streams in Rhode Island from April 14 to April 16. Peak flows occurred in south-central and southwestern Massachusetts from mid to late December during a series of three heavy precipitation events.

Monthly discharges for the 2004 water year and median monthly discharges for the 30-year reference period 1971–2000 for three index gaging stations are compared in figure 3. Maps showing monthly surface-water conditions during the 2004 water year in Massachusetts and Rhode Island are shown in figure 4. The maps show areas of normal (between highest and lowest 25 percent of record), above normal (within the highest 25 percent of record), or below normal (within the lowest 25 percent of record) runoff for each month and are based on records for many of the gaging stations contained in this report. Additional statistics for each gaging station are provided with the tables of daily mean discharge. Historical monthly surface-water conditions maps dating back to 1999 are available on the Web at http://ma.water.usgs.gov/water/water_s.htm.

Reservoir Storage

During the 2004 water year, month-end storage of Quabbin Reservoir in central Massachusetts ranged from 88 percent of usable capacity at the end of October to 98 percent of usable capacity at the end of May. Month-end storage of Borden Brook/Cobble Mountain Reservoir in western Massachusetts ranged from 82 percent of usable capacity at the end of August to 100 percent of usable capacity at the end of October. Storage values for Quabbin and Borden Brook/Cobble Mountain Reservoirs were provided by the Department of Conservation and Recreation, Division of Water Supply Protection. Month-end storage of Scituate Reservoir in central Rhode Island ranged from 81 percent of usable capacity at the end of December to 105 percent of usable capacity at the end of April. Storage values were provided by the Providence Water Supply Board.

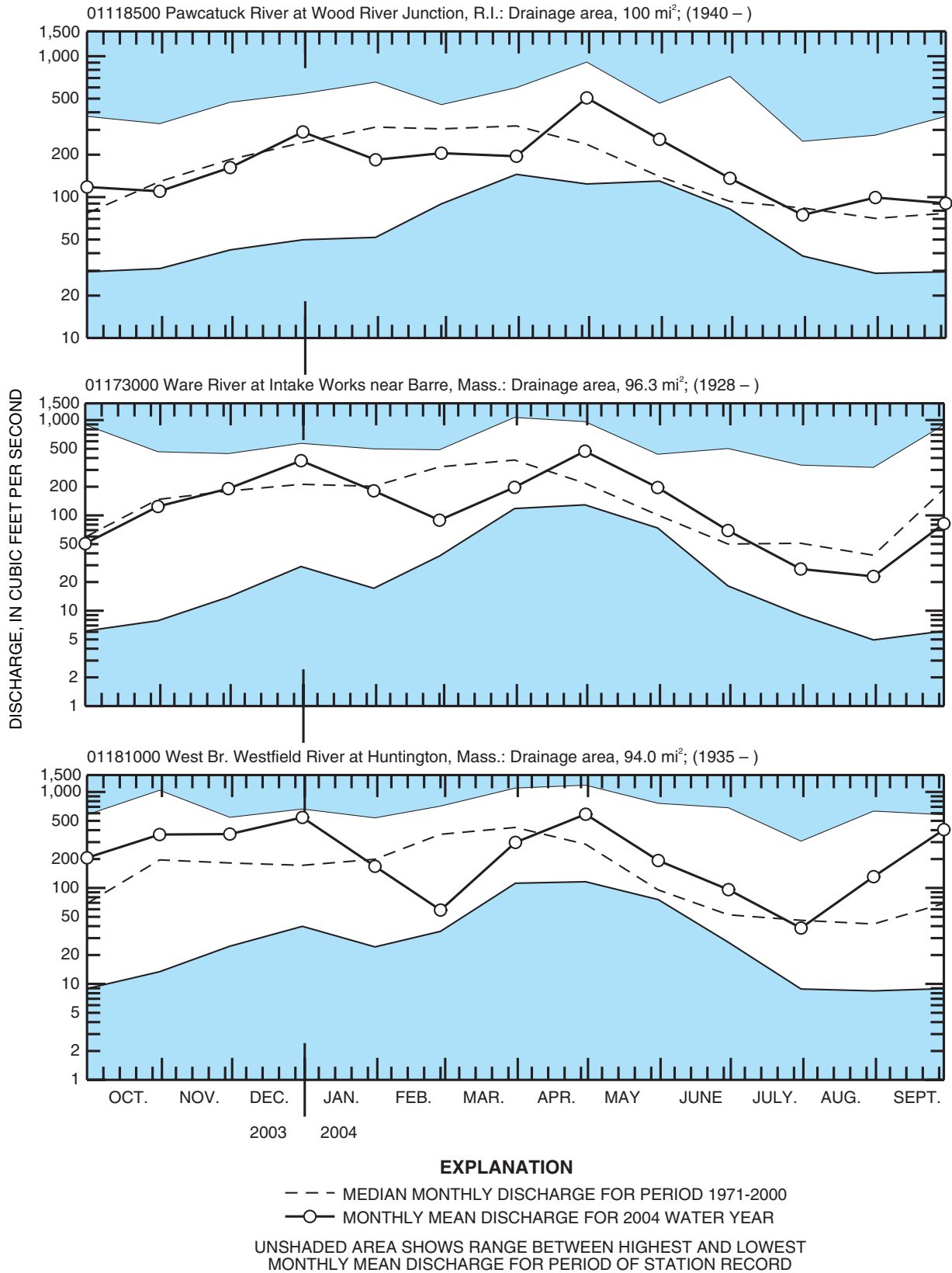


Figure 3. Comparison of discharge at three long-term index stations during the 2004 water year with median discharge for 1971–2000.

WATER RESOURCES DATA FOR MASSACHUSETTS AND RHODE ISLAND, 2004

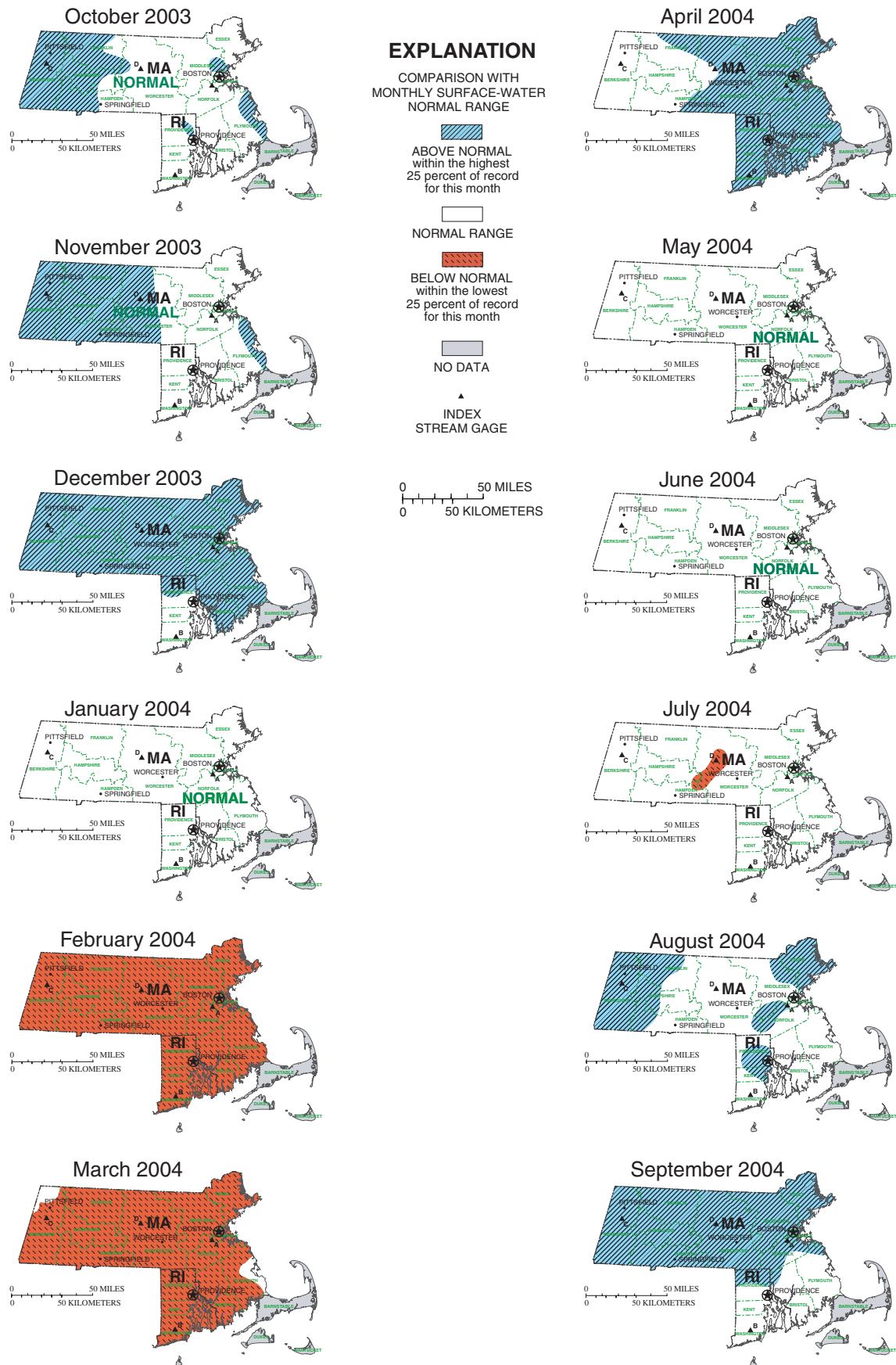


Figure 4. Monthly surface-water conditions during the 2004 water year in Massachusetts and Rhode Island.

Water Quality

Specific conductance and water temperature were measured at 10 surface-water sites in Massachusetts and 11 surface-water sites in Rhode Island. In Massachusetts, water-quality data were recorded at two sites and were sampled intermittently at eight sites. In Rhode Island, water-quality data were recorded at all 11 sites.

Three stations that had recorded water-quality data for 5 years or longer were in operation during the 2004 water year. These include: Stillwater River near Sterling, MA (01095220); Quinapoxet River at Canada Mills near Holden, MA (01095375); and Wood River at Hope Valley, RI (01118000). The following new extremes for period of gage operation were recorded during the 2004 water year: new maximum specific conductance values were recorded at Stillwater River and Wood River. No new extremes were recorded at any other stations. New extreme values for these stations are listed in the station manuscripts.

Ground-Water Levels

From October 2003 through March 2004, new historical high ground-water levels were measured at two wells in Massachusetts (Blandford 9 and Hardwick 31). No new historical high ground-water levels were measured at any wells in Rhode Island. During that same period, no new historical low ground-water levels were measured at any wells in Massachusetts or Rhode Island. Also from October through March, new monthly high ground-water levels (including historical high levels) were measured at 17 wells in Massachusetts and at two wells in Rhode Island. During that same period, new monthly low ground-water levels were measured at 3 wells in Massachusetts and at 15 wells in Rhode Island. Analyses of historical and monthly high and low ground-water levels are based on wells with 10 or more years of record.

From April through September 2004, new historical high ground-water levels were measured at one well in Rhode Island (Coventry 342). No new historical high ground-water levels were measured at any wells in Massachusetts. During that same period, no historical low ground-water levels were measured at any wells in Massachusetts or Rhode Island. From April through September, no new monthly high ground-water levels were measured at any wells in Massachusetts and Rhode Island. During that same period, new monthly low ground-water levels were measured at two wells in Rhode Island. No new monthly low ground-water levels were measured at any wells in Massachusetts.

Monthly water levels and median, maximum, and minimum monthly water levels for periods of record for three index observation wells in Massachusetts and Rhode Island are compared in figure 5. Maps showing monthly ground-water conditions during the 2004 water year in Massachusetts and Rhode Island are shown in figure 6. The maps show areas of normal (between the highest and lowest 25 percent of levels), above normal (within the highest 25 percent of levels), and below normal (within the lowest 25 percent of levels) ground-water levels for each month. Historical monthly ground-water-level conditions maps dating back to 1995 are available on the Web at: http://ma.water.usgs.gov/water/water_g.htm.

Floods and Droughts

Floods

No major floods occurred during the 2004 water year in Massachusetts or Rhode Island.

Droughts

No major droughts occurred during the 2004 water year in Massachusetts or Rhode Island.

WATER RESOURCES DATA FOR MASSACHUSETTS AND RHODE ISLAND, 2004

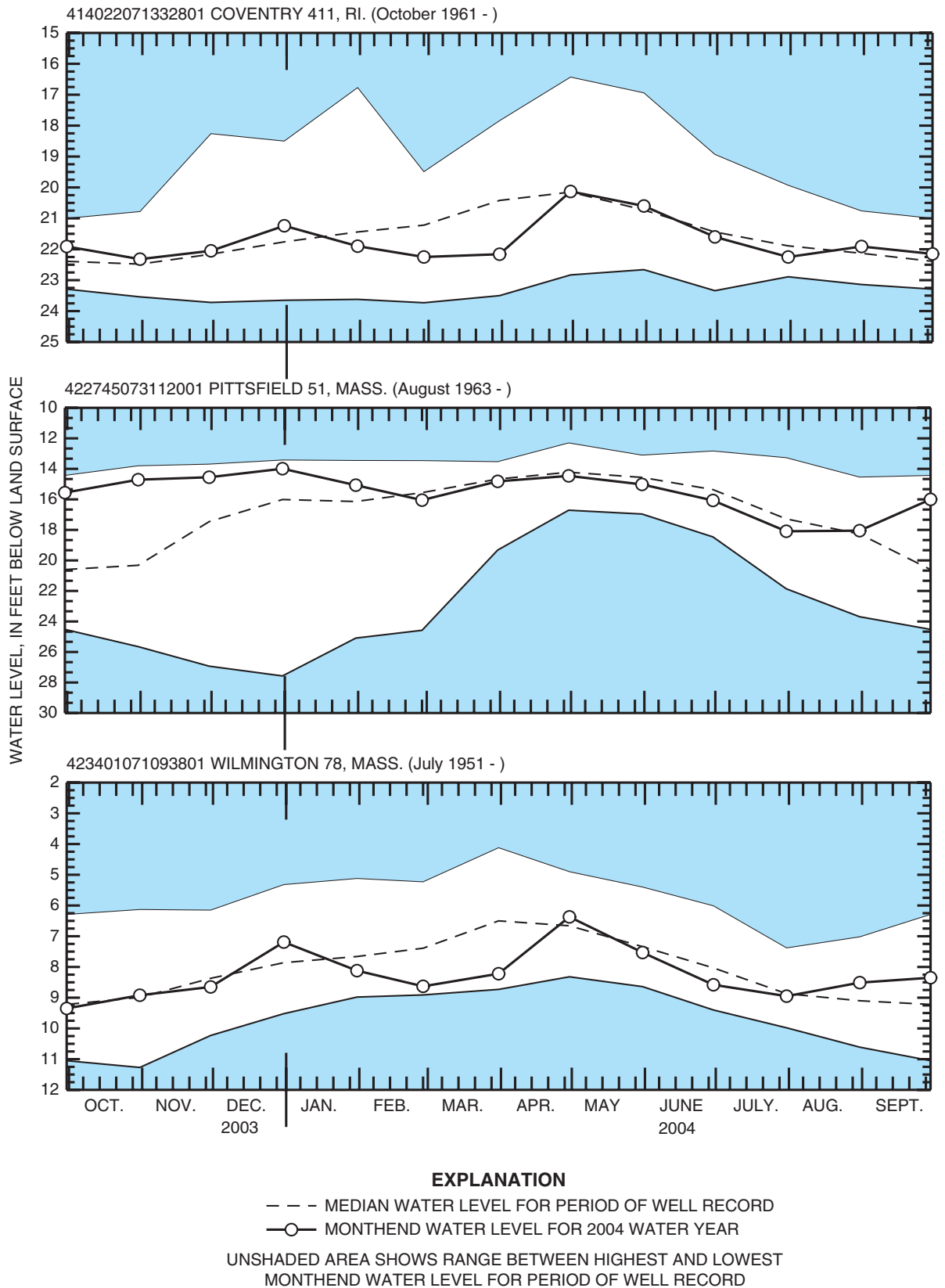


Figure 5. Comparison of monthly water levels in selected observation wells during the 2004 water year with median, maximum, and minimum monthly water levels for periods of record.

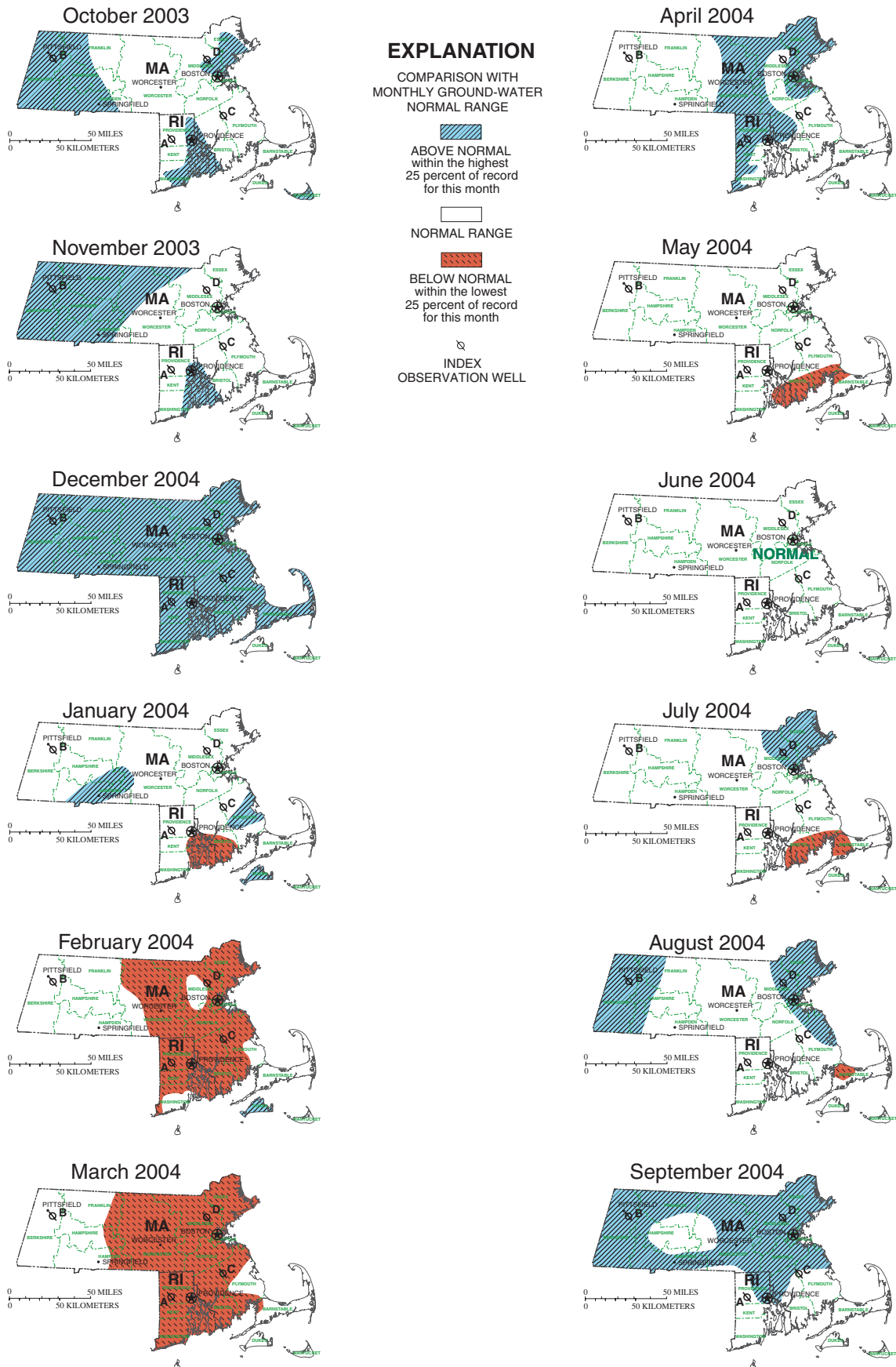


Figure 6. Monthly ground-water conditions during the 2004 water year in Massachusetts and Rhode Island.

DOWNSTREAM ORDER AND STATION NUMBER

Since October 1, 1950, hydrologic-station records in USGS reports have been listed in order of downstream direction along the main stream. All stations on a tributary entering upstream from a main-stream station are listed before that station. A station on a tributary entering between two main-stream stations is listed between those stations. A similar order is followed in listing stations on first rank, second rank, and other ranks of tributaries. The rank of any tributary on which a station is located with respect to the stream to which it is immediately tributary is indicated by an indentation in that list of stations in the front of this report. Each indentation represents one rank. This downstream order and system of indentation indicates which stations are on tributaries between any two stations and the rank of the tributary on which each station is located.

As an added means of identification, each hydrologic station and partial-record station has been assigned a station number. These station numbers are in the same downstream order used in this report. In assigning a station number, no distinction is made between partial-record stations and other stations; therefore, the station number for a partial-record station indicates downstream-order position in a list composed of both types of stations. Gaps are consecutive. The complete 8-digit (or 10-digit) number for each station such as 09004100, which appears just to the left of the station name, includes a 2-digit part number "09" plus the 6-digit (or 8-digit) downstream order number "004100." In areas of high station density, an additional two digits may be added to the station identification number to yield a 10-digit number. The stations are numbered in downstream order as described above between stations of consecutive 8-digit numbers.

NUMBERING SYSTEM FOR WELLS AND MISCELLANEOUS SITES

The USGS well and miscellaneous site-numbering system is based on the grid system of latitude and longitude. The system provides the geographic location of the well or miscellaneous site and a unique number for each site. The number consists of 15 digits. The first 6 digits denote the degrees, minutes, and seconds of latitude, and the next 7 digits denote degrees, minutes, and seconds of longitude; the last 2 digits are a sequential number for wells within a 1-second grid. In the event that the latitude-longitude coordinates for a well and miscellaneous site are the same, a sequential number such as "01," "02," and so forth, would be assigned as one would for wells (see fig. 7). The 8-digit, downstream order station numbers are not assigned to wells and miscellaneous sites where only random water-quality samples or discharge measurements are taken.

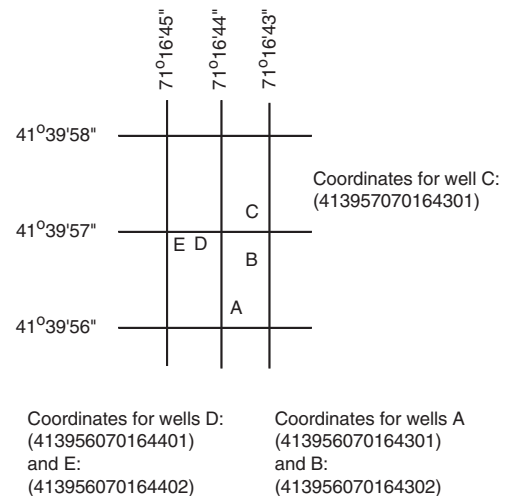


Figure 7. System for numbering wells (latitude and longitude).

SPECIAL NETWORKS AND PROGRAMS

Hydrologic Benchmark Network is a network of 61 sites in small drainage basins in 39 States that was established in 1963 to provide consistent streamflow data representative of undeveloped watersheds nationwide, and from which data could be analyzed on a continuing basis for use in comparison and contrast with conditions observed in basins more obviously affected by human activities. At selected sites, water-quality information is being gathered on major ions and nutrients, primarily to assess the effects of acid deposition on stream chemistry. Additional information on the Hydrologic Benchmark Program may be accessed from <http://water.usgs.gov/hbn/>.

National Stream-Quality Accounting Network (NASQAN) is a network of sites used to monitor the water quality of large rivers within the Nation's largest river basins. From 1995 through 1999, a network of approximately 40 stations was operated in the Mississippi, Columbia, Colorado, and Rio Grande River basins. For the period 2000 through 2004, sampling was reduced to a few index stations on the Colorado and Columbia Rivers so that a network of 5 stations could be implemented on the Yukon River. Samples are collected with sufficient frequency that the flux of a wide range of constituents can be estimated. The objective of NASQAN is to characterize the water quality of these large rivers by measuring concentration and mass transport of a wide range of dissolved and suspended constituents, including nutrients, major ions, dissolved and sediment-bound heavy metals, common pesticides, and inorganic and organic forms of carbon. This information will be used (1) to describe the long-term trends and changes in concentration and transport of these constituents; (2) to test findings of the National Water-Quality Assessment (NAWQA) Program; (3) to characterize processes unique to large-river systems such as storage and re-mobilization of sediments and associated contaminants; and (4) to refine existing estimates of off-continent transport of water, sediment, and chemicals for assessing human effects on the world's oceans and for determining global cycles of carbon, nutrients, and other chemicals. Additional information about the NASQAN Program may be accessed from <http://water.usgs.gov/nasqan/>.

The National Atmospheric Deposition Program/National Trends Network (NADP/NTN) is a network of monitoring sites that provides continuous measurement and assessment of the chemical constituents in precipitation throughout the United States. As the lead Federal agency, the USGS works together with over 100 organizations to provide a long-term, spatial and temporal record of atmospheric deposition generated from this network of 250 precipitation-chemistry monitoring sites. The USGS supports 74 of these 250 sites. This long-term, nationally consistent monitoring program, coupled with ecosystem research, provides critical information toward a national scorecard to evaluate the effectiveness of ongoing and future regulations intended to reduce atmospheric emissions and subsequent impacts to the Nation's land and water resources. Reports and other information on the NADP/NTN Program, as well as data from the individual sites, may be accessed from <http://bqs.usgs.gov/acidrain/>.

The USGS National Water-Quality Assessment (NAWQA) Program is a long-term program with goals to describe the status and trends of water-quality conditions for a large, representative part of the Nation's ground- and surface-water resources; to provide an improved understanding of the primary natural and human factors affecting these observed conditions and trends; and to provide information that supports development and evaluation of management, regulatory, and monitoring decisions by other agencies.

Assessment activities are being conducted in 42 study units (major watersheds and aquifer systems) that represent a wide range of environmental settings nationwide and that account for a large percentage of the Nation's water use. A wide array of chemical constituents is measured in ground water, surface water, streambed sediments, and fish tissues. The coordinated application of comparative hydrologic studies at a wide range of spatial and temporal scales will provide information for water-resources managers to use in making decisions and a foundation for aggregation and comparison of findings to address water-quality issues of regional and national interest.

Communication and coordination between USGS personnel and other local, State, and Federal interests are critical components of the NAWQA Program. Each study unit has a local liaison committee consisting of representatives from key Federal, State, and local water-resources agencies, Indian nations, and universities in the study unit. Liaison committees typically meet semiannually to discuss their information needs, monitoring plans and progress, desired information products, and opportunities to collaborate efforts among the agencies. Additional information about the NAWQA Program may be accessed from <http://water.usgs.gov/nawqa/>.

The New England Coastal Basins (NECB) NAWQA study unit encompasses 23,000 square miles (mi²) in western and central Maine, eastern New Hampshire, eastern Massachusetts, most of Rhode Island, and a small part of eastern Connecticut. The NECB NAWQA routine surface-water quality monitoring locations in WY 2003 published in this report are: Stillwater River near Sterling, MA (01095220); Merrimack River below Concord River, at Lowell, MA (01100000); Aberjona River (head of Mystic River) at Winchester, MA (01102500); and Charles River above Watertown Dam at Watertown, MA (01104615). Additional water samples were collected from 8 groundwater wells as part of the NECB NAWQA program during the 2003 water year.

The Connecticut, Housatonic, and Thames River Basins (CONN) NAWQA study unit encompasses 15,760 mi² in eastern Vermont, western New Hampshire, west-central Massachusetts, most of Connecticut, and small parts of New York, Rhode Island, and the Province of Quebec, Canada. The CONN NAWQA routine surface-water-quality-monitoring location published in this report is the Green River near Colrain, MA (01170100). Additional water samples were collected from 7 groundwater wells as part of the CONN NAWQA program during the 2003 water year.

Additional information about the NAWQA Program is available through the World Wide Web at: <http://water.usgs.gov/nawqa>.

The USGS National Streamflow Information Program (NSIP) is a long-term program with goals to provide framework streamflow data across the Nation. Included in the program are creation of a permanent Federally funded streamflow network, research on the nature of streamflow, regional assessments of streamflow data and databases, and upgrades in the streamflow information delivery systems. Additional information about NSIP may be accessed from <http://water.usgs.gov/nsip/>.

EXPLANATION OF STAGE- AND WATER-DISCHARGE RECORDS

Data Collection and Computation

The base data collected at gaging stations (fig. 1) consist of records of stage and measurements of discharge of streams or canals, and stage, surface area, and volume of lakes or reservoirs. In addition, observations of factors affecting the stage-discharge relation or the stage-capacity relation, weather records, and other information are used to supplement base data in determining the daily flow or volume of water in storage. Records of stage are obtained from a water-stage recorder that is either downloaded electronically in the field to a laptop computer or similar device or is transmitted using telemetry such as GOES satellite, land-line or cellular-phone modems, or by radio transmission. Measurements of discharge are made with a current meter or acoustic Doppler current profiler, using the general methods adopted by the USGS. These methods are described in standard textbooks, USGS Water-Supply Paper 2175, and the Techniques of Water-Resources Investigations of the U.S. Geological Survey (TWRIs), Book 3, Chapters A1 through A19 and Book 8, Chapters A2 and B2. Most of the methods used for collecting surface-water data are described in the TWRIs, which may be accessed from <http://water.usgs.gov/pubs/twri/>. The methods are consistent with the American Society for Testing and Materials (ASTM) standards and generally follow the standards of the International Organization for Standards (ISO).

For stream-gaging stations, discharge-rating tables for any stage are prepared from stage-discharge curves. If extensions to the rating curves are necessary to express discharge greater than measured, the extensions are made on the basis of indirect measurements of peak discharge (such as slope-area or contracted-opening measurements, or computation of flow over dams and weirs), step-backwater techniques, velocity-area studies, and logarithmic plotting. The daily mean discharge is computed from gage heights and rating tables, then the monthly and yearly mean discharges are computed from the daily values. If the stage-discharge relation is subject to change because of frequent or continual change in the physical features of the stream channel, the daily mean discharge is computed by the shifting-control method in which correction factors based on individual discharge measurements and notes by engineers and observers are used when applying the gage heights to the rating tables. If the stage-discharge relation for a station is temporarily changed by the presence of aquatic growth or debris on the controlling section, the daily mean discharge is computed by the shifting-control method.

The stage-discharge relation at some stream-gaging stations is affected by backwater from reservoirs, tributary streams, or other sources. Such an occurrence necessitates the use of the slope method in which the slope or fall in a reach of the stream is a factor in computing discharge. The slope or fall is obtained by means of an auxiliary gage at some distance from the base gage.

An index velocity is measured using ultrasonic or acoustic instruments at some stream-gaging stations and this index velocity is used to calculate an average velocity for the flow in the stream. This average velocity along with a stage-area relation is then used to calculate average discharge.

At some stations, stage-discharge relation is affected by changing stage. At these stations, the rate of change in stage is used as a factor in computing discharge.

At some stream-gaging stations in the northern United States, the stage-discharge relation is affected by ice in the winter; therefore, computation of the discharge in the usual manner is impossible. Discharge for periods of ice effect is computed on the basis of gage-height record and occasional winter-discharge measurements. Consideration is given to the available information on temperature and precipitation, notes by gage observers and hydrologists, and comparable records of discharge from other stations in the same or nearby basins.

For a lake or reservoir station, capacity tables giving the volume or contents for any stage are prepared from stage-area relation curves defined by surveys. The application of the stage to the capacity table gives the contents, from which the daily, monthly, or yearly changes are computed.

If the stage-capacity curve is subject to changes because of deposition of sediment in the reservoir, periodic resurveys of the reservoir are necessary to define new stage-capacity curves. During the period between reservoir surveys, the computed contents may be increasingly in error due to the gradual accumulation of sediment.

For some stream-gaging stations, periods of time occur when no gage-height record is obtained or the recorded gage height is faulty and cannot be used to compute daily discharge or contents. Such a situation can happen when the recorder stops or otherwise fails to operate properly, the intakes are plugged, the float is frozen in the well, or for various other reasons. For such periods, the daily discharges are estimated on the basis of recorded range in stage, prior and subsequent records, discharge measurements, weather records, and comparison with records from other stations in the same or nearby basins. Likewise, lake or reservoir volumes may be estimated on the basis of operator's log, prior and subsequent records, inflow-outflow studies, and other information.

Data Presentation

The records published for each continuous-record surface-water discharge station (stream-gaging station) consist of four parts: (1) the station manuscript or description; (2) the data table of daily mean values of discharge for the current water year with summary data; (3) a tabular statistical summary of monthly mean flow data for a designated period, by water year; and (4) a summary statistics table that includes statistical data of annual, daily, and instantaneous flows as well as data pertaining to annual runoff, 7-day low-flow minimums, and flow duration.

Station Manuscript

The manuscript provides, under various headings, descriptive information, such as station location; period of record; historical extremes outside the period of record; record accuracy; and other remarks pertinent to station operation and regulation. The following information, as appropriate, is provided with each continuous record of discharge or lake content. Comments follow that clarify information presented under the various headings of the station description.

LOCATION.—Location information is obtained from the most accurate maps available. The location of the gaging station with respect to the cultural and physical features in the vicinity and with respect to the reference place mentioned in the station name is given. River mileages, given for only a few stations, were determined by methods given in "River Mileage Measurement," Bulletin 14, Revision of October 1968, prepared by the Water Resources Council or were provided by the U.S. Army Corps of Engineers.

DRAINAGE AREA.—Drainage areas are measured using the most accurate maps available. Because the type of maps available varies from one drainage basin to another, the accuracy of drainage areas likewise varies. Drainage areas are updated as better maps become available.

PERIOD OF RECORD.—This term indicates the time period for which records have been published for the station or for an equivalent station. An equivalent station is one that was in operation at a time that the present station was not and whose location was such that its flow reasonably can be considered equivalent to flow at the present station.

REVISED RECORDS.—If a critical error in published records is discovered, a revision is included in the first report published following discovery of the error.

GAGE.—The type of gage in current use, the datum of the current gage referred to a standard datum, and a condensed history of the types, locations, and datums of previous gages are given under this heading.

REMARKS.—All periods of estimated daily discharge either will be identified by date in this paragraph of the station description for water-discharge stations or flagged in the daily discharge table. (See section titled Identifying Estimated Daily Discharge.) Information is presented relative to the accuracy of the records, to special methods of computation, and to conditions that affect natural flow at the station. In addition, information may be presented pertaining to average discharge data for the period of record; to extremes data for the period of record and the current year; and, possibly, to other pertinent items. For reservoir stations, information is given on the dam forming the reservoir, the capacity, the outlet works and spillway, and the purpose and use of the reservoir.

EXTREMES OUTSIDE PERIOD OF RECORD.—Information here documents major floods or unusually low flows that occurred outside the stated period of record. The information may or may not have been obtained by the USGS.

REVISIONS.—Records are revised if errors in published records are discovered. Appropriate updates are made in the USGS distributed data system, NWIS, and subsequently to its Web-based National data system, NWISWeb (<http://water.usgs.gov/nwis/nwis>). Users are encouraged to obtain all required data from NWIS or NWISWeb to ensure that they have the most recent data updates. Updates to NWISWeb are made on an annual basis.

Although rare, occasionally the records of a discontinued gaging station may need revision. Because no current or, possibly, future station manuscript would be published for these stations to document the revision in a REVISED RECORDS entry, users of data for these stations who obtained the record from previously published data reports may wish to contact the District Office (address given on the back of the title page of this report) to determine if the published records were revised after the station was discontinued. If, however, the data for a discontinued station were obtained by computer retrieval, the data would be current. Any published revision of data is always accompanied by revision of the corresponding data in computer storage.

Manuscript information for lake or reservoir stations differs from that for stream stations in the nature of the REMARKS and in the inclusion of a stage-capacity table when daily volumes are given.

Data Table of Daily Mean Values

The daily table of discharge records for stream-gaging stations gives mean discharge for each day of the water year. In the monthly summary for the table, the line headed TOTAL

gives the sum of the daily figures for each month; the line headed MEAN gives the arithmetic average flow in cubic feet per second for the month; and the lines headed MAX and MIN give the maximum and minimum daily mean discharges, respectively, for each month. Discharge for the month is expressed in cubic feet per second per square mile (line headed CF5M); or in inches (line headed IN); or in acre-feet (line headed AC-FT). Values for cubic feet per second per square mile and runoff in inches or in acre-feet may be omitted if extensive regulation or diversion is in effect or if the drainage area includes large noncontributing areas. At some stations, monthly and (or) yearly observed discharges are adjusted for reservoir storage or diversion, or diversion data or reservoir volumes are given. These values are identified by a symbol and a corresponding footnote.

Statistics of Monthly Mean Data

A tabular summary of the mean (line headed MEAN), maximum (MAX), and minimum (MIN) of monthly mean flows for each month for a designated period is provided below the mean values table. The water years of the first occurrence of the maximum and minimum monthly flows are provided immediately below those values. The designated period will be expressed as FOR WATER YEARS ___-___, BY

WATER YEAR (WY), and will list the first and last water years of the range of years selected from the PERIOD OF RECORD paragraph in the station manuscript. The designated period will consist of all of the station record within the specified water years, including complete months of record for partial water years, and may coincide with the period of record for the station. The water years for which the statistics are computed are consecutive, unless a break in the station record is indicated in the manuscript.

Summary Statistics

A table titled SUMMARY STATISTICS follows the statistics of monthly mean data tabulation. This table consists of four columns with the first column containing the line headings of the statistics being reported. The table provides a statistical summary of yearly, daily, and instantaneous flows, not only for the current water year but also for the previous calendar year and for a designated period, as appropriate. The designated period selected, WATER YEARS ___-___, will consist of all of the station records within the specified water years, including complete months of record for partial water years, and may coincide with the period of record for the station. The water years for which the statistics are computed are consecutive, unless a break in the station record is indicated in the manuscript. All of the calculations for the statistical characteristics designated ANNUAL (see line headings below), except for the ANNUAL 7-DAY MINIMUM statistic, are calculated for the designated period using complete water years. The other statistical characteristics may be calculated using partial water years.

The date or water year, as appropriate, of the first occurrence of each statistic reporting extreme values of discharge is provided adjacent to the statistic. Repeated occurrences may be noted in the REMARKS paragraph of the manuscript or in footnotes. Because the designated period may not be the same as the station period of record published in the manuscript, occasionally the dates of occurrence listed for the daily and instantaneous extremes in the designated-period column may not be within the selected water years listed in the heading. When the dates of occurrence do not fall within the selected water years listed in the heading, it will be noted in the REMARKS paragraph or in footnotes. Selected streamflow duration-curve statistics and runoff data also are given. Runoff data may be omitted if extensive regulation or diversion of flow is in effect in the drainage basin.

The following summary statistics data are provided with each continuous record of discharge. Comments that follow clarify information presented under the various line headings of the SUMMARY STATISTICS table.

ANNUAL TOTAL.—The sum of the daily mean values of discharge for the year.

ANNUAL MEAN.—The arithmetic mean for the individual daily mean discharges for the year noted or for the designated period.

HIGHEST ANNUAL MEAN.—The maximum annual mean discharge occurring for the designated period.

LOWEST ANNUAL MEAN.—The minimum annual mean discharge occurring for the designated period.

HIGHEST DAILY MEAN.—The maximum daily mean discharge for the year or for the designated period.

LOWEST DAILY MEAN.—The minimum daily mean discharge for the year or for the designated period.

ANNUAL 7-DAY MINIMUM.—The lowest mean discharge for 7 consecutive days for a calendar year or a water year. Note that most low-flow frequency analyses of annual 7-day minimum flows use a climatic year (April 1-March 31). The date shown in the summary statistics table is the initial date of the 7-day period. This value should not be confused with the 7-day 10-year low-flow statistic.

MAXIMUM PEAK FLOW.—The maximum instantaneous peak discharge occurring for the water year or designated period. Occasionally the maximum flow for a year may occur at midnight at the beginning or end of the year, on a recession from or rise toward a higher peak in the adjoining year. In this case, the maximum peak flow is given in the table and the maximum flow may be reported in a footnote or in the REMARKS paragraph in the manuscript.

MAXIMUM PEAK STAGE.—The maximum instantaneous peak stage occurring for the water year or designated period. Occasionally the maximum stage for a year may occur at midnight at the beginning or end of the year, on a recession from or rise toward a higher peak in the adjoining year. In this case, the maximum peak stage is given in the table and the

maximum stage may be reported in the REMARKS paragraph in the manuscript or in a footnote. If the dates of occurrence of the maximum peak stage and maximum peak flow are different, the REMARKS paragraph in the manuscript or a footnote may be used to provide further information.

INSTANTANEOUS LOW FLOW.—The minimum instantaneous discharge occurring for the water year or for the designated period.

ANNUAL RUNOFF.—Indicates the total quantity of water in runoff for a drainage area for the year. Data reports may use any of the following units of measurement in presenting annual runoff data:

Acre-foot (AC-FT) is the quantity of water required to cover 1 acre to a depth of 1 foot and is equivalent to 43,560 cubic feet or about 326,000 gallons or 1,233 cubic meters.

Cubic feet per square mile (CFSM) is the average number of cubic feet of water flowing per second from each square mile of area drained, assuming the runoff is distributed uniformly in time and area.

Inches (INCHES) indicate the depth to which the drainage area would be covered if all of the runoff for a given time period were uniformly distributed on it.

10 PERCENT EXCEEDS.—The discharge that has been exceeded 10 percent of the time for the designated period.

50 PERCENT EXCEEDS.—The discharge that has been exceeded 50 percent of the time for the designated period.

90 PERCENT EXCEEDS.—The discharge that has been exceeded 90 percent of the time for the designated period.

Data collected at partial-record stations follow the information for continuous-record sites. Data for partial-record discharge stations are presented in a table. The table lists discharge measurements made at sites other than continuous-record or partial-record stations. These measurements are often made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for a special reason are called measurements at miscellaneous sites.

Identifying Estimated Daily Discharge

Estimated daily-discharge values published in the water-discharge tables of annual State data reports are identified. This identification is shown either by flagging individual daily values with the letter “e” and noting in a table footnote, “e—Estimated,” or by listing the dates of the estimated record in the REMARKS paragraph of the station description.

Accuracy of Field Data and Computed Results

The accuracy of streamflow data depends primarily on (1) the stability of the stage-discharge relation or, if the control is unstable, the frequency of discharge measurements, and (2) the accuracy of observations of stage, measurements of discharge, and interpretations of records.

The degree of accuracy of the records is stated in the REMARKS in the station description. "Excellent" indicates that about 95 percent of the daily discharges are within 5 percent of the true value; "good" within 10 percent; and "fair," within 15 percent. "Poor" indicates that daily discharges have less than "fair" accuracy. Different accuracies may be attributed to different parts of a given record.

Values of daily mean discharge in this report are shown to the nearest hundredth of a cubic foot per second for discharges of less than 1 ft³/s; to the nearest tenths between 1.0 and 10 ft³/s; to whole numbers between 10 and 1,000 ft³/s; and to 3 significant figures above 1,000 ft³/s. The number of significant figures used is based solely on the magnitude of the discharge value. The same rounding rules apply to discharge values listed for partial-record stations.

Discharge at many stations, as indicated by the monthly mean, may not reflect natural runoff due to the effects of diversion, consumption, regulation by storage, increase or decrease in evaporation due to artificial causes, or to other factors. For such stations, values of cubic feet per second per square mile and of runoff in inches are not published unless satisfactory adjustments can be made for diversions, for changes in contents of reservoirs, or for other changes incident to use and control. Evaporation from a reservoir is not included in the adjustments for changes in reservoir contents, unless it is so stated. Even at those stations where adjustments are made, large errors in computed runoff may occur if adjustments or losses are large in comparison with the observed discharge.

Other Data Records Available

Information of a more detailed nature than that published for most of the stream-gaging stations such as discharge measurements, gage-height records, and rating tables is available from the District office. Also, most stream-gaging station records are available in computer-usable form and many statistical analyses have been made.

Information on the availability of unpublished data or statistical analyses may be obtained from the District office (see address that is shown on the back of the title page of this report).

EXPLANATION OF PRECIPITATION RECORDS

Data Collection and Computation

Rainfall data generally are collected using electronic data loggers that measure the rainfall in 0.01-inch increments every 15 minutes using either a tipping-bucket rain gage or a collection well gage. Twenty-four hour rainfall totals are tabulated and presented. A 24-hour period extends from just past midnight of the previous day to midnight of the current day. Snowfall-affected data can result during cold weather when snow fills the rain-gage funnel and then melts as temperatures rise. Snowfall-affected data are subject to errors. Missing values are indicated by this symbol "---" in the table.

Data Presentation

Precipitation records collected at surface-water gaging stations are identified with the same station number and name as the stream-gaging station. Where a surface-water daily-record station is not available, the precipitation record is published with its own name and latitude-longitude identification number.

Information pertinent to the history of a precipitation station is provided in descriptive headings preceding the tabular data. These descriptive headings give details regarding location, period of record, and general remarks.

The following information is provided with each precipitation station. Comments that follow clarify information presented under the various headings of the station description.

LOCATION.—See Data Presentation in the EXPLANATION OF STAGE- AND WATER-DISCHARGE RECORDS section of this report (same comments apply).

PERIOD OF RECORD.—See Data Presentation in the EXPLANATION OF STAGE- AND WATER-DISCHARGE RECORDS section of this report (same comments apply).

INSTRUMENTATION.—Information on the type of rainfall collection system is given.

REMARKS.—Remarks provide added information pertinent to the collection, analysis, or computation of records.

EXPLANATION OF WATER-QUALITY RECORDS

Collection and Examination of Data

Surface-water samples for analysis usually are collected at or near stream-gaging stations. The quality-of-water records are given immediately following the discharge records at these stations.

The descriptive heading for water-quality records gives the period of record for all water-quality data; the period of daily record for parameters that are measured on a daily basis (specific conductance, water temperature, sediment discharge, and so forth); extremes for the current year; and general remarks.

For ground-water records, no descriptive statements are given; however, the well number, depth of well, sampling date, or other pertinent data are given in the table containing the chemical analyses of the ground water.

Water Analysis

Most of the methods used for collecting and analyzing water samples are described in the TWRIs. Most of the methods used for collecting and analyzing water samples are described in the TWRIs, which may be accessed from <http://water.usgs.gov/pubs/twri/>.

One sample can define adequately the water quality at a given time if the mixture of solutes throughout the stream cross-section is homogeneous. However, the concentration of solutes at different locations in the cross section may vary widely with different rates of water discharge, depending on the source of material and the turbulence and mixing of the stream. Some streams must be sampled at several verticals to obtain a representative sample needed for an accurate mean concentration and for use in calculating load.

Chemical-quality data published in this report are considered to be the most representative values available for the stations listed. The values reported represent water-quality conditions at the time of sampling as much as possible, consistent with available sampling techniques and methods of analysis. In the rare case where an apparent inconsistency exists between a reported pH value and the relative abundance of carbon dioxide species (carbonate and bicarbonate), the inconsistency is the result of a slight uptake of carbon dioxide from the air by the sample between measurement of pH in the field and determination of carbonate and bicarbonate in the laboratory.

For chemical-quality stations equipped with digital monitors, the records consist of daily maximum and minimum values (and sometimes mean or median values) for each constituent measured, and are based on 15-minute or 1-hour intervals of recorded data beginning at 0000 hours and ending at 2400 hours for the day of record.

SURFACE-WATER-QUALITY RECORDS

Records of surface-water quality ordinarily are obtained at or near stream-gaging stations because discharge data are useful in the interpretation of surface-water quality. Records of surface-water quality in this report involve a variety of types of data and measurement frequencies.

Classification of Records

Water-quality data for surface-water sites are grouped into one of three classifications. A *continuous-record station* is a site where data are collected on a regularly scheduled basis. Frequency may be one or more times daily, weekly, monthly, or quarterly. A *partial-record station* is a site where limited water-quality data are collected systematically over a period of years. Frequency of sampling is usually less than quarterly. A *miscellaneous sampling site* is a location other than a continuous- or partial-record station, where samples are collected to give better areal coverage to define water-quality conditions in the river basin.

A careful distinction needs to be made between *continuous records* as used in this report and *continuous recordings* that refer to a continuous graph or a series of discrete values recorded at short intervals. Some records of water quality, such as temperature and specific conductance, may be obtained through continuous recordings; however, because of costs, most data are obtained only monthly or less frequently. Locations of stations for which records on the quality of surface water appear in this report are shown in figures 1 and 2.

Accuracy of the Records

One of four accuracy classifications is applied for measured physical properties at continuous-record stations on a scale ranging from poor to excellent. The accuracy rating is based on data values recorded before any shifts or corrections are made. Additional consideration also is given to the amount of publishable record and to the amount of data that have been corrected or shifted.

Rating classifications for continuous water-quality records

[\leq less than or equal to; \pm plus or minus value shown; $^{\circ}$ C, degree Celsius; $>$, greater than; %, percent; mg/L, milligram per liter; pH unit, standard pH unit]

| Measured physical property | Rating | | | |
|----------------------------|-----------------------------|-----------------------------------|-----------------------------------|--------------------------|
| | Excellent | Good | Fair | Poor |
| Water temperature | $\leq \pm 0.2$ $^{\circ}$ C | $> \pm 0.2$ to 0.5 $^{\circ}$ C | $> \pm 0.5$ to 0.8 $^{\circ}$ C | $> \pm 0.8$ $^{\circ}$ C |
| Specific conductance | $\leq \pm 3$ % | $> \pm 3$ to 10 % | $> \pm 10$ to 15 % | $> \pm 15$ % |
| Dissolved oxygen | $\leq \pm 0.3$ mg/L | $> \pm 0.3$ to 0.5 mg/L | $> \pm 0.5$ to 0.8 mg/L | $> \pm 0.8$ mg/L |
| pH | $\leq \pm 0.2$ unit | $> \pm 0.2$ to 0.5 unit | $> \pm 0.5$ to 0.8 unit | $> \pm 0.8$ unit |
| Turbidity | $\leq \pm 5$ % | $> \pm 5$ to 10 % | $> \pm 10$ to 15 % | $> \pm 15$ % |

Arrangement of Records

Water-quality records collected at a surface-water daily record station are published immediately following that record, regardless of the frequency of sample collection. Station number and name are the same for both records. Where a surface-water daily record station is not available or where the water quality differs significantly from that at the nearby surface-water station, the continuing water-quality record is published with its own station number and name in the regular downstream-order sequence. Water-quality data for partial-record stations and for miscellaneous sampling sites appear in separate tables following the table of discharge measurements at miscellaneous sites.

On-Site Measurements and Sample Collection

In obtaining water-quality data, a major concern is assuring that the data obtained represent the naturally occurring quality of the water. To ensure this, certain measurements, such as water temperature, pH, and dissolved oxygen, must be made on site when the samples are taken. To assure that measurements made in the laboratory also represent the naturally occurring water, carefully prescribed procedures must be followed in collecting the samples, in treating the samples to prevent changes in quality pending analysis, and in shipping the samples to the laboratory. Procedures for on-site measurements and for collecting, treating, and shipping samples are given in TWRIs Book 1, Chapter D2; Book 3, Chapters A1, A3, and A4; and Book 9, Chapters A1-A9. Most of the methods used for collecting and analyzing water samples are described in the TWRIs, which may be accessed from <http://water.usgs.gov/pubs/twri/>. Also, detailed information on collecting, treating, and shipping samples can be obtained from the USGS District office (see address that is shown on the back of title page in this report).

Water Temperature

Water temperatures are measured at most of the water-quality stations. In addition, water temperatures are taken at the time of discharge measurements for water-discharge stations. For stations where water temperatures are taken

manually once or twice daily, the water temperatures are taken at about the same time each day. Large streams have a small diurnal temperature change; shallow streams may have a daily range of several degrees and may follow closely the changes in air temperature. Some streams may be affected by waste-heat discharges.

At stations where recording instruments are used, either mean temperatures or maximum and minimum temperatures for each day are published. Water temperatures measured at the time of water-discharge measurements are on file in the District office.

Sediment

Suspended-sediment concentrations are determined from samples collected by using depth-integrating samplers. Samples usually are obtained at several verticals in the cross section, or a single sample may be obtained at a fixed point and a coefficient applied to determine the mean concentration in the cross section.

During periods of rapidly changing flow or rapidly changing concentration, samples may be collected more frequently (twice daily or, in some instances, hourly). The published sediment discharges for days of rapidly changing flow or concentration were computed by the subdivided-day method (time-discharge weighted average). Therefore, for those days when the published sediment discharge value differs from the value computed as the product of discharge times mean concentration times 0.0027, the reader can assume that the sediment discharge for that day was computed by the subdivided-day method. For periods when no samples were collected, daily discharges of suspended sediment were estimated on the basis of water discharge, sediment concentrations observed immediately before and after the periods, and suspended-sediment loads for other periods of similar discharge.

At other stations, suspended-sediment samples are collected periodically at many verticals in the stream cross section. Although data collected periodically may represent conditions only at the time of observation, such data are useful in establishing seasonal relations between quality and streamflow and in predicting long-term sediment-discharge characteristics of the stream.

In addition to the records of suspended-sediment discharge, records of the periodic measurements of the particle-size distribution of the suspended sediment and bed material are included for some stations.

Laboratory Measurements

Samples for biochemical oxygen demand (BOD) and indicator bacteria are analyzed locally. All other samples are analyzed in the USGS laboratory in Lakewood, Colorado, unless otherwise noted. Methods used in analyzing sediment samples and computing sediment records are given in TWRI, Book 5, Chapter C1. Methods used by the USGS laboratories are given in the TWRIs, Book 1, Chapter D2; Book 3, Chapter C2; and Book 5, Chapters A1, A3, and A4. These methods are consistent with ASTM standards and generally follow ISO standards.

Analyses of Pesticides in Surface- and Ground-Water Samples (Schedule 2001)

Selected surface- and ground-water samples from NECB and CONN NAWQA study sites were analyzed for pesticides on National Water Quality Laboratory (NWQL) schedule 2001 during the 2003 water year. The following table lists the pesticides on the schedule, the unit of measure (micrograms per liter, µg/L), the U.S. Geological Survey National Water Information System parameter code, the NWQL compound name, and the laboratory reporting level (LRL).

Estimated values for constituents in the 2001 schedule are preceded by an "E" to alert the data user to decreased confidence in accurate quantitation. Values for analytes in the 2001 schedule are preceded by an "E" in the following situations:

1. An analyte is determined outside the concentration range (upper concentration limits are to 20 mg/L for most compounds). The analyte is reported as greater than the highest calibration standard, and qualified with an "E." For example, a sample with a concentration of cyanazine determined as 41 mg/L from the calibration curve is reported as "E41."
2. The concentration is less than the Laboratory Reporting Level (LRL). The analyte meets all identification criteria to be positively identified, but the amount detected is below where it can be reliably quantified. The LRLs are used as the default reporting values when no analyte is detected in a sample.
3. An analyte demonstrated "poor" performance (that is, low and/or inconsistent recovery). These performance problems are related to either SPE or GC/MS procedures. The analyte is reported with an "E" code, to indicate that the concentration is an estimated measurement.

Only pesticides measured at or above the minimum reporting level for one or more samples are listed in the water-quality tables.

ANALYSES DESCRIPTION--Pesticides are partitioned from the filtered sample water by a C-18 Solid Phase Extraction (SPE) cartridge and analyzed by gas chromatography/mass spectrometry (GC/MS).

SAMPLE REQUIREMENTS--1 liter of water is filtered through a 0.7-micron glass-fiber depth filter, chilled at 4°C (packed in ice).

CONTAINER REQUIREMENTS--1 liter baked amber glass bottle (GCC) from USGS NWQL.

PCODE--The USGS parameter code.

COMPOUND NAME--IUPAC nomenclature.

COMMON NAME--Common or trade name(s) for constituent.

LRL--Laboratory reporting level.

| PCode | Compound Name/(Common Name) | LRL (µg/L) |
|-------|---|------------|
| 82660 | 2,6-Diethylaniline (Metabolite of Alachlor) | 0.006 |
| 49260 | Acetochlor (Harness Plus, Surpass) | .006 |
| 46342 | Alachlor (Lasso, Bullet) | .004 |
| 39632 | Atrazine (Atrex, Atred) | .007 |
| 82686 | Azinphos, Methyl- (Guthion, Gusathion) | .050 |
| 82673 | Benfluralin (Benefin, Balan) | .010 |
| 04028 | Butylate (Genate Plus, Suntan+) | .002 |
| 82680 | Carbaryl (Sevin, Denapan) | .041 |
| 82674 | Carbofuran (Furandan, Curaterr) ***** | .020 |
| 38933 | Chlorpyrifos (Brodan, Dursban) | 0.005 |
| 04041 | Cyanazine (Bledex, Fortrol) | .018 |
| 82682 | DCPA (Dacthal, Chlorthal-dimethyl) | .003 |
| 34653 | DDE,p,p' - | .003 |
| 04040 | Deethylatrazine, (Metabolite of Atrazine) | .006 |
| 39572 | Diazinon (Basudin, Diazatol) | .005 |
| 39381 | Dieldrin (Panoram D-31, Octalox) | .005 |
| 82677 | Disulfoton (Disyston, Frumin AL) | .021 |
| 82668 | EPTC (Eptam, Farmarox) | .002 |
| 82663 | Ethalfuralin (Sonalan, Curbit) | .009 |
| 82672 | Ethoprop (Mocap, Ethoprophos) | .005 |
| 62169 | Desulfinylfipronil amide | .009 |
| 62167 | Fipronil sulfide | .005 |
| 62168 | Fipronil sulfone | .005 |
| 62170 | Desulfinylfipronil | .004 |
| 62166 | Fipronil | .007 |
| 04095 | Fonofos (Dyfonate, Capfos) | .003 |
| 34253 | HCH,alpha- (alpha-BHC, alpha-lindane) | .005 |
| 39341 | HCH,gamma- (Lindane, gamma-BHC) | .004 |
| 82666 | Linuron (Lorex, Linex) | .035 |
| 39532 | Malathion | .027 |
| 39415 | Metolachlor (Dual, Pennant) | .013 |
| 82630 | Metribuzin (Lexon, Sencor) | .006 |
| 82671 | Molinate (Ordram) | .002 |
| 82684 | Napropamide (Devrinol) | .007 |
| 39542 | Parathion, Ethyl- (Roethyl-P, Alkron) | .010 |
| 82667 | Parathion, Methyl- (Pennacp-M) | .006 |
| 82669 | Pebulate (Tillam, PEBL) | .004 |
| 82683 | Pendimethalin (Prowl, Stomp, Pre-M) | .022 |

| PCode | Compound Name/(Common Name) | LRL (µg/L) |
|-------|-----------------------------------|---------------|
| 82687 | Permethrin,cis- (Ambush, Astro) | 0.006 |
| 82664 | Phorate (Thimet, Granutox) | .011 |
| 04037 | Prometon (Pramitol, Princep) | .015 |
| 82676 | Pronamide (Kerb) (Propyzamid) | .004 |
| 04024 | Propachlor (Ramrod, Satecid) | .010 |
| 82679 | Propanil (Stampede, Stam) | .011 |
| 82685 | Propargite (Omite, Alkyl sulfite) | .023 |
| 04035 | Simazine (Princep, Caliber 91) | .005 |
| 82670 | Tebuthiuron (Spike, Tebusan) | .016 |
| 82665 | Terbacil (Sinbar) | .034 |
| 82675 | Terbufos (Counter, Contraven) | .017 |
| 82681 | Thiobencarb (Bolero, Saturn) | .005 |
| 82678 | Triallate (Avadex BW, Far-Go) | .002 |
| 82661 | Trifluralin (Treflan, Gowan) | .009 |

Analyses of Volatile-Organic Compounds in Ground-Water Samples (Schedule 2020)

Selected ground-water samples from CONN NAWQA study sites were analyzed for volatile organic compounds (VOCs) in the 2003 water year. The NWQL created a method for accurate determination of VOCs in water in the nanogram per liter range, schedule 2020. The method described in USGS Open-File Report 97-829 (Connor and others) is similar to USEPA method 524-2 (Mund, 1995) and the method described by Rose and Schroeder (1995). Minor improvements to instrument operating conditions include the following: additional compounds, quantitation ions that are different from those recommended in USEPA Method 524.2 because of interferences from the additional compounds, and a data-reporting strategy for measuring detected compounds extrapolated at less than the lowest calibration standard or measured at less than the reporting limit.

The following table lists the VOCs on the schedule, the unit of measure (micrograms per liter, µg/L), the USGS National Water Information System parameter code, the NWQL compound name, and the NWQL LRL. The LRL is a statistically defined reporting limit designed to limit false positives and false negatives to less than 1 percent. Positive detections measured at less than LRL are reported as estimated concentrations (E) to alert the data user to decreased confidence in accurate quantitation. Values for analytes in the 2020 schedule are preceded by an "E" in the following situations:

1. The calculated concentration is less than the lowest calibration standard. The analyte meets all identification criteria to be positively identified, but the amount detected is below where it can be reliably quantified.
2. A sample is diluted for any reason. The method reporting level is multiplied by the dilution factor to

obtain the adjusted method reporting level. Values below the lowest calibration standard multiplied by the dilution factor are qualified with an "E." For example, a value of 0.19 in a 1:2 dilution is reported as E0.19.

3. The set spike has recoveries out of the specified range (60-140%).
4. The analyte is also detected in the set blank. If the value in the sample is less than five times the blank value and greater than the blank value plus the long term method detection limit, the value is preceded by an "E" to indicate that the analyte is positively identified but not positively quantified because the analyte was also detected in the blank.

Only VOCs measured at or above the non-detection level for one or more samples are listed in the water-quality tables.

ANALYSES DESCRIPTION--The sample water is actively purged with helium to extract the volatile organic compounds. The volatile organic compounds are collected onto a sorbent trap, thermally desorbed, separated by a gas chromatographic capillary column, and determined by a full scan quadropole mass spectrometer. Compound identification is confirmed by the gas chromatographic retention time and by the resultant mass spectrum, typically identified by three unique ions.

SAMPLE REQUIREMENTS--Water is collected in vials placed in a stainless steel VOC sampler. Samples are preserved with 1:1 hydrochloric acid and chilled at 4°C (packed in ice).

CONTAINER REQUIREMENTS--40 milliliter baked amber septum glass vial, from USGS OCALA Water Quality Service Unit.

PCODE--The USGS parameter code.

COMPOUND NAME--USGS NWQL nomenclature.

LRL--Laboratory reporting level.

| PCODE | COMPOUND NAME | LRL (µg/L) |
|-------|--------------------------------|---------------|
| 77562 | 1,1,1,2-Tetrachloroethane | 0.030 |
| 34506 | 1,1,1-Trichloroethane | .032 |
| 34516 | 1,1,2,2-Tetrachloroethane | .09 |
| 34511 | 1,1,2-Trichloroethane | .064 |
| 77652 | 1,1,2-Trichlorotrifluoroethane | .060 |
| 34496 | 1,1-Dichloroethane | .035 |
| 34501 | 1,1-Dichloroethylene | .044 |
| 77168 | 1,1-Dichloropropene | .05 |
| 49999 | 1,2,3,4-Tetramethylbenzene | .23 |
| 50000 | 1,2,3,5-Tetramethylbenzene | .20 |
| 77613 | 1,2,3-Trichlorobenzene | .27 |
| 77443 | 1,2,3-Trichloropropane | .16 |
| 77221 | 1,2,3-Trimethylbenzene | .12 |
| 34551 | 1,2,4-Trichlorobenzene | .12 |
| 77222 | 1,2,4-Trimethylbenzene | .056 |
| 82625 | 1,2-Dibromo-3-chloropropane | .05 |

| PCODE | COMPOUND NAME | LRL (µg/L) | PCODE | COMPOUND NAME | LRL (µg/L) |
|-------|----------------------------------|---------------|-------|-------------------------------------|---------------|
| 77651 | 1,2-Dibromoethane | 0.036 | 77220 | o-Ethyl toluene | 0.06 |
| 34536 | 1,2-Dichlorobenzene | .048 | 77135 | o-Xylene | .07 |
| 32103 | 1,2-Dichloroethane | .13 | 77224 | Propylbenzene | .042 |
| 34541 | 1,2-Dichloropropane | .029 | 77350 | <i>sec</i> -Butylbenzene | .06 |
| 77226 | 1,3,5-Trimethylbenzene | .044 | 77128 | Styrene | .042 |
| 34566 | 1,3-Dichlorobenzene | .030 | 77353 | <i>tert</i> -Butylbenzene | .10 |
| 77173 | 1,3-Dichloropropane | .12 | 50005 | <i>tert</i> -Pentyl methyl ether | .08 |
| 34571 | 1,4-Dichlorobenzene | .05 | 34475 | Tetrachloroethylene | .027 |
| 77170 | 2,2-Dichloropropane | .05 | 32102 | Tetrachloromethane | .060 |
| 81595 | 2-Butanone | 5.0 | 81607 | Tetrahydrofuran | 2.2 |
| 77275 | 2-Chlorotoluene | .042 | 34010 | Toluene | .05 |
| 77103 | 2-Hexanone | .7 | 34546 | <i>trans</i> -1,2-Dichloroethylene | .032 |
| 78109 | 3-Chloropropene | .12 | 34699 | <i>trans</i> -1,3-Dichloropropene | .09 |
| 77277 | 4-Chlorotoluene | .056 | 73547 | <i>trans</i> -1,4-Dichloro-2-butene | .7 |
| 77356 | 4-Isopropyl-1-methylbenzene | .12 | 39180 | Trichloroethylene | .038 |
| 78133 | 4-Methyl-2-pentanone | .37 | 34488 | Trichlorofluoromethane | .09 |
| 81552 | Acetone | 7.1 | 39175 | Vinyl chloride | .11 |
| 34215 | Acrylonitrile | 1.2 | | | |
| 34030 | Benzene | .021 | | | |
| 81555 | Bromobenzene | .036 | | | |
| 77297 | Bromochloromethane | .12 | | | |
| 32101 | Bromodichloromethane | .048 | | | |
| 50002 | Bromoethene | .1 | | | |
| 32104 | Bromoform | .10 | | | |
| 34413 | Bromomethane | .26 | | | |
| 77342 | Butylbenzene | .19 | | | |
| 77041 | Carbon disulfide | .075 | | | |
| 34301 | Chlorobenzene | .028 | | | |
| 34311 | Chloroethane | .12 | | | |
| 32106 | Chloroform | .024 | | | |
| 34418 | Chloromethane | .17 | | | |
| 77093 | <i>cis</i> -1,2-Dichloroethylene | .038 | | | |
| 34704 | <i>cis</i> -1,3-Dichloropropene | .09 | | | |
| 32105 | Dibromochloromethane | .18 | | | |
| 30217 | Dibromomethane | .05 | | | |
| 34668 | Dichlorodifluoromethane | .18 | | | |
| 34423 | Dichloromethane | .16 | | | |
| 81576 | Diethyl ether | .17 | | | |
| 81577 | Diisopropyl ether | .10 | | | |
| 73570 | Ethyl methacrylate | .18 | | | |
| 50004 | Ethyl <i>tert</i> -butyl ether | .054 | | | |
| 34371 | Ethylbenzene | .03 | | | |
| 39702 | Hexachlorobutadiene | .14 | | | |
| 34396 | Hexachloroethane | .19 | | | |
| 77223 | Isopropylbenzene | .06 | | | |
| 85795 | m- and p-Xylene | .06 | | | |
| 49991 | Methyl acrylate | 1.4 | | | |
| 81593 | Methyl acrylonitrile | .57 | | | |
| 77424 | Methyl iodide | .35 | | | |
| 81597 | Methyl methacrylate | .35 | | | |
| 78032 | Methyl <i>tert</i> -butyl ether | .17 | | | |
| 34696 | Naphthalene | .50 | | | |

Data Presentation

For continuing-record stations, information pertinent to the history of station operation is provided in descriptive headings preceding the tabular data. These descriptive headings give details regarding location, drainage area, period of record, type of data available, instrumentation, general remarks, cooperation, and extremes for parameters currently measured daily. Tables of chemical, physical, biological, radiochemical data, and so forth, obtained at a frequency less than daily are presented first. Tables of "daily values" of specific conductance, pH, water temperature, dissolved oxygen, and suspended sediment then follow in sequence.

In the descriptive headings, if the location is identical to that of the discharge gaging station, neither the LOCATION nor the DRAINAGE AREA statements are repeated. The following information is provided with each continuous-record station. Comments that follow clarify information presented under the various headings of the station description.

LOCATION.—See Data Presentation information in the EXPLANATION OF STAGE- AND WATER-DISCHARGE RECORDS section of this report (same comments apply).

DRAINAGE AREA.—See Data Presentation information in the EXPLANATION OF STAGE- AND WATER-DISCHARGE RECORDS section of this report (same comments apply).

PERIOD OF RECORD.—This indicates the time periods for which published water-quality records for the station are available. The periods are shown separately for records of parameters measured daily or continuously and those measured less than daily. For those measured daily or continuously, periods of record are given for the parameters individually.

INSTRUMENTATION.—Information on instrumentation is given only if a water-quality monitor temperature record, sediment pumping sampler, or other sampling device is in operation at a station.

REMARKS.—Remarks provide added information pertinent to the collection, analysis, or computation of the records.

COOPERATION.—Records provided by a cooperating organization or obtained for the USGS by a cooperating organization are identified here.

EXTREMES.—Maximums and minimums are given only for parameters measured daily or more frequently. For parameters measured weekly or less frequently, true maximums or minimums may not have been obtained. Extremes, when given, are provided for both the period of record and for the current water year.

REVISIONS.—Records are revised if errors in published water-quality records are discovered. Appropriate updates are made in the USGS distributed data system, NWIS, and subsequently to its Web-based National data system, NWISWeb (<http://waterdata.usgs.gov/nwis>). Users of USGS water-quality data are encouraged to obtain all required data from NWIS or NWISWeb to ensure that they have the most recent updates. Updates to the NWISWeb are made on an annual basis.

The surface-water-quality records for partial-record stations and miscellaneous sampling sites are published in separate tables following the table of discharge measurements at miscellaneous sites. No descriptive statements are given for these records. Each station is published with its own station number and name in the regular downstream-order sequence.

Remark Codes

The following remark codes may appear with the water-quality data in this section:

| Printed Output | Remark |
|----------------|--|
| E or e | Value is estimated. |
| > | Actual value is known to be greater than the value shown. |
| < | Actual value is known to be less than the value shown. |
| M | Presence of material verified, but not quantified. |
| N | Presumptive evidence of presence of material. |
| U | Material specifically analyzed for, but not detected. |
| A | Value is an average. |
| V | Analyte was detected in both the environmental sample and the associated blanks. |
| S | Most probable value. |

Water-Quality Control Data

The USGS National Water Quality Laboratory collects quality-control data on a continuing basis to evaluate selected analytical methods to determine long-term method detection levels (LT-MDLs) and laboratory reporting levels (LRLs). These values are re-evaluated each year on the basis of the most recent quality-control data and, consequently, may change from year to year.

This reporting procedure limits the occurrence of false positive error. Falsely reporting a concentration greater than the LT-MDL for a sample in which the analyte is not present is 1 percent or less. Application of the LRL limits the occurrence of false negative error. The chance of falsely reporting a non-detection for a sample in which the analyte is present at a concentration equal to or greater than the LRL is 1 percent or less.

Accordingly, concentrations are reported as less than LRL for samples in which the analyte was either not detected or did not pass identification. Analytes detected at concentrations between the LT-MDL and the LRL and that pass identification criteria are estimated. Estimated concentrations will be noted with a remark code of "E." These data should be used with the understanding that their uncertainty is greater than that of data reported without the E remark code.

Data generated from quality-control (QC) samples are a requisite for evaluating the quality of the sampling and processing techniques as well as data from the actual samples themselves. Without QC data, environmental sample data cannot be adequately interpreted because the errors associated with the sample data are unknown. The various types of QC samples collected by this District office are described in the following section. Procedures have been established for the storage of water-quality-control data within the USGS. These procedures allow for storage of all derived QC data and are identified so that they can be related to corresponding environmental samples. These data are not presented in this report but are available from the District office.

Blank Samples

Blank samples are collected and analyzed to ensure that environmental samples have not been contaminated in the overall data-collection process. The blank solution used to develop specific types of blank samples is a solution that is free of the analytes of interest. Any measured value signal in a blank sample for an analyte (a specific component measured in a chemical analysis) that was absent in the blank solution is believed to be due to contamination. Many types of blank samples are possible; each is designed to segregate a different part of the overall data-collection process. The types of blank samples collected in this district are:

Field blank—A blank solution that is subjected to all aspects of sample collection, field processing preservation, transportation, and laboratory handling as an environmental sample.

Trip blank—A blank solution that is put in the same type of bottle used for an environmental sample and kept with the set of sample bottles before and after sample collection.

Equipment blank—A blank solution that is processed through all equipment used for collecting and processing an environmental sample (similar to a field blank but normally done in the more controlled conditions of the office).

Sampler blank—A blank solution that is poured or pumped through the same field sampler used for collecting an environmental sample.

Filter blank—A blank solution that is filtered in the same manner and through the same filter apparatus used for an environmental sample.

Splitter blank—A blank solution that is mixed and separated using a field splitter in the same manner and through the same apparatus used for an environmental sample.

Preservation blank—A blank solution that is treated with the sampler preservatives used for an environmental sample.

Reference Samples

Reference material is a solution or material prepared by a laboratory. The reference material composition is certified for one or more properties so that it can be used to assess a measurement method. Samples of reference material are submitted for analysis to ensure that an analytical method is accurate for the known properties of the reference material. Generally, the selected reference material properties are similar to the environmental sample properties.

Replicate Samples

Replicate samples are a set of environmental samples collected in a manner such that the samples are thought to be essentially identical in composition. Replicate is the general case for which a duplicate is the special case consisting of two samples. Replicate samples are collected and analyzed to establish the amount of variability in the data contributed by some part of the collection and analytical process. Many types of replicate samples are possible, each of which may yield slightly different results in a dynamic hydrologic setting, such as a flowing stream. The types of replicate samples collected in this District are:

Concurrent samples—A type of replicate sample in which the samples are collected simultaneously with two or more samplers or by using one sampler and alternating the collection of samples into two or more compositing containers.

Sequential samples—A type of replicate sample in which the samples are collected one after the other, typically over a short time.

Split sample—A type of replicate sample in which a sample is split into subsamples, each subsample contemporaneous in time and space.

Spike Samples

Spike samples are samples to which known quantities of a solution with one or more well-established analyte concentrations have been added. These samples are analyzed to determine the extent of matrix interference or degradation on the analyte concentration during sample processing and analysis.

EXPLANATION OF GROUND-WATER-LEVEL RECORDS

Ground-water-level data from wells with continuous recorders and from wells measured monthly (generally within the last 10 days of each month) or more frequently are published in this report. This basic network contains observation wells located so that the most significant data are obtained from the fewest wells in the most important aquifers.

Site Identification Numbers

Each well is identified by means of (1) a 15-digit number that is based on latitude and longitude and (2) a local number that is produced for local needs. (See NUMBERING SYSTEM FOR WELLS AND MISCELLANEOUS SITES in this report for a detailed explanation.)

Data Collection and Computation

Measurements are made in many types of wells, under varying conditions of access and at different temperatures; hence, neither the method of measurement nor the equipment can be standardized. At each observation well, however, the equipment and techniques used are those that will ensure that measurements at each well are consistent.

Most methods for collecting and analyzing water samples are described in the TWRI's referred to in the On-site Measurements and Sample Collection and the Laboratory Measurements sections in this report. In addition, TWRI Book 1, Chapter D2, describes guidelines for the collection and field analysis of ground-water samples for selected unstable constituents. Procedures for on-site measurements and for collecting, treating, and shipping samples are given in TWRI's Book 1, Chapter D2; Book 3, Chapters A1, A3, and A4; and Book 9, Chapters A1 through A9. The values in this report represent water-quality conditions at the time of sampling, as much as possible, and that are consistent with available sampling techniques and methods of analysis. These methods are consistent with ASTM standards and generally follow ISO standards. Trained personnel collected all samples. The wells sampled were pumped long enough to ensure that the water collected came directly from the aquifer and had not stood for a long time in the well casing where it would have been exposed to the atmosphere and to the material, possibly metal, comprising the casings.

Water-level measurements in this report are given in feet with reference to land-surface datum (lsd). Land-surface datum is a datum plane that is approximately at land surface at each well. If known, the elevation of the land-surface datum above sea level is given in the well description. The height of the measuring point (MP) above or below land-surface datum is given in each well description. Water levels in wells equipped with recording gages are reported daily. Water levels for measured wells are reported generally in the last 10 days of each month (EOM).

Water levels are reported to as many significant figures as can be justified by the local conditions. For example, in a measurement of a depth of water of several hundred feet, the error in determining the absolute value of the total depth to water may be a few tenths of a foot, whereas the error in determining the net change of water level between successive measurements may be only a hundredth or a few hundredths of a foot. For lesser depths to water the accuracy is greater. Accordingly, most measurements are reported to a hundredth of a foot, but some are given only to a tenth of a foot or a larger unit.

Data Presentation

Water-level data are presented in alphabetical order by county. The primary identification number for a given well is the 15-digit site identification number that appears in the upper left corner of the table. The secondary identification number is the local or town well number. Well locations are shown in figure 2; each well is identified on the map by its local well number.

Each well record consists of two parts: the well description and the data table of water levels observed during the water year. Hydrographs are available only online in page-size PDF format (<http://water.usgs.gov/pubs/wdr/>). Well descriptions are presented in the headings preceding the tabular data.

The following comments clarify information presented in these various headings.

LOCATION.—This paragraph follows the well-identification number and reports the hydrologic-unit number and a geographic point of reference. Latitudes and longitudes used in this report are reported as North American Datum of 1927 unless otherwise specified.

AQUIFER.—This entry designates by name and geologic age the aquifer that the well taps.

WELL CHARACTERISTICS.—This entry describes the well in terms of depth, casing diameter and depth or screened interval, method of construction, use, and changes since construction.

INSTRUMENTATION.—This paragraph provides information on both the frequency of measurement and the collection method used, allowing the user to better evaluate the reported water-level extremes by knowing whether they are based on continuous, monthly, or some other frequency of measurement.

DATUM.—This entry describes both the measuring point and the land-surface elevation at the well. The altitude of the land-surface datum is described in feet above the altitude datum; it is reported with a precision depending on the method of determination. The measuring point is described physically (such as top of casing, top of instrument shelf, and so forth), and in relation to land surface (such as 1.3 ft above land-surface datum). The elevation of the land-surface datum is described in feet above National Geodetic Vertical Datum of 1929 (NGVD 29); it is reported with a precision depending on the method of determination.

REMARKS.—This entry describes factors that may influence the water level in a well or the measurement of the water level, when various methods of measurement were begun, and the network (climatic, terrane, local, or areal effects) or the special project to which the well belongs.

PERIOD OF RECORD.—This entry indicates the time period for which records are published for the well, the month and year at the start of publication of water-level records by the USGS, and the words “to current year” if the records are to be continued into the following year. Time periods for which water-level records are available, but are not published by the USGS, may be noted.

EXTREMES FOR PERIOD OF RECORD.—This entry contains the highest and lowest instantaneously recorded or measured water levels of the period of published record, with respect to land-surface datum or sea level, and the dates of occurrence.

Water-Level Tables

A table of water levels follows the well description for each well. Water-level measurements in this report are given in feet with reference to either sea level or land-surface datum (lsd). Missing records are indicated by dashes in place of the water-level value.

For wells not equipped with recorders, water-level measurements were obtained periodically by steel or electric tape. Tables of periodic water-level measurements in these wells show the date of measurement and the measured water-level value.

Hydrographs

Hydrographs are a graphic display of water-level fluctuations over a period of time. Hydrographs of ground-water-level data presented in this report are available on the Web at <http://nwis.waterdata.usgs.gov/ma/nwis/gw/>. Refer to the tutorial in the “Retrieval of Hydrographs and Historical Data from the USGS Database” section.

Hydrographs that display periodic water-level measurements show points connected with a dashed line from one measurement to the next. Hydrographs that display recorded data show a solid line representing the mean water level recorded for each day. Missing data are indicated by a blank space or break in the hydrograph. Missing data may occur as a result of recorder malfunctions, battery failures, or mechanical problems related to the response of the recorder’s float or transducer mechanisms to water-level fluctuations in a well.

GROUND-WATER-QUALITY DATA

Data Collection and Computation

The ground-water-quality data in this report were obtained as a part of special studies in specific areas. Consequently, a number of chemical analyses are presented for some wells within a county but not for others. As a result, the records for this year, by themselves, do not provide a balanced view of ground-water quality Statewide.

Most methods for collecting and analyzing water samples are described in the TWRI. Procedures for on-site measurements and for collecting, treating, and shipping samples are given in TWRI, Book 1, Chapter D2; Book 3, Chapter C2; and Book 5, Chapters A1, A3, and A4. Also, detailed information on collecting, treating, and shipping samples may be obtained from the USGS District office (see address shown on back of title page in this report).

Laboratory Measurements

Analysis for sulfide and measurement of alkalinity, pH, water temperature, specific conductance, and dissolved oxygen are performed on site. All other sample analyses are performed at the USGS laboratory in Lakewood, Colorado, unless otherwise noted. Methods used by the USGS laboratory are given in TWRI, Book 1, Chapter D2; and Book 5, Chapters A1, A3, and A4.

ACCESS TO USGS WATER DATA

The USGS provides near real-time stage and discharge data for many of the gaging stations equipped with the necessary telemetry and historic daily mean and peak-flow

discharge data for most current or discontinued gaging stations through the Web. These data may be accessed from <http://water.usgs.gov>.

Water-quality data and ground-water data also are available through the Web. In addition, data can be provided in various machine-readable formats on various media. Information about the availability of specific types of data or products, and user charges, can be obtained locally from each Water Science Center (See address that is shown on the back of the title page of this report.).

RETRIEVAL OF HYDROGRAPHS AND HISTORICAL DATA FROM THE USGS DATABASE

Hydrographs of streamflow and ground-water levels provide graphical views of tabular data and can improve the understanding of daily, seasonal, and annual fluctuations. Although hydrographs are no longer published in the USGS MA-RI Water Science Center Annual Data Report, they are readily available on the USGS Web site. The following procedures can be used to retrieve streamflow and ground-water-level hydrographs and tabular data for any record length for all streamflow-gaging stations and ground-water wells listed in this report. Station information, such as a description of the station or well location and site maps are also available from the Web.

For Surface-Water Data:

1. Go to: <http://nwis.waterdata.usgs.gov/ma/nwis/discharge/>.
2. Select “Site Number” (Multiple Site Numbers if more than one site is desired), then submit.
3. In “Site Number” box, enter the 8-10 digit site ID number, then submit.
4. In the “Retrieve Data From” windows, enter dates for data retrieval.
5. To view the hydrograph on screen, change “save to file” to “display in browser,” then submit.
6. The hydrograph shows approved daily mean discharge for period of record selected. The hydrograph can be saved as a .GIF file.
7. Graphical data can also be displayed as tab-delimited tables by selecting the “Tab-separated data file,” located above the hydrograph.
8. The tabular data can be saved to a file for later use and for importing into spreadsheets.
9. Other types of data are available for display by selecting data types from the “Available data for this site” pull-down menu, located above the hydrograph.

For Ground-Water Data:

1. Go to: <http://nwis.waterdata.usgs.gov/ma/nwis/gw/>.
2. Select "Levels" then select "Site Number" then submit.
3. In "Site Number" box enter the 15-digit site ID number.
4. Under "Retrieve Ground-water level data for Selected Sites," enter dates for data retrieval.
5. Select output types, "graphs of data," "table of data," or "tab-separated data."
6. To view the hydrograph on screen, change "save to file" to "display in browser," then submit.
7. Graphical data can also be displayed as "Tab-separated data" or "Table of data" by selecting those options, located above the hydrograph.
8. The tabular data can be saved to a file for later use and for importing into spreadsheets.
9. Other types of data are available for display by selecting data types from the "Available data for this site" option, located above the hydrograph.

DEFINITION OF TERMS

Specialized technical terms related to streamflow, water-quality, and other hydrologic data, as used in this report, may be accessed from http://water.usgs.gov/ADR_Defs_2004.pdf. Terms such as algae, water level, and precipitation are used in their common everyday meanings, definitions of which are given in standard dictionaries. Not all terms defined in this alphabetical list apply to every State. See also table for converting English units to International System (SI) Units. Other glossaries that also define water-related terms are accessible from <http://water.usgs.gov/glossaries.html>.

REMARK CODES

The following remark codes may appear with the water-quality data in this section:

| PRINT OUTPUT | REMARK |
|--------------|--|
| E or e | Value is estimated. |
| > | Actual value is known to be greater than the value shown. |
| < | Actual value is known to be less than the value shown. |
| M | Presence of material verified, but not quantified. |
| N | Presumptive evidence of presence of material. |
| U | Material specifically analyzed for, but not detected. |
| A | Value is an average. |
| V | Analyte was detected in both the environmental sample and the associated blanks. |
| S | Most probable value. |

Dissolved Trace-Element Concentrations

NOTE--Traditionally, dissolved trace-element concentrations have been reported at the microgram per liter ($\mu\text{g/L}$) level. Recent evidence, mostly from large rivers, indicates that actual dissolved-phase concentrations for a number of trace elements are within the range of 10s to 100s of nanograms per liter (ng/L). Data above the $\mu\text{g/L}$ level should be viewed with caution. Such data may actually represent elevated environmental concentrations from natural or human causes; however, these data could reflect contamination introduced during sampling, processing, or analysis. To confidently produce dissolved trace-element data with insignificant contamination, the U.S. Geological Survey began using new trace-element protocols at some stations in water year 1994.

Change in National Trends Network Procedures

NOTE--Sample handling procedures at all National Trends Network stations were changed substantially on January 11, 1994, in order to reduce contamination from the sample shipping container. The data for samples before and after that date are different and not directly comparable. A tabular summary of the differences based on a special intercomparison study, is available from the NADP/NTN Coordination Office, Colorado State University, Fort Collins, CO 80523 (Telephone: 303-491-5643).



Culvert pipes at USGS streamflow gaging station (instrument shelter at right) on Catamint Brook at Cumberland, RI, 01113685.

MERRIMACK RIVER BASIN

01094400 NORTH NASHUA RIVER AT FITCHBURG, MA

LOCATION.--Lat 42° 34' 34", long 71° 47' 19", Worcester County, Hydrologic Unit 01070004, on right bank 400 ft upstream from Fifth Street Bridge at Fitchburg and 1.8 mi upstream from Baker Brook.

DRAINAGE AREA.--64.2 mi².

PERIOD OF RECORD.--October 1972 to current year.

REVISED RECORDS.--WDR MA-RI-84-1; WDR MA-RI-03-1; Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 400 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow regulated by mills and reservoirs upstream. Flow affected by diversions for municipal use. Satellite gage-height telemeter at station.

AVERAGE DISCHARGE.--32 years (water years 1973--2004), 119 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,510 ft³/s, Apr. 5, 1987, gage height, 7.78 ft; maximum gage height, 9.25 ft, Apr. 5, 1987 (backwater from landslide); minimum discharge, 1.5 ft³/s, Sept. 11, 12, 1995; minimum daily discharge, 2.7 ft³/s, Sept. 5, 1995.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,840 ft³/s, Apr. 2, gage height, 7.59 ft; minimum discharge, 6.5 ft³/s, Aug. 11, 12, Sept. 9.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004 DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|------|------|------|------|-------|------|------|------|-------|--------|
| 1 | 71 | 198 | 123 | 175 | e42 | 63 | 1390 | 144 | 90 | 21 | 15 | 14 |
| 2 | 62 | 164 | 80 | 158 | e42 | 91 | 1950 | 134 | 90 | 33 | 14 | 13 |
| 3 | 54 | 160 | e70 | 157 | e42 | 149 | 768 | 142 | 90 | 29 | 12 | 11 |
| 4 | 52 | 146 | e68 | 176 | e60 | 147 | 471 | 274 | 80 | 25 | 11 | 11 |
| 5 | 54 | 170 | 65 | 188 | e57 | 132 | 369 | 215 | 70 | 22 | 20 | 8.8 |
| 6 | 45 | 201 | 74 | 170 | e60 | 176 | 278 | 175 | 64 | 22 | 16 | 8.2 |
| 7 | 40 | 170 | e99 | 142 | 87 | 180 | 231 | 150 | 63 | 20 | 13 | 7.7 |
| 8 | 47 | 142 | e87 | e107 | e73 | 152 | 201 | 127 | 56 | 46 | 12 | 24 |
| 9 | 42 | 119 | e78 | e83 | e62 | 128 | 180 | 127 | 54 | 93 | 10 | 147 |
| 10 | 38 | 108 | 74 | e79 | 60 | 110 | 161 | 129 | 75 | 46 | 9.0 | 97 |
| 11 | 39 | 106 | 226 | e74 | 59 | 102 | 143 | 118 | 67 | 33 | 9.3 | 62 |
| 12 | 39 | 113 | 345 | e78 | 55 | 103 | 134 | 106 | 52 | 28 | 18 | 48 |
| 13 | 40 | 127 | e217 | e85 | 55 | 96 | 273 | 93 | 46 | 30 | 21 | 37 |
| 14 | 33 | 114 | e161 | e73 | 55 | 88 | 933 | 86 | 42 | 35 | 18 | 29 |
| 15 | 191 | 99 | 177 | e66 | e54 | 91 | 473 | 84 | 44 | 37 | 30 | 23 |
| 16 | 128 | 92 | 148 | e59 | e51 | 92 | 320 | 87 | 37 | 34 | 29 | 21 |
| 17 | 95 | 88 | 239 | e64 | e51 | 97 | 250 | 82 | 35 | 27 | 27 | 21 |
| 18 | 77 | 85 | 908 | e67 | 51 | 90 | 210 | 79 | 44 | 23 | 22 | 463 |
| 19 | 65 | 89 | 434 | e66 | 50 | 83 | 185 | 85 | 43 | 32 | 18 | 327 |
| 20 | 57 | 131 | 289 | e62 | 48 | 81 | 167 | 71 | 35 | 31 | 18 | 170 |
| 21 | 55 | 128 | 223 | e57 | 50 | 119 | 147 | 62 | 29 | 26 | 111 | 113 |
| 22 | 53 | 114 | 188 | e54 | 51 | 121 | 137 | 62 | 29 | 21 | 118 | 84 |
| 23 | 54 | 105 | 170 | e51 | 50 | 101 | 227 | 68 | 29 | 18 | 70 | 63 |
| 24 | 54 | 99 | 275 | e46 | 48 | 97 | 234 | 99 | 24 | 23 | 46 | 50 |
| 25 | 50 | 102 | 595 | e44 | 47 | 107 | 181 | 156 | 22 | 19 | 38 | 44 |
| 26 | 51 | 131 | 400 | e41 | 46 | 140 | 232 | 170 | 29 | 17 | 28 | 39 |
| 27 | 145 | 121 | 286 | e42 | 46 | 232 | 304 | 214 | 30 | 15 | 22 | 33 |
| 28 | 263 | 126 | 230 | e41 | 48 | 223 | 233 | 184 | 22 | 29 | 19 | 68 |
| 29 | 649 | 156 | 200 | e45 | 53 | 181 | 186 | 160 | 27 | 24 | 16 | 207 |
| 30 | 437 | 136 | 200 | e44 | --- | 152 | 161 | 121 | 25 | 19 | 15 | 159 |
| 31 | 258 | --- | 198 | e43 | --- | 239 | --- | 97 | --- | 16 | 15 | --- |
| TOTAL | 3338 | 3840 | 6927 | 2637 | 1553 | 3963 | 11129 | 3901 | 1443 | 894 | 840.3 | 2402.7 |
| MEAN | 108 | 128 | 223 | 85.1 | 53.6 | 128 | 371 | 126 | 48.1 | 28.8 | 27.1 | 80.1 |
| MAX | 649 | 201 | 908 | 188 | 87 | 239 | 1950 | 274 | 90 | 93 | 118 | 463 |
| MIN | 33 | 85 | 65 | 41 | 42 | 63 | 134 | 62 | 22 | 15 | 9.0 | 7.7 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1973 - 2004, BY WATER YEAR (WY)

| | 1973 | 1974 | 1975 | 1976 | 1977 | 1978 | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--|
| MEAN | 75.9 | 112 | 138 | 131 | 133 | 228 | 246 | 142 | 96.9 | 44.4 | 44.6 | 42.4 | | | | | | | | | | | | | | | | | | | |
| MAX | 220 | 243 | 347 | 304 | 294 | 528 | 600 | 277 | 368 | 90.3 | 137 | 121 | | | | | | | | | | | | | | | | | | | |
| (WY) | 1997 | 1996 | 1997 | 1996 | 1984 | 1983 | 1987 | 1984 | 1982 | 1996 | 1991 | 1991 | | | | | | | | | | | | | | | | | | | |
| MIN | 15.1 | 14.2 | 35.5 | 24.6 | 34.6 | 84.1 | 84.1 | 53.6 | 16.0 | 12.9 | 8.63 | 8.33 | | | | | | | | | | | | | | | | | | | |
| (WY) | 2002 | 2002 | 2002 | 1981 | 1980 | 1989 | 1985 | 1999 | 1999 | 1999 | 1999 | 1995 | | | | | | | | | | | | | | | | | | | |

SUMMARY STATISTICS

| | FOR 2003 CALENDAR YEAR | FOR 2004 WATER YEAR | WATER YEARS 1973 - 2004 |
|--------------------------|------------------------|---------------------|-------------------------|
| ANNUAL TOTAL | 47704 | 42868.0 | |
| ANNUAL MEAN | 131 | 117 | 119 |
| HIGHEST ANNUAL MEAN | | | 169 |
| LOWEST ANNUAL MEAN | | | 54.7 |
| HIGHEST DAILY MEAN | 908 | Dec 18 | 1950 Apr 2 |
| LOWEST DAILY MEAN | 10 | Jul 31 | 7.7 Sep 7 |
| ANNUAL SEVEN-DAY MINIMUM | 14 | Jul 25 | 11 Sep 1 |
| MAXIMUM PEAK FLOW | | | 2840 Apr 2 |
| MAXIMUM PEAK STAGE | | | 7.59 Apr 2 |
| INSTANTANEOUS LOW FLOW | | | 6.5 Aug 11 |
| 10 PERCENT EXCEEDS | 261 | 226 | 251 |
| 50 PERCENT EXCEEDS | 93 | 74 | 77 |
| 90 PERCENT EXCEEDS | 26 | 21 | 21 |

e Estimated

MERRIMACK RIVER BASIN

01095220 STILLWATER RIVER NEAR STERLING, MA
(National Water Quality Assessment Site)

LOCATION.--Lat 42°24'39", long 71°47'30", Worcester County, Hydrologic Unit 01070004, on left bank at downstream side of bridge on Muddy Pond Road, 1.5 mi upstream of mouth and 2.5 mi southwest of Sterling.

DRAINAGE AREA.--31.6 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Discharge: Low-flow partial-record measurements in water years 1971–73, 1991–93, April 1994 to current year.

Water-quality records: April 1998 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 400 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records poor due to backwater from beaver dams.

AVERAGE DISCHARGE.--10 years (water years 1995–2004), 50.5 ft³/s, 21.71 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 890 ft³/s, Jan. 28, 1996, gage height, 8.50 ft from rating curve extended above 340 ft³/s; minimum discharge, 0.07 ft³/s, Aug. 19, 20, 27–29, Sept. 13–15, 2002.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 706 ft³/s, Apr. 2, gage height, 8.53 ft; minimum discharge, 3.1 ft³/s, June 13.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004 DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|------|------|------|------|------|------|------|------|-------|-------|-------|
| 1 | e13 | 53 | 39 | 78 | 31 | e29 | 370 | 52 | e34 | e11 | e9.6 | e6.0 |
| 2 | e12 | 41 | 35 | 72 | 31 | e42 | 630 | 46 | e33 | e15 | e9.0 | e5.1 |
| 3 | e11 | 35 | 30 | 71 | e30 | e58 | 387 | 44 | e35 | e14 | e7.8 | e4.5 |
| 4 | e10 | 31 | 29 | 79 | e27 | e80 | 250 | 79 | e30 | e11 | e7.2 | e4.4 |
| 5 | e10 | 30 | 29 | 84 | e26 | e77 | 188 | 74 | e27 | e11 | e9.7 | e4.8 |
| 6 | e9.7 | 39 | 31 | 78 | e30 | e98 | 146 | 55 | e25 | e12 | e8.4 | e3.7 |
| 7 | e9.1 | 37 | 32 | 65 | e39 | e100 | 120 | 44 | e25 | e11 | e7.7 | e3.2 |
| 8 | e8.5 | 32 | 34 | 55 | e38 | e82 | 107 | e40 | e24 | e11 | e7.2 | e4.1 |
| 9 | e8.1 | 28 | 34 | 42 | e38 | e56 | 94 | e44 | e21 | e11 | e5.3 | e16 |
| 10 | e7.9 | 26 | 33 | 40 | e37 | e51 | 84 | e54 | e25 | e9.9 | e4.8 | e23 |
| 11 | e8.2 | 26 | 52 | 41 | e35 | e49 | 76 | e57 | e26 | e9.3 | e4.5 | e15 |
| 12 | e8.9 | 28 | 163 | 44 | e35 | e48 | 70 | e51 | e19 | e9.1 | e4.9 | e12 |
| 13 | e9.7 | 33 | 106 | 46 | e32 | e47 | 91 | e48 | e17 | e11 | e5.4 | e8.9 |
| 14 | e8.5 | 34 | 74 | 43 | e29 | e42 | 375 | e45 | e15 | e14 | e5.1 | e6.4 |
| 15 | e39 | 30 | 72 | 42 | e29 | e42 | 280 | e41 | e15 | e14 | e7.4 | e5.4 |
| 16 | e27 | 27 | 71 | 42 | e26 | e43 | 190 | e40 | e14 | e14 | e8.1 | e4.9 |
| 17 | e22 | 27 | 71 | 39 | e24 | e43 | 132 | e40 | e17 | e14 | e8.9 | e5.0 |
| 18 | e19 | 27 | 277 | 39 | e26 | e40 | 105 | e40 | e18 | e12 | e7.9 | e63 |
| 19 | e15 | 27 | 175 | 40 | e26 | e38 | 88 | e41 | e18 | e13 | e6.7 | e50 |
| 20 | e14 | 32 | 110 | 38 | e26 | e45 | 78 | e36 | e18 | e13 | e7.0 | e34 |
| 21 | e13 | 39 | 85 | 37 | e26 | e63 | 68 | e35 | e14 | e11 | e29 | e29 |
| 22 | e14 | 35 | 74 | 36 | e26 | e70 | 61 | e34 | e14 | e9.9 | e45 | e21 |
| 23 | e15 | 32 | 70 | 36 | e25 | e56 | 79 | e37 | e14 | e9.5 | e24 | e15 |
| 24 | e14 | 30 | 90 | 33 | e25 | e50 | 99 | e39 | e13 | e31 | e15 | e11 |
| 25 | e13 | 29 | 261 | 30 | e25 | e52 | 74 | e43 | e11 | e24 | e11 | e9.5 |
| 26 | e13 | 29 | 189 | 28 | e25 | e62 | 81 | e47 | e12 | e16 | e8.9 | e9.7 |
| 27 | 39 | 29 | 126 | 29 | e25 | e97 | 133 | e57 | e12 | e13 | e7.5 | e8.7 |
| 28 | 92 | 30 | 98 | 30 | e25 | e93 | 104 | e54 | e12 | e16 | e6.6 | e14 |
| 29 | 137 | 40 | 86 | 32 | e25 | e68 | 74 | e46 | e12 | e14 | e5.6 | e37 |
| 30 | 155 | 43 | 84 | 32 | --- | e57 | 60 | e37 | e11 | e11 | e5.8 | e33 |
| 31 | 77 | --- | 86 | 32 | --- | e84 | --- | e32 | --- | e9.8 | e6.8 | --- |
| TOTAL | 852.6 | 979 | 2746 | 1433 | 842 | 1862 | 4694 | 1432 | 581 | 405.5 | 307.8 | 467.3 |
| MEAN | 27.5 | 32.6 | 88.6 | 46.2 | 29.0 | 60.1 | 156 | 46.2 | 19.4 | 13.1 | 9.93 | 15.6 |
| MAX | 155 | 53 | 277 | 84 | 39 | 100 | 630 | 79 | 35 | 31 | 45 | 63 |
| MIN | 7.9 | 26 | 29 | 28 | 24 | 29 | 60 | 32 | 11 | 9.1 | 4.5 | 3.2 |
| CFSM | 0.87 | 1.03 | 2.80 | 1.46 | 0.92 | 1.90 | 4.95 | 1.46 | 0.61 | 0.41 | 0.31 | 0.49 |
| IN. | 1.00 | 1.15 | 3.23 | 1.69 | 0.99 | 2.19 | 5.53 | 1.69 | 0.68 | 0.48 | 0.36 | 0.55 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 2004, BY WATER YEAR (WY)

| | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 22.5 | 37.1 | 60.2 | 66.7 | 61.2 | 109 | 113 | 59.6 | 41.1 | 15.1 | 11.9 | 10.3 |
| MAX | 83.8 | 106 | 171 | 157 | 120 | 164 | 187 | 100 | 113 | 34.4 | 39.0 | 22.5 |
| (WY) | 1997 | 1996 | 1997 | 1996 | 1996 | 2003 | 2001 | 1998 | 1998 | 1996 | 2003 | 1996 |
| MIN | 2.44 | 2.36 | 10.4 | 8.60 | 21.5 | 51.8 | 43.8 | 26.1 | 4.46 | 2.81 | 0.74 | 0.92 |
| (WY) | 2002 | 2002 | 2002 | 2002 | 2002 | 2002 | 1999 | 1999 | 1999 | 1999 | 2002 | 1995 |

SUMMARY STATISTICS

| | FOR 2003 CALENDAR YEAR | | FOR 2004 WATER YEAR | | WATER YEARS 1994 - 2004 | |
|--------------------------|------------------------|--|---------------------|--|-------------------------|--|
| ANNUAL TOTAL | 21521.7 | | 16602.2 | | | |
| ANNUAL MEAN | 59.0 | | 45.4 | | 50.5 | |
| HIGHEST ANNUAL MEAN | | | | | 74.9 | |
| LOWEST ANNUAL MEAN | | | | | 22.5 | |
| HIGHEST DAILY MEAN | 434 | | Mar 22 | | 742 | |
| LOWEST DAILY MEAN | 3.0 | | Sep 1 | | 0.10 | |
| ANNUAL SEVEN-DAY MINIMUM | 3.5 | | Aug 26 | | 0.15 | |
| MAXIMUM PEAK FLOW | | | 706 | | Apr 2 | |
| MAXIMUM PEAK STAGE | | | 8.53 | | Apr 2 | |
| INSTANTANEOUS LOW FLOW | | | | | 0.07 | |
| ANNUAL RUNOFF (CFSM) | 1.87 | | 1.44 | | 1.60 | |
| ANNUAL RUNOFF (INCHES) | 25.34 | | 19.54 | | 21.71 | |
| 10 PERCENT EXCEEDS | 131 | | 87 | | 116 | |
| 50 PERCENT EXCEEDS | 35 | | 31 | | 29 | |
| 90 PERCENT EXCEEDS | 9.4 | | 8.5 | | 2.7 | |

e Estimated

MERRIMACK RIVER BASIN

01095220 STILLWATER RIVER NEAR STERLING, MA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1998 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: April 1998 to current year.

WATER TEMPERATURE: April 1998 to current year.

PRECIPITATION: October 1998 to current year.

INSTRUMENTATION.--Heated tipping-bucket precipitation gage, specific conductance and water temperature water-quality monitor.

REMARKS.--Specific conductance and water temperature records good. Extremes for period of daily record and current year are for those values reported.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum recorded, 352 $\mu\text{S}/\text{cm}$, Aug. 31, 2004; minimum, 43 $\mu\text{S}/\text{cm}$, June 14, 1998.

WATER TEMPERATURE: Maximum recorded, 27.6°C, July 6, 1999; minimum, -0.4°C, Jan. 7, 10, 11, 13-15, 18, 19, 2003.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 352 $\mu\text{S}/\text{cm}$, Aug. 31; minimum, 66 $\mu\text{S}/\text{cm}$, Dec 12, 13, 18, 19.

WATER TEMPERATURE: Maximum recorded, 22.1°C, June 9, 16 ; minimum, 0.0°C, several days in Dec. Jan., and Feb.

SPECIFIC CONDUCTANCE ($\mu\text{S}/\text{CM}$ AT 25°C), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY | OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | | |
|-------|---------|-----|------|----------|-----|------|----------|-----|------|---------|-----|------|
| | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
| 1 | 154 | 150 | 152 | 94 | 87 | 91 | 119 | 115 | 117 | 101 | 97 | 99 |
| 2 | 159 | 154 | 157 | 102 | 94 | 98 | 119 | 111 | 118 | 101 | 97 | 99 |
| 3 | 160 | 157 | 158 | 110 | 102 | 107 | 116 | 102 | 110 | 107 | 100 | 104 |
| 4 | 165 | 157 | 160 | 111 | 109 | 110 | 125 | 106 | 115 | 107 | 103 | 104 |
| 5 | 166 | 147 | 160 | 122 | 111 | 114 | 121 | 104 | 113 | 111 | 101 | 105 |
| 6 | 157 | 154 | 156 | 120 | 106 | 109 | 116 | 106 | 110 | 104 | 95 | 100 |
| 7 | 165 | 155 | 161 | 111 | 106 | 109 | 112 | 103 | 108 | 101 | 90 | 95 |
| 8 | 171 | 165 | 168 | 110 | 108 | 109 | 112 | 103 | 107 | 96 | 91 | 94 |
| 9 | 174 | 169 | 171 | 116 | 110 | 113 | 110 | 103 | 106 | 103 | 95 | 100 |
| 10 | 178 | 173 | 175 | 120 | 116 | 118 | 117 | 108 | 112 | 111 | 102 | 106 |
| 11 | 182 | 175 | 178 | 125 | 120 | 122 | 139 | 102 | 122 | 113 | 107 | 109 |
| 12 | 180 | 177 | 179 | 126 | 119 | 123 | 102 | 66 | 73 | 110 | 106 | 108 |
| 13 | 186 | 179 | 183 | 121 | 115 | 117 | 74 | 66 | 70 | 108 | 101 | 104 |
| 14 | 187 | 182 | 185 | 117 | 112 | 115 | 79 | 72 | 76 | 106 | 101 | 103 |
| 15 | 206 | 127 | 176 | 120 | 116 | 118 | 96 | 78 | 90 | 106 | 102 | 104 |
| 16 | 133 | 124 | 129 | 124 | 119 | 121 | 85 | 80 | 83 | 109 | 105 | 107 |
| 17 | 133 | 129 | 131 | 126 | 123 | 124 | 122 | 85 | 98 | 113 | 108 | 110 |
| 18 | 134 | 125 | 131 | 126 | 123 | 125 | 105 | 66 | 73 | 113 | 109 | 110 |
| 19 | 125 | 121 | 122 | 125 | 123 | 124 | 74 | 66 | 71 | 110 | 106 | 108 |
| 20 | 123 | 122 | 122 | 130 | 117 | 125 | 80 | 73 | 76 | 113 | 106 | 109 |
| 21 | 129 | 123 | 126 | 117 | 112 | 113 | 84 | 75 | 80 | 113 | 107 | 109 |
| 22 | 130 | 128 | 129 | 116 | 114 | 115 | 93 | 81 | 86 | 114 | 107 | 110 |
| 23 | 136 | 128 | 132 | 119 | 115 | 117 | 98 | 88 | 93 | 115 | 108 | 110 |
| 24 | 139 | 135 | 136 | 120 | 118 | 119 | 122 | 89 | 102 | 114 | 108 | 111 |
| 25 | 142 | 139 | 140 | 124 | 120 | 122 | 89 | 70 | 74 | 117 | 111 | 114 |
| 26 | 145 | 140 | 143 | 124 | 121 | 122 | 74 | 70 | 71 | 123 | 115 | 119 |
| 27 | 159 | 145 | 152 | 125 | 122 | 123 | 81 | 74 | 77 | 121 | 118 | 119 |
| 28 | 156 | 120 | 132 | 129 | 124 | 126 | 85 | 79 | 82 | 120 | 116 | 118 |
| 29 | 127 | 84 | 110 | 129 | 113 | 122 | 94 | 84 | 89 | 117 | 113 | 115 |
| 30 | 84 | 81 | 81 | 116 | 112 | 113 | 101 | 93 | 97 | 119 | 114 | 116 |
| 31 | 87 | 82 | 84 | --- | --- | --- | 101 | 96 | 98 | 118 | 114 | 115 |
| MONTH | 206 | 81 | 146 | 130 | 87 | 116 | 139 | 66 | 93 | 123 | 90 | 108 |

MERRIMACK RIVER BASIN

01095220 STILLWATER RIVER NEAR STERLING, MA--Continued

SPECIFIC CONDUCTANCE ($\mu\text{S}/\text{CM}$ AT 25°C), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY | MAX | FEBRUARY | | | MARCH | | | APRIL | | | MAY | | |
|-------|-----|----------|------|-----|-------|------|-----|-------|------|-----|-----|------|--|
| | | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | |
| 1 | 121 | 114 | 117 | 141 | 123 | 131 | 119 | 80 | 99 | 124 | 117 | 121 | |
| 2 | 122 | 114 | 117 | 130 | 114 | 121 | 80 | 68 | 71 | 131 | 123 | 126 | |
| 3 | 121 | 111 | 117 | 114 | 95 | 103 | 80 | 70 | 75 | 138 | 130 | 132 | |
| 4 | 130 | 114 | 121 | 100 | 88 | 94 | --- | --- | 86 | 145 | 112 | 130 | |
| 5 | 123 | 116 | 118 | 100 | 91 | 95 | 107 | 90 | 97 | 122 | 109 | 115 | |
| 6 | 136 | 111 | 119 | 108 | 87 | 101 | 103 | 97 | 101 | 118 | 114 | 115 | |
| 7 | 169 | 131 | 152 | 95 | 80 | 89 | 108 | 103 | 106 | 120 | 116 | 118 | |
| 8 | 132 | 118 | 124 | 93 | 85 | 89 | 122 | 108 | 114 | 125 | 119 | 122 | |
| 9 | 133 | 121 | 128 | 96 | 89 | 93 | 120 | 114 | 117 | 134 | 124 | 129 | |
| 10 | 139 | 126 | 132 | 109 | 92 | 100 | 119 | 116 | 118 | 133 | 126 | 129 | |
| 11 | 127 | 113 | 120 | 113 | 100 | 107 | 123 | 119 | 121 | 132 | 127 | 130 | |
| 12 | 120 | 112 | 116 | 113 | 105 | 109 | 126 | 120 | 124 | 135 | 131 | 132 | |
| 13 | 127 | 113 | 119 | 118 | 100 | 109 | 149 | 124 | 131 | 140 | 135 | 137 | |
| 14 | 131 | 116 | 122 | 120 | 100 | 112 | 132 | 69 | 81 | 144 | 139 | 141 | |
| 15 | 122 | 109 | 115 | 123 | 114 | 119 | 79 | 70 | 75 | 149 | 142 | 146 | |
| 16 | 119 | 109 | 114 | 120 | 99 | 114 | 89 | 79 | 84 | 151 | 147 | 150 | |
| 17 | 123 | 114 | 118 | 119 | 105 | 110 | 98 | 89 | 93 | 152 | 149 | 150 | |
| 18 | 127 | 116 | 120 | 118 | 101 | 109 | 109 | 98 | 104 | 157 | 152 | 156 | |
| 19 | 134 | 117 | 124 | 120 | 105 | 111 | 115 | 109 | 112 | 158 | 148 | 153 | |
| 20 | 134 | 113 | 124 | 129 | 98 | 115 | 121 | 115 | 117 | 153 | 149 | 152 | |
| 21 | 135 | 125 | 130 | 136 | 116 | 130 | 125 | 121 | 122 | 163 | 152 | 159 | |
| 22 | 151 | 126 | 135 | 117 | 108 | 113 | 128 | 124 | 126 | 169 | 161 | 165 | |
| 23 | 147 | 125 | 134 | 125 | 110 | 117 | 144 | 109 | 132 | 169 | 159 | 166 | |
| 24 | 138 | 119 | 129 | 126 | 113 | 120 | 116 | 107 | 112 | 163 | 157 | 159 | |
| 25 | 142 | 116 | 128 | 126 | 119 | 121 | 117 | 112 | 115 | 161 | 144 | 155 | |
| 26 | 145 | 117 | 131 | 122 | 114 | 118 | 128 | 116 | 121 | 150 | 142 | 144 | |
| 27 | 146 | 117 | 131 | 118 | 107 | 113 | 120 | 103 | 112 | 165 | 144 | 152 | |
| 28 | 152 | 126 | 138 | 107 | 104 | 105 | 104 | 97 | 100 | 145 | 128 | 136 | |
| 29 | 139 | 123 | 132 | 110 | 105 | 107 | 109 | 102 | 105 | 128 | 122 | 124 | |
| 30 | --- | --- | --- | 115 | 110 | 111 | 117 | 109 | 112 | 131 | 124 | 126 | |
| 31 | --- | --- | --- | 142 | 115 | 125 | --- | --- | --- | 134 | 129 | 132 | |
| MONTH | 169 | 109 | 125 | 142 | 80 | 110 | --- | --- | 106 | 169 | 109 | 139 | |

| DAY | MAX | JUNE | | | JULY | | | AUGUST | | | SEPTEMBER | | |
|-------|-----|------|------|-----|------|------|-----|--------|------|-----|-----------|------|--|
| | | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | |
| 1 | 139 | 129 | 132 | 228 | 213 | 219 | 259 | 243 | 249 | 352 | 327 | 334 | |
| 2 | 143 | 139 | 141 | 242 | 220 | 232 | 263 | 252 | 258 | 329 | 300 | 309 | |
| 3 | 142 | 135 | 138 | 228 | 219 | 224 | 269 | 248 | 256 | 303 | 292 | 296 | |
| 4 | 136 | 134 | 135 | 237 | 223 | 230 | 267 | 249 | 260 | 294 | 290 | 292 | |
| 5 | 144 | 135 | 141 | 241 | 231 | 237 | 270 | 232 | 255 | 295 | 290 | 293 | |
| 6 | 151 | 143 | 148 | 254 | 238 | 244 | 247 | 189 | 219 | 292 | 286 | 288 | |
| 7 | 155 | 151 | 153 | 247 | 232 | 238 | 204 | 189 | 198 | 291 | 288 | 289 | |
| 8 | 159 | 155 | 157 | 244 | 235 | 238 | 221 | 204 | 209 | 295 | 290 | 292 | |
| 9 | 165 | 156 | 161 | 252 | 201 | 237 | 253 | 210 | 219 | 348 | 228 | 299 | |
| 10 | 169 | 156 | 166 | 201 | 181 | 191 | 272 | 221 | 233 | 228 | 169 | 183 | |
| 11 | 160 | 152 | 156 | 194 | 178 | 186 | 307 | 238 | 272 | 176 | 167 | 170 | |
| 12 | 165 | 155 | 160 | 198 | 189 | 194 | 287 | 259 | 271 | 193 | 176 | 184 | |
| 13 | 169 | 162 | 167 | 206 | 197 | 200 | 287 | 262 | 276 | 206 | 193 | 201 | |
| 14 | 186 | 166 | 176 | 213 | 206 | 211 | 281 | 245 | 264 | 219 | 200 | 210 | |
| 15 | 189 | 172 | 183 | 213 | 201 | 208 | 267 | 225 | 251 | 232 | 218 | 223 | |
| 16 | 182 | 173 | 178 | 202 | 198 | 199 | 256 | 220 | 244 | 244 | 229 | 236 | |
| 17 | 187 | 179 | 184 | 203 | 192 | 197 | 274 | 238 | 247 | 267 | 242 | 254 | |
| 18 | 198 | 183 | 188 | 223 | 201 | 209 | 241 | 213 | 225 | 327 | 115 | 226 | |
| 19 | 187 | 166 | 181 | 222 | 212 | 217 | 244 | 218 | 232 | 115 | 97 | 100 | |
| 20 | 178 | 166 | 172 | 221 | 198 | 215 | 242 | 220 | 232 | 110 | 98 | 103 | |
| 21 | 188 | 174 | 181 | 205 | 193 | 200 | 307 | 151 | 249 | 126 | 110 | 117 | |
| 22 | 195 | 178 | 187 | 221 | 194 | 206 | 259 | 187 | 207 | 143 | 126 | 134 | |
| 23 | 202 | 185 | 196 | 230 | 209 | 217 | 197 | 188 | 192 | 157 | 143 | 150 | |
| 24 | 199 | 184 | 191 | 276 | 226 | 256 | 206 | 192 | 200 | 173 | 157 | 166 | |
| 25 | 209 | 188 | 202 | 247 | 219 | 229 | 222 | 179 | 210 | 195 | 173 | 185 | |
| 26 | 216 | 208 | 213 | 257 | 217 | 232 | 245 | 179 | 217 | 214 | 195 | 206 | |
| 27 | 216 | 201 | 213 | 256 | 229 | 236 | 268 | 233 | 249 | 234 | 214 | 224 | |
| 28 | 212 | 200 | 205 | 251 | 231 | 244 | 272 | 255 | 264 | 302 | 232 | 256 | |
| 29 | 218 | 210 | 215 | 256 | 235 | 246 | 282 | 266 | 278 | 285 | 128 | 191 | |
| 30 | 218 | 213 | 215 | 252 | 225 | 234 | 283 | 268 | 277 | 150 | 128 | 142 | |
| 31 | --- | --- | --- | 252 | 237 | 246 | 352 | 268 | 326 | --- | --- | --- | |
| MONTH | 218 | 129 | 174 | 276 | 178 | 222 | 352 | 151 | 243 | 352 | 97 | 218 | |

MERRIMACK RIVER BASIN

01095220 STILLWATER RIVER NEAR STERLING, MA--Continued

WATER TEMPERATURE (DEG. C), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|------|------|------|------|------|------|-----|-----|------|-----|-----|------|
| | | | | | | | | | | | | |
| 1 | 14.4 | 13.0 | 13.7 | 11.0 | 9.3 | 10.3 | 4.8 | 3.5 | 4.2 | 2.0 | 1.4 | 1.7 |
| 2 | 14.0 | 12.2 | 13.1 | 12.2 | 11.0 | 11.6 | 3.6 | 1.0 | 2.6 | 1.6 | 1.3 | 1.4 |
| 3 | 12.6 | 10.6 | 11.6 | 13.0 | 11.7 | 12.3 | 1.0 | .3 | .7 | 2.1 | 1.3 | 1.6 |
| 4 | 11.5 | 10.0 | 10.8 | 12.6 | 11.2 | 12.1 | 1.8 | .3 | .9 | 2.9 | 2.1 | 2.5 |
| 5 | 11.5 | 10.0 | 10.8 | 11.2 | 9.6 | 10.3 | 1.1 | .1 | .6 | 2.8 | 1.7 | 2.4 |
| 6 | 11.0 | 9.2 | 10.2 | 9.6 | 9.2 | 9.3 | .6 | .0 | .3 | 1.8 | .7 | 1.4 |
| 7 | 10.8 | 8.3 | 9.6 | 10.2 | 9.3 | 9.6 | .4 | .0 | .2 | .7 | .1 | .4 |
| 8 | 12.3 | 9.3 | 10.7 | 9.4 | 6.6 | 8.2 | .6 | .1 | .3 | .2 | .0 | .1 |
| 9 | 13.3 | 10.9 | 11.9 | 6.6 | 4.2 | 5.5 | .5 | .1 | .3 | .2 | .1 | .1 |
| 10 | 12.7 | 11.8 | 12.1 | 4.6 | 3.2 | 3.8 | 1.0 | .5 | .7 | .3 | .1 | .1 |
| 11 | 13.3 | 10.8 | 11.9 | 3.6 | 2.7 | 3.2 | 1.3 | .5 | 1.0 | .4 | .1 | .2 |
| 12 | 12.1 | 11.3 | 11.7 | 4.4 | 3.4 | 3.9 | .5 | .0 | .2 | .3 | .1 | .2 |
| 13 | 13.7 | 11.6 | 12.4 | 6.3 | 4.4 | 5.6 | .3 | .0 | .1 | .4 | .1 | .2 |
| 14 | 12.6 | 10.6 | 11.6 | 5.8 | 4.0 | 5.0 | .2 | .0 | .1 | .2 | .0 | .1 |
| 15 | 13.2 | 11.7 | 12.4 | 4.0 | 2.4 | 3.2 | .2 | .1 | .1 | .2 | .1 | .1 |
| 16 | 12.0 | 10.9 | 11.6 | 3.2 | 1.9 | 2.5 | .3 | .1 | .2 | .2 | .1 | .1 |
| 17 | 10.9 | 9.6 | 10.4 | 3.1 | 2.6 | 2.9 | .8 | .2 | .5 | .3 | .1 | .2 |
| 18 | 10.2 | 9.1 | 9.8 | 4.3 | 3.1 | 3.6 | .4 | .0 | .1 | .3 | .2 | .3 |
| 19 | 9.1 | 7.8 | 8.5 | 6.0 | 3.7 | 4.8 | .4 | .0 | .1 | .4 | .1 | .2 |
| 20 | 8.4 | 6.7 | 7.6 | 7.0 | 6.0 | 6.6 | .5 | .1 | .2 | .4 | .1 | .2 |
| 21 | 9.8 | 7.3 | 8.6 | 8.1 | 6.8 | 7.4 | .4 | .0 | .2 | .4 | .1 | .2 |
| 22 | 9.2 | 7.7 | 8.5 | 7.4 | 6.1 | 6.7 | .9 | .1 | .4 | .5 | .1 | .3 |
| 23 | 8.1 | 7.0 | 7.5 | 6.1 | 5.0 | 5.6 | 1.2 | .5 | .7 | .4 | .1 | .2 |
| 24 | 7.5 | 6.3 | 6.9 | 5.4 | 4.3 | 4.9 | 1.6 | .6 | 1.1 | .4 | .1 | .2 |
| 25 | 7.5 | 5.1 | 6.4 | 5.3 | 3.9 | 4.8 | 1.2 | .6 | .8 | .3 | .1 | .2 |
| 26 | 9.1 | 7.3 | 8.1 | 4.9 | 3.6 | 4.2 | 1.0 | .7 | .8 | .4 | .1 | .2 |
| 27 | 10.0 | 9.0 | 9.4 | 4.7 | 3.9 | 4.3 | 1.0 | .7 | .9 | .4 | .2 | .3 |
| 28 | 11.1 | 9.4 | 10.3 | 5.5 | 4.2 | 4.7 | 1.1 | .6 | .8 | .4 | .1 | .3 |
| 29 | 11.0 | 10.6 | 10.8 | 6.2 | 5.0 | 5.7 | 1.3 | .7 | 1.0 | .4 | .1 | .2 |
| 30 | 10.6 | 9.5 | 10 | 5.7 | 4.5 | 5.2 | 2.2 | 1.2 | 1.8 | .4 | .2 | .2 |
| 31 | 9.5 | 8.5 | 9.0 | --- | --- | --- | 2.3 | 1.8 | 2.1 | .5 | .2 | .3 |
| MONTH | 14.4 | 5.1 | 10.3 | 13.0 | 1.9 | 6.3 | 4.8 | 0.0 | 0.8 | 2.9 | 0.0 | 0.5 |

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|-----|-----|------|-----|-----|------|------|------|------|------|------|------|
| | | | | | | | | | | | | |
| 1 | 0.5 | 0.2 | 0.3 | 3.6 | 1.1 | 1.9 | 4.2 | 3.3 | 3.7 | 17.4 | 15.2 | 16.2 |
| 2 | .6 | .2 | .3 | 3.0 | 1.1 | 1.7 | 3.7 | 3.5 | 3.6 | 17.5 | 16.4 | 16.9 |
| 3 | .5 | .0 | .3 | 2.1 | .6 | 1.2 | 4.0 | 3.4 | 3.6 | 16.6 | 15.1 | 16.2 |
| 4 | .7 | .2 | .4 | 1.3 | .5 | .8 | 4.5 | 3.7 | 4.0 | 15.1 | 13.3 | 13.8 |
| 5 | .6 | .2 | .4 | 1.0 | .5 | .8 | 4.8 | 3.7 | 4.3 | 13.4 | 11.6 | 12.2 |
| 6 | .4 | .1 | .3 | 2.0 | .9 | 1.4 | 5.8 | 3.1 | 4.4 | 13.8 | 11.3 | 12.5 |
| 7 | .6 | .1 | .3 | 2.0 | .4 | 1.2 | 6.7 | 5.2 | 6.0 | 17.1 | 13.5 | 15.3 |
| 8 | .4 | .1 | .2 | 1.5 | .6 | 1.0 | 8.0 | 6.4 | 7.2 | 16.3 | 14.0 | 15.0 |
| 9 | .6 | .1 | .3 | 1.2 | .6 | .8 | 8.9 | 7.5 | 8.0 | 14.0 | 12.6 | 13.3 |
| 10 | .9 | .2 | .4 | 2.2 | .5 | 1.2 | 9.2 | 7.3 | 8.1 | 14.0 | 11.5 | 12.7 |
| 11 | .8 | .1 | .4 | 2.7 | .8 | 1.5 | 9.0 | 7.6 | 8.2 | 17.4 | 13.0 | 15.2 |
| 12 | .7 | .1 | .3 | 2.2 | 1.0 | 1.5 | 9.9 | 7.4 | 8.4 | 19.2 | 16.3 | 17.6 |
| 13 | 1.2 | .1 | .5 | 3.1 | .6 | 1.5 | 8.6 | 6.4 | 8.0 | 19.9 | 17.7 | 18.5 |
| 14 | 1.5 | .3 | .7 | 3.2 | .6 | 1.8 | 7.8 | 5.8 | 6.6 | 19.4 | 16.3 | 17.7 |
| 15 | .9 | .1 | .3 | 4.0 | 1.6 | 2.5 | 8.5 | 7.3 | 7.9 | 20.8 | 17.5 | 19.0 |
| 16 | .4 | .1 | .2 | 3.2 | .6 | 2.0 | 9.8 | 6.3 | 7.9 | 19.6 | 18.0 | 19.2 |
| 17 | .7 | .1 | .3 | 1.9 | .6 | 1.1 | 11.2 | 8.1 | 9.3 | 20.0 | 17.0 | 18.3 |
| 18 | 1.0 | .2 | .5 | 2.0 | .3 | 1.0 | 13.2 | 11.2 | 12.2 | 19.0 | 17.2 | 18.1 |
| 19 | 1.4 | .1 | .6 | 2.0 | .5 | 1.1 | 14.5 | 12.6 | 13.6 | 18.7 | 17.2 | 18.0 |
| 20 | 1.6 | .1 | .8 | 3.3 | .1 | 1.5 | 16.3 | 14.3 | 15.1 | 19.1 | 15.5 | 17.2 |
| 21 | 1.4 | .8 | 1.1 | 3.7 | 1.6 | 2.3 | 14.6 | 12.5 | 13.7 | 19.6 | 16.2 | 17.8 |
| 22 | 2.8 | .6 | 1.4 | 2.8 | 1.2 | 1.8 | 15.1 | 12.3 | 13.6 | 18.7 | 14.7 | 16.2 |
| 23 | 2.6 | .5 | 1.3 | 3.4 | 1.0 | 2.0 | 14.9 | 11.8 | 13.8 | 16.8 | 14.1 | 15.3 |
| 24 | 2.1 | .3 | 1.1 | 4.5 | 1.3 | 2.8 | 12.6 | 10.5 | 11.6 | 15.7 | 14.3 | 14.8 |
| 25 | 2.5 | .2 | 1.1 | 5.2 | 2.9 | 4.0 | 12.5 | 10.9 | 11.7 | 14.3 | 13.0 | 13.7 |
| 26 | 2.8 | .2 | 1.2 | 7.1 | 4.1 | 5.5 | 11.0 | 9.7 | 10.4 | 13.0 | 12.3 | 12.5 |
| 27 | 2.9 | .2 | 1.3 | 8.5 | 6.1 | 7.5 | 13.6 | 9.7 | 11.1 | 14.4 | 11.8 | 13.0 |
| 28 | 3.6 | .7 | 1.7 | 7.8 | 5.9 | 7.2 | 13.7 | 11.8 | 12.5 | 14.9 | 14.0 | 14.4 |
| 29 | 3.1 | .9 | 1.8 | 7.3 | 5.4 | 6.1 | 13.1 | 11.3 | 12.3 | 15.6 | 13.4 | 14.4 |
| 30 | --- | --- | --- | 6.9 | 5.3 | 5.9 | 16.0 | 12.9 | 14.5 | 16.2 | 12.8 | 14.4 |
| 31 | --- | --- | --- | 5.4 | 4.2 | 5.0 | --- | --- | --- | 16.5 | 13.1 | 14.8 |
| MONTH | 3.6 | 0.0 | 0.7 | 8.5 | 0.1 | 2.5 | 16.3 | 3.1 | 9.2 | 20.8 | 11.3 | 15.6 |

MERRIMACK RIVER BASIN

01095220 STILLWATER RIVER NEAR STERLING, MA--Continued

WATER TEMPERATURE (DEG. C), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|------|------|------|------|------|------|------|--------|------|------|-----------|------|
| | | JUNE | | | JULY | | | AUGUST | | | SEPTEMBER | |
| 1 | 15.0 | 13.7 | 14.4 | 19.4 | 16.0 | 17.7 | 19.9 | 19.4 | 19.6 | 19.2 | 17.0 | 18.0 |
| 2 | 15.8 | 13.1 | 14.3 | 20.5 | 17.2 | 18.7 | 19.9 | 18.8 | 19.4 | 18.4 | 16.0 | 16.9 |
| 3 | 16.6 | 14.2 | 15.4 | 19.8 | 17.0 | 18.5 | 19.9 | 18.3 | 19.1 | 17.2 | 15.1 | 15.9 |
| 4 | 17.7 | 13.9 | 15.7 | 19.8 | 16.4 | 18.1 | 19.9 | 19.1 | 19.6 | 16.9 | 16.0 | 16.5 |
| 5 | 17.3 | 14.8 | 16.1 | 19.3 | 17.6 | 18.0 | 19.8 | 17.7 | 18.6 | 17.2 | 16.3 | 16.7 |
| 6 | 16.3 | 14.5 | 15.2 | 19.0 | 17.1 | 18.0 | 19.0 | 17.1 | 18.0 | 16.3 | 14.4 | 15.1 |
| 7 | 17.5 | 13.9 | 15.6 | 19.8 | 16.5 | 18.1 | 18.0 | 15.3 | 16.3 | 15.4 | 14.5 | 14.9 |
| 8 | 19.8 | 16.2 | 18.0 | 19.5 | 18.0 | 18.4 | 16.8 | 15.0 | 15.9 | 15.8 | 15.0 | 15.4 |
| 9 | 22.1 | 18.3 | 20.1 | 20.6 | 17.3 | 18.7 | 16.8 | 15.1 | 16.1 | 18.7 | 15.8 | 17.0 |
| 10 | 21.2 | 18.5 | 19.9 | 21.3 | 17.9 | 19.4 | 17.0 | 15.8 | 16.5 | 19.1 | 17.9 | 18.4 |
| 11 | 19.1 | 15.9 | 17.6 | 20.7 | 18.3 | 19.4 | 17.6 | 17.0 | 17.3 | 18.6 | 16.5 | 17.5 |
| 12 | 18.8 | 14.8 | 16.8 | 19.4 | 17.4 | 18.4 | 18.5 | 17.4 | 17.9 | 18.4 | 15.6 | 16.9 |
| 13 | 18.9 | 15.3 | 17.1 | 18.8 | 16.9 | 17.6 | 18.6 | 18.2 | 18.5 | 18.4 | 15.8 | 16.8 |
| 14 | 17.6 | 15.9 | 16.8 | 17.4 | 16.3 | 16.8 | 19.3 | 17.9 | 18.6 | 17.4 | 15.0 | 16.1 |
| 15 | 21.0 | 16.8 | 18.6 | 18.7 | 16.7 | 17.5 | 19.3 | 17.4 | 18.1 | 16.0 | 13.8 | 15.0 |
| 16 | 22.1 | 18.3 | 20.0 | 19.2 | 16.6 | 17.8 | 17.4 | 16.3 | 16.8 | 15.9 | 15.0 | 15.4 |
| 17 | 21.2 | 18.9 | 20.1 | 19.8 | 17.1 | 18.3 | 17.7 | 15.9 | 16.6 | 16.4 | 15.4 | 15.8 |
| 18 | 20.0 | 19.2 | 19.6 | 19.9 | 17.8 | 18.8 | 18.4 | 16.3 | 17.1 | 16.6 | 14.9 | 16.0 |
| 19 | 21.1 | 18.3 | 19.4 | 19.6 | 18.4 | 18.8 | 18.9 | 17.7 | 18.2 | 14.9 | 13.4 | 13.9 |
| 20 | 19.6 | 16.4 | 18.0 | 21.1 | 18.3 | 19.4 | 19.6 | 18.3 | 18.9 | 13.8 | 12.6 | 13.2 |
| 21 | 19.6 | 15.6 | 17.5 | 21.0 | 18.5 | 19.7 | 20.1 | 18.9 | 19.4 | 14.6 | 12.9 | 13.7 |
| 22 | 18.2 | 16.4 | 17.4 | 21.0 | 18.7 | 19.8 | 19.8 | 17.5 | 18.6 | 16.0 | 13.8 | 14.8 |
| 23 | 20.7 | 16.8 | 18.5 | 20.8 | 18.8 | 19.6 | 19.8 | 16.7 | 18.2 | 16.9 | 15.0 | 15.9 |
| 24 | 20.3 | 16.3 | 18.3 | 20.4 | 19.0 | 19.5 | 19.5 | 17.2 | 18.2 | 16.5 | 14.4 | 15.5 |
| 25 | 18.8 | 17.3 | 18.0 | 19.7 | 17.5 | 18.6 | 18.7 | 15.5 | 16.9 | 17.0 | 14.4 | 15.6 |
| 26 | 18.7 | 17.3 | 17.8 | 18.8 | 16.7 | 17.8 | 17.6 | 14.9 | 16.3 | 17.5 | 15.5 | 16.3 |
| 27 | 18.8 | 15.3 | 17.0 | 18.6 | 17.2 | 17.7 | 18.1 | 16.1 | 16.8 | 16.6 | 13.9 | 15.2 |
| 28 | 18.0 | 14.8 | 16.4 | 17.6 | 16.1 | 16.5 | 18.7 | 17.4 | 17.9 | 15.3 | 14.3 | 14.8 |
| 29 | 19.0 | 15.8 | 17.2 | 18.6 | 16.5 | 17.2 | 19.2 | 18.4 | 18.9 | 15.3 | 13.4 | 14.5 |
| 30 | 19.5 | 15.8 | 17.5 | 18.7 | 17.0 | 17.8 | 20.9 | 18.6 | 19.5 | 13.4 | 12.3 | 12.8 |
| 31 | --- | --- | --- | 19.7 | 18.4 | 19.0 | 20.5 | 19.2 | 19.8 | --- | --- | --- |
| MONTH | 22.1 | 13.1 | 17.5 | 21.3 | 16.0 | 18.4 | 20.9 | 14.9 | 18.0 | 19.2 | 12.3 | 15.7 |
| YEAR | 22.1 | 0.0 | 9.6 | | | | | | | | | |

PRECIPITATION, TOTAL, INCHES WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY SUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2.04 | 0.00 | 0.16 | 0.00 | 0.00 | 0.01 |
| 2 | .00 | .03 | .00 | .03 | .00 | .01 | .10 | .08 | .06 | .44 | .00 | .00 |
| 3 | .00 | .13 | .00 | .07 | .49 | .00 | .00 | .49 | .20 | .00 | .00 | .00 |
| 4 | .16 | .08 | .00 | .12 | .01 | .02 | .16 | .32 | .00 | .00 | .00 | .00 |
| 5 | .00 | .38 | .03 | .13 | .00 | .02 | .00 | .00 | .00 | .20 | .70 | .00 |
| 6 | .00 | .01 | .29 | .02 | .76 | .15 | .00 | .00 | .00 | .01 | .00 | .00 |
| 7 | .00 | .00 | .28 | .00 | .06 | .00 | .00 | .03 | .00 | .00 | .00 | .00 |
| 8 | .00 | .00 | .00 | .15 | .00 | .13 | .00 | .00 | .00 | .30 | .00 | .47 |
| 9 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .33 | .18 | .01 | .00 | 1.37 |
| 10 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .23 | .13 | .00 | .01 |
| 11 | .00 | .13 | 1.04 | .00 | .00 | .01 | .00 | .00 | .00 | .01 | .00 | .00 |
| 12 | .29 | .01 | .00 | .05 | .00 | .04 | .06 | .00 | .00 | .00 | .04 | .00 |
| 13 | .00 | .14 | .00 | .00 | .00 | .00 | 2.20 | .00 | .00 | .40 | .01 | .00 |
| 14 | .00 | .00 | .97 | .00 | .00 | .01 | .08 | .00 | .09 | .09 | .00 | .00 |
| 15 | 1.51 | .00 | .39 | .00 | .00 | .00 | .31 | .00 | .00 | .03 | .62 | .00 |
| 16 | .00 | .00 | .00 | .00 | .00 | .42 | .00 | .09 | .00 | .00 | .17 | .02 |
| 17 | .00 | .01 | .99 | .00 | .00 | .02 | .00 | .00 | .01 | .00 | .01 | .28 |
| 18 | .01 | .00 | .00 | .03 | .00 | .01 | .00 | .15 | .16 | .12 | .00 | 3.12 |
| 19 | .03 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .07 | .14 | .00 | .00 |
| 20 | .00 | .41 | .00 | .00 | .00 | .09 | .00 | .00 | .00 | .00 | .22 | .00 |
| 21 | .05 | .00 | .00 | .00 | .00 | .14 | .00 | .00 | .00 | .00 | 3.23 | .00 |
| 22 | .03 | .00 | .00 | .00 | .00 | .00 | .00 | .12 | .00 | .00 | .01 | .00 |
| 23 | .03 | .00 | .00 | .00 | .00 | .00 | .77 | .23 | .00 | .00 | .00 | .00 |
| 24 | .00 | .00 | .89 | .00 | .00 | .00 | .00 | .29 | .00 | 1.30 | .00 | .00 |
| 25 | .00 | .09 | .04 | .00 | .00 | .00 | .08 | .02 | .01 | .00 | .00 | .00 |
| 26 | .10 | .00 | .00 | .00 | .00 | .01 | .83 | .07 | .11 | .00 | .00 | .00 |
| 27 | 1.24 | .00 | .00 | .00 | .00 | .16 | .09 | .30 | .00 | .09 | .00 | .00 |
| 28 | .03 | .35 | .00 | .16 | .00 | .00 | .00 | .24 | .00 | .35 | .00 | 1.61 |
| 29 | 1.76 | .07 | .00 | .00 | .00 | .00 | .00 | .00 | .11 | .00 | .00 | .71 |
| 30 | .00 | .00 | .04 | .00 | --- | .00 | .00 | .00 | .00 | .00 | 1.12 | .09 |
| 31 | .00 | --- | .00 | .00 | --- | 1.75 | --- | .00 | --- | .00 | .14 | --- |
| TOTAL | 5.24 | 1.84 | 4.96 | 0.76 | 1.32 | 2.99 | 6.72 | 2.76 | 1.39 | 3.62 | 6.27 | 7.69 |
| MAX | 1.76 | 0.41 | 1.04 | 0.16 | 0.76 | 1.75 | 2.20 | 0.49 | 0.23 | 1.30 | 3.23 | 3.12 |

MERRIMACK RIVER BASIN

01095220 STILLWATER RIVER NEAR STERLING, MA--Continued
(National Water Quality Assessment Site)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1998 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | TIME | INSTAN- TANEOUS DIS- CHARGE, CFS (00061) | TUR- BIDITY, NTU (00076) | BARO- METRIC PRESSURE, MM HG (00025) | DIS- SOLVED OXYGEN, MG/L (00300) | PH, WATER, UNFLTRD FIELD, STD UNITS (00400) | SPECIF. CONDUCTANCE, WAT UNF US/CM 25 DEGC (00095) | TEMPER- ATURE, AIR, DEG C (00020) | TEMPER- ATURE, WATER, DEG C (00010) | ALKALINITY, WAT FLT INC TIT FIELD, MG/L AS CACO3 (39086) | BICARBONATE, WAT FLT INCRM.TITR. , FIELD, MG/L (00453) |
|----------|------|---|-----------------------------------|--|--|--|---|---|---|---|---|
| NOV 2003 | | | | | | | | | | | |
| 13... | 1015 | 33 | -- | 730 | 11.3 | 6.7 | 122 | 11.3 | 5.5 | 7 | 9 |
| DEC | | | | | | | | | | | |
| 04... | 1015 | 29 | -- | 756 | 13.2 | 6.2 | 126 | -.1 | .7 | 7 | 9 |
| JAN 2004 | | | | | | | | | | | |
| 14... | 1000 | 43 | -- | 753 | 10.6 | 7.4 | 124 | -18.2 | .2 | 9 | 10 |
| FEB | | | | | | | | | | | |
| 12... | 0945 | E35 | -- | 754 | 12.7 | 7.0 | 131 | -3.0 | .1 | 8 | 10 |
| MAR | | | | | | | | | | | |
| 30... | 0945 | E57 | -- | 757 | 11.7 | 6.8 | 113 | 3.3 | 5.7 | 5 | 6 |
| APR | | | | | | | | | | | |
| 28... | 1000 | E104 | -- | 746 | 8.8 | 6.0 | 103 | 11.5 | 11.7 | 5 | 6 |
| MAY | | | | | | | | | | | |
| 18... | 0930 | E40 | -- | 753 | 7.9 | 6.2 | 157 | 17.1 | 17.7 | 13 | 15 |
| JUL | | | | | | | | | | | |
| 06... | 1545 | E12 | 1.9 | 749 | 8.7 | 6.3 | 223 | -- | 20.4 | -- | -- |
| 15... | 1000 | E14 | -- | 738 | 7.1 | 6.1 | 199 | 19.1 | 17.8 | 18 | 22 |
| AUG | | | | | | | | | | | |
| 30... | 1430 | E5.8 | 1.5 | 757 | 7.8 | 6.5 | 254 | 30.7 | 21.8 | -- | -- |
| SEP | | | | | | | | | | | |
| 08... | 1030 | E4.1 | -- | 751 | 6.0 | 6.6 | 302 | 22.2 | 16.4 | 21 | 25 |
| 14... | 1645 | E6.4 | 1.1 | 757 | 8.1 | 6.6 | 215 | 22.8 | 18.6 | -- | -- |

| DATE | CHLOR- IDE, WATER, FLTRD, MG/L (00940) | SULFATE WATER, FLTRD, MG/L (00945) | AMMONIA + ORG-N, WATER, UNFLTRD MG/L AS N (00625) | AMMONIA WATER, FLTRD, MG/L AS N (00608) | NITRITE + NITRATE WATER FLTRD, MG/L AS N (00631) | NITRITE WATER, FLTRD, MG/L AS N (00613) | ORTHO- PHOSPHATE, WATER, FLTRD, MG/L AS P (00671) | PHOS- PHORUS, WATER, UNFLTRD MG/L (00665) | TOTAL NITROGEN, WAT UNF BY ANALYSIS, MG/L (62855) | CHLORO- PHYLL A PERIPHYTON, CHROMOFLUORO, MG/M2 (70957) | SUSPENDED SEDIMENT CONCEN- TRATION MG/L (80154) |
|----------|---|--|--|--|---|--|--|--|--|--|--|
| NOV 2003 | | | | | | | | | | | |
| 13... | 25.6 | 5.9 | -- | <0.04 | 0.15 | <0.008 | <0.006 | 0.011 | 0.36 | -- | 1 |
| DEC | | | | | | | | | | | |
| 04... | 26.7 | 6.7 | -- | <.04 | .22 | <.008 | <.006 | .009 | .42 | -- | 1 |
| JAN 2004 | | | | | | | | | | | |
| 14... | 25.7 | 7.9 | -- | E.02 | .34 | <.008 | <.006 | .009 | .51 | -- | 2 |
| FEB | | | | | | | | | | | |
| 12... | 27.5 | 6.5 | -- | .05 | .34 | <.008 | <.006 | .012 | .56 | -- | 3 |
| MAR | | | | | | | | | | | |
| 30... | 25.9 | 5.5 | -- | <.04 | .17 | <.008 | <.006 | .010 | .36 | -- | 2 |
| APR | | | | | | | | | | | |
| 28... | 21.8 | 6.0 | -- | <.04 | .07 | <.008 | <.006 | .012 | .28 | -- | 3 |
| MAY | | | | | | | | | | | |
| 18... | 34.3 | 6.0 | -- | E.02 | .21 | <.008 | <.006 | .019 | .47 | -- | 3 |
| JUL | | | | | | | | | | | |
| 06... | -- | -- | .26 | .016 | .203 | -- | -- | .02 | -- | 10.8 | -- |
| 15... | 43.5 | 7.2 | -- | <.04 | .21 | E.004 | <.006 | .014 | .43 | -- | 2 |
| AUG | | | | | | | | | | | |
| 30... | -- | -- | .23 | .018 | .153 | -- | -- | .01 | -- | 16.4 | -- |
| SEP | | | | | | | | | | | |
| 08... | 68.4 | 9.1 | -- | E.02 | .16 | <.008 | <.006 | .011 | .34 | -- | 2 |
| 14... | -- | -- | .31 | E.008 | .127 | -- | -- | .016 | -- | E17.4 | -- |

< Less than
E Estimated value

MERRIMACK RIVER BASIN

01095375 QUINAPOXET RIVER AT CANADA MILLS NEAR HOLDEN, MA

LOCATION.--Lat 42° 22' 25", long 71° 49' 43", Worcester County, Hydrologic Unit 01070004, on left bank, 300 ft upstream from bridge on Harris Street at Canada Mills, 2.1 mi north of Holden, MA, and about 3.5 mi upstream from mouth at Wachusett Reservoir.

DRAINAGE AREA.--46.3 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Discharge: November 1996 to current year.

Water-quality records: April 1997 to current year.

REVISED RECORDS.--WDR MA-RI-03-1: Drainage area.

GAGE.--Water stage recorder. Elevation of gage is 560 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good except those for estimated daily discharge, which are poor. Flow regulated by Quinapoxet Reservoir. Telephone gage-height telemeter at station.

AVERAGE DISCHARGE.-- 7 years (water years 1998--2004), 56.3 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,670 ft³/s, Mar. 10, 1998, gage height, 13.76 ft; minimum discharge, 0.48 ft³/s, Aug. 10, 1999.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Oct. 21, 1996, reached a discharge of 890 ft³/s, gage height, 12.45 ft, from floodmarks.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,100 ft³/s, Apr. 2, gage height, 11.92 ft; minimum discharge, 2.7 ft³/s, Sept. 7.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|------|------|------|------|------|------|------|------|-------|-------|
| 1 | 14 | 118 | 55 | 105 | e43 | 36 | 499 | 105 | 40 | 11 | 15 | 9.5 |
| 2 | 13 | 93 | 52 | 95 | e43 | 53 | 896 | 98 | 44 | 16 | 15 | 7.2 |
| 3 | 12 | 81 | 44 | 96 | e41 | 87 | 429 | 105 | 44 | 15 | 14 | 5.9 |
| 4 | 12 | 79 | 38 | 117 | e37 | 99 | 304 | 201 | 42 | 13 | 12 | 6.4 |
| 5 | 13 | 90 | 39 | 140 | e30 | 88 | 270 | 172 | 36 | 13 | 20 | 7.3 |
| 6 | 12 | 105 | 43 | 131 | e35 | 108 | 206 | 133 | 34 | 13 | 16 | 3.9 |
| 7 | 11 | 100 | 57 | 112 | e52 | 113 | 164 | 109 | 33 | 12 | 12 | 3.2 |
| 8 | 11 | 79 | 49 | e95 | e47 | 93 | 133 | 74 | 34 | 12 | 10 | 5.3 |
| 9 | 10 | 63 | e46 | e84 | e47 | 76 | 117 | 75 | 32 | 12 | 9.1 | 31 |
| 10 | 10 | 56 | 44 | e77 | 41 | 62 | 106 | 80 | 36 | 11 | 7.6 | 26 |
| 11 | 12 | 57 | 108 | e71 | 40 | 58 | 99 | 74 | 34 | 11 | 6.6 | 15 |
| 12 | 14 | 64 | 295 | e65 | e38 | 59 | 93 | 66 | 26 | 10 | 6.4 | 16 |
| 13 | 16 | 67 | 158 | e59 | 36 | 54 | 172 | 61 | 22 | 12 | 5.5 | 11 |
| 14 | 12 | 62 | 105 | e55 | 35 | 50 | 734 | 54 | 20 | 16 | 4.7 | 6.8 |
| 15 | 53 | 50 | 132 | e54 | e33 | 51 | 494 | 51 | 21 | 15 | 8.7 | 5.6 |
| 16 | 32 | 50 | 107 | e53 | e33 | 53 | 346 | 49 | 19 | 15 | 9.9 | 5.1 |
| 17 | 27 | 48 | 138 | e52 | e32 | 57 | 248 | 49 | 21 | 15 | 11 | 5.4 |
| 18 | 23 | 47 | 684 | e51 | 31 | 51 | 197 | 47 | 22 | 13 | 8.9 | 106 |
| 19 | 17 | 45 | 307 | e50 | 31 | 48 | 166 | 54 | 22 | 13 | 7.4 | 77 |
| 20 | 16 | 73 | 197 | e50 | 30 | 46 | 142 | 46 | 19 | 13 | 8.5 | 43 |
| 21 | 15 | 71 | 147 | e51 | 30 | 73 | 119 | 42 | 16 | 12 | 79 | 35 |
| 22 | 16 | 70 | 123 | e49 | 31 | 81 | 109 | 41 | 15 | 11 | 76 | 26 |
| 23 | 17 | 57 | 112 | e49 | 30 | 68 | 159 | 49 | 15 | 11 | 33 | 18 |
| 24 | 16 | 47 | 171 | e47 | 30 | 63 | 191 | 48 | 14 | 44 | 20 | 12 |
| 25 | 15 | 48 | 432 | e48 | 29 | 67 | 139 | 55 | 13 | 30 | 15 | 11 |
| 26 | 14 | 44 | 266 | e46 | 29 | 81 | 184 | 55 | 14 | 21 | 11 | 13 |
| 27 | 53 | 44 | 185 | e43 | 29 | 109 | 271 | 73 | 13 | 17 | 9.4 | 12 |
| 28 | 160 | 49 | 147 | e43 | 29 | 107 | 205 | 71 | 13 | 23 | 8.4 | 30 |
| 29 | 354 | 65 | 127 | e44 | 31 | 86 | 149 | 66 | 13 | 21 | 6.6 | 69 |
| 30 | 332 | 59 | 122 | e44 | --- | 71 | 121 | 48 | 12 | 18 | 7.9 | 47 |
| 31 | 154 | --- | 118 | e43 | --- | 116 | --- | 40 | --- | 16 | 12 | --- |
| TOTAL | 1486 | 1981 | 4648 | 2119 | 1023 | 2264 | 7462 | 2291 | 739 | 485 | 486.6 | 669.6 |
| MEAN | 47.9 | 66.0 | 150 | 68.4 | 35.3 | 73.0 | 249 | 73.9 | 24.6 | 15.6 | 15.7 | 22.3 |
| MAX | 354 | 118 | 684 | 140 | 52 | 116 | 896 | 201 | 44 | 44 | 79 | 106 |
| MIN | 10 | 44 | 38 | 43 | 29 | 36 | 93 | 40 | 12 | 10 | 4.7 | 3.2 |
| CFSM | 1.04 | 1.43 | 3.24 | 1.48 | 0.76 | 1.58 | 5.37 | 1.60 | 0.53 | 0.34 | 0.34 | 0.48 |
| IN. | 1.19 | 1.59 | 3.73 | 1.70 | 0.82 | 1.82 | 6.00 | 1.84 | 0.59 | 0.39 | 0.39 | 0.54 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2004, BY WATER YEAR (WY)

| | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 |
|------|------|------|------|------|------|------|------|------|
| MEAN | 14.9 | 21.4 | 68.4 | 54.4 | 57.0 | 136 | 165 | 76.9 |
| MAX | 47.9 | 66.0 | 247 | 104 | 119 | 267 | 283 | 165 |
| (WY) | 2004 | 2004 | 1997 | 1997 | 1998 | 1998 | 2001 | 1998 |
| MIN | 3.25 | 4.35 | 8.81 | 7.65 | 11.6 | 22.7 | 28.4 | 31.1 |
| (WY) | 2002 | 2002 | 1999 | 2002 | 2002 | 2002 | 1999 | 1999 |

SUMMARY STATISTICS

| | FOR 2003 CALENDAR YEAR | FOR 2004 WATER YEAR | WATER YEARS 1997 - 2004 |
|--------------------------|------------------------|---------------------|-------------------------|
| ANNUAL TOTAL | 32011 | 25654.2 | |
| ANNUAL MEAN | 87.7 | 70.1 | 56.3 |
| HIGHEST ANNUAL MEAN | | | 84.1 |
| LOWEST ANNUAL MEAN | | | 16.7 |
| HIGHEST DAILY MEAN | 750 | Jun 23 | 1270 |
| LOWEST DAILY MEAN | 10 | Oct 9 | 0.57 |
| ANNUAL SEVEN-DAY MINIMUM | 11 | Oct 4 | 0.63 |
| MAXIMUM PEAK FLOW | | | 1100 |
| MAXIMUM PEAK STAGE | | | 11.92 |
| INSTANTANEOUS LOW FLOW | | | 2.7 |
| ANNUAL RUNOFF (CFSM) | 1.89 | 1.51 | 1.22 |
| ANNUAL RUNOFF (INCHES) | 25.72 | 20.61 | 16.51 |
| 10 PERCENT EXCEEDS | 195 | 147 | 138 |
| 50 PERCENT EXCEEDS | 57 | 44 | 22 |
| 90 PERCENT EXCEEDS | 16 | 11 | 4.2 |

e Estimated

MERRIMACK RIVER BASIN

01095375 QUINAPOXET RIVER AT CANADA MILLS NEAR HOLDEN, MA--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--April 1997 to current year.

INSTRUMENTATION.--Specific conductance and water temperature water-quality monitor.

REMARKS.--Specific conductance records good except those for the periods May 22 to June 30, and Aug. 8-16, which are fair. Water temperature records are good. Extremes for period of daily record and current year are for those values reported.

EXTREMES FOR PERIOD OF DAILY RECORD, APRIL 1997 TO CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 659 $\mu\text{S}/\text{cm}$, Jan. 9, 1999; minimum, 61 $\mu\text{S}/\text{cm}$, June 18, 1998.

WATER TEMPERATURE: Maximum recorded, 29.5°C, Aug. 19, 2002; minimum, -0.8°C, Feb. 19, 2001.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 533 $\mu\text{S}/\text{cm}$, Aug. 12; minimum, 94 $\mu\text{S}/\text{cm}$, Apr. 1.

WATER TEMPERATURE: Maximum recorded, 24.2°C, Aug. 2; minimum, -0.1°C, Dec. 9, Feb. 12, 15.

SPECIFIC CONDUCTANCE ($\mu\text{S}/\text{CM}$ AT 25°C), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|-----|---------|------|-----|----------|------|-----|----------|------|-----|---------|------|
| | | OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | |
| 1 | 199 | 196 | 198 | 123 | 118 | 120 | 143 | 139 | 141 | 126 | 119 | 122 |
| 2 | 198 | 196 | 197 | 126 | 119 | 122 | 145 | 139 | 144 | 131 | 126 | 128 |
| 3 | 198 | 193 | 196 | 134 | 122 | 124 | 139 | 127 | 134 | 138 | 131 | 134 |
| 4 | 197 | 194 | 195 | 136 | 123 | 129 | 153 | 129 | 142 | 134 | 126 | 130 |
| 5 | 196 | 192 | 194 | 136 | 119 | 126 | 150 | 136 | 145 | 151 | 123 | 138 |
| 6 | 196 | 190 | 193 | 119 | 116 | 117 | 148 | 134 | 141 | 152 | 136 | 145 |
| 7 | 200 | 193 | 196 | 121 | 116 | 117 | 135 | 121 | 129 | 142 | 133 | 137 |
| 8 | 202 | 195 | 199 | 127 | 121 | 123 | 143 | 130 | 136 | 140 | 130 | 134 |
| 9 | 203 | 200 | 202 | 133 | 127 | 130 | 146 | 128 | 137 | 144 | 135 | 139 |
| 10 | 207 | 201 | 204 | 135 | 133 | 134 | 151 | 146 | 149 | 150 | 144 | 147 |
| 11 | 206 | 201 | 204 | 137 | 135 | 137 | 162 | 125 | 149 | 155 | 149 | 152 |
| 12 | 207 | 201 | 204 | 139 | 137 | 138 | 125 | 114 | 117 | 151 | 145 | 148 |
| 13 | 207 | 203 | 205 | 139 | 130 | 135 | 128 | 117 | 123 | 162 | 148 | 153 |
| 14 | 210 | 201 | 205 | 132 | 129 | 130 | 131 | 110 | 122 | 155 | 148 | 151 |
| 15 | 210 | 152 | 182 | 139 | 132 | 135 | 158 | 108 | 141 | 163 | 152 | 155 |
| 16 | 198 | 181 | 192 | 141 | 139 | 140 | 170 | 139 | 154 | 165 | 156 | 162 |
| 17 | 256 | 198 | 208 | 141 | 139 | 140 | 222 | 134 | 167 | 162 | 155 | 159 |
| 18 | 218 | 210 | 214 | 139 | 135 | 137 | 138 | 105 | 112 | 205 | 154 | 167 |
| 19 | 210 | 204 | 207 | 139 | 137 | 138 | 115 | 109 | 112 | 164 | 155 | 157 |
| 20 | 204 | 198 | 200 | 140 | 121 | 131 | 118 | 113 | 115 | 170 | 164 | 168 |
| 21 | 199 | 195 | 197 | 134 | 128 | 131 | 120 | 109 | 115 | 166 | 162 | 164 |
| 22 | 201 | 199 | 200 | 152 | 129 | 136 | 126 | 117 | 122 | 168 | 162 | 166 |
| 23 | 205 | 201 | 203 | 156 | 152 | 154 | 132 | 125 | 129 | 202 | 154 | 167 |
| 24 | 208 | 205 | 206 | 155 | 142 | 149 | 134 | 111 | 127 | 200 | 161 | 168 |
| 25 | 212 | 206 | 209 | 142 | 137 | 139 | 113 | 103 | 107 | 184 | 167 | 176 |
| 26 | 207 | 203 | 205 | 142 | 138 | 140 | 107 | 102 | 105 | 182 | 172 | 177 |
| 27 | 213 | 170 | 199 | 142 | 135 | 140 | 111 | 106 | 109 | 176 | 173 | 174 |
| 28 | 170 | 120 | 130 | 135 | 132 | 133 | 116 | 109 | 113 | 179 | 163 | 171 |
| 29 | 142 | 106 | 118 | 137 | 132 | 134 | 120 | 115 | 118 | 174 | 164 | 167 |
| 30 | 114 | 105 | 109 | 140 | 137 | 139 | 121 | 118 | 120 | 183 | 167 | 173 |
| 31 | 119 | 113 | 116 | --- | --- | --- | 120 | 119 | 119 | 171 | 166 | 169 |
| MONTH | 256 | 105 | 190 | 156 | 116 | 133 | 222 | 102 | 129 | 205 | 119 | 155 |

MERRIMACK RIVER BASIN

01095375 QUINAPOXET RIVER AT CANADA MILLS NEAR HOLDEN, MA--Continued

SPECIFIC CONDUCTANCE ($\mu\text{S}/\text{CM}$ AT 25°C), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY | MAX | FEBRUARY | | | MARCH | | | APRIL | | | MAY | | |
|-------|-----|----------|------|-----|-------|------|-----|-------|------|-----|-----|------|--|
| | | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | |
| 1 | 198 | 160 | 169 | 224 | 209 | 217 | 123 | 94 | 105 | --- | --- | 147 | |
| 2 | 183 | 160 | 170 | 216 | 199 | 207 | 101 | 95 | 98 | 152 | 149 | 150 | |
| 3 | 174 | 165 | 170 | 202 | 158 | 177 | 101 | 95 | 99 | 152 | 142 | 149 | |
| 4 | 246 | 150 | 189 | 158 | 148 | 151 | 104 | 101 | 102 | 142 | 130 | 135 | |
| 5 | 236 | 204 | 215 | 154 | 149 | 150 | 117 | 104 | 109 | 136 | 127 | 131 | |
| 6 | 220 | 189 | 203 | 154 | 132 | 142 | 128 | 117 | 121 | 144 | 134 | 138 | |
| 7 | 408 | 214 | 311 | 134 | 130 | 132 | 134 | 127 | 130 | --- | --- | 144 | |
| 8 | 380 | 296 | 326 | 162 | 133 | 145 | 136 | 131 | 133 | 151 | 143 | 147 | |
| 9 | 313 | 261 | 283 | 154 | 141 | 147 | 146 | 136 | 138 | 150 | 144 | 148 | |
| 10 | 266 | 242 | 255 | 158 | 154 | 156 | 150 | 140 | 145 | 152 | 145 | 149 | |
| 11 | 264 | 226 | 243 | 157 | 153 | 155 | 147 | 140 | 143 | --- | --- | 153 | |
| 12 | 249 | 216 | 228 | 158 | 151 | 154 | 145 | 141 | 144 | --- | --- | 156 | |
| 13 | 248 | 229 | 240 | 157 | 145 | 151 | 145 | 106 | 134 | 163 | 157 | 161 | |
| 14 | 238 | 221 | 231 | 161 | 146 | 154 | 110 | 104 | 107 | --- | --- | 164 | |
| 15 | 228 | 197 | 212 | 161 | 155 | 158 | 120 | 105 | 113 | 169 | 168 | 168 | |
| 16 | 217 | 192 | 207 | 161 | 131 | 152 | 122 | 115 | 118 | 171 | 168 | 169 | |
| 17 | 211 | 188 | 198 | 167 | 131 | 151 | 135 | 119 | 129 | 182 | 171 | 176 | |
| 18 | 207 | 189 | 197 | 175 | 154 | 163 | 142 | 132 | 136 | 180 | 170 | 175 | |
| 19 | 215 | 194 | 204 | 179 | 162 | 168 | 144 | 135 | 140 | 177 | 169 | 172 | |
| 20 | 218 | 193 | 208 | 185 | 151 | 168 | 151 | 143 | 146 | 203 | 176 | 186 | |
| 21 | 229 | 216 | 219 | 194 | 172 | 181 | 153 | 144 | 149 | 207 | 191 | 201 | |
| 22 | 232 | 220 | 225 | 172 | 159 | 165 | 157 | 150 | 153 | 192 | 180 | 188 | |
| 23 | 226 | 211 | 222 | 177 | 157 | 164 | 155 | 135 | 144 | 180 | 164 | 171 | |
| 24 | 224 | 207 | 218 | 168 | 159 | 164 | 145 | 134 | 138 | --- | --- | 169 | |
| 25 | 219 | 192 | 210 | 163 | 149 | 156 | 147 | 135 | 139 | --- | --- | 171 | |
| 26 | 222 | 192 | 210 | 149 | 130 | 140 | 139 | 128 | 134 | --- | --- | 176 | |
| 27 | 226 | 192 | 213 | 132 | 119 | 125 | 132 | 122 | 126 | --- | --- | 165 | |
| 28 | 226 | 209 | 218 | 131 | 119 | 123 | 135 | 124 | 129 | --- | --- | 170 | |
| 29 | 227 | 215 | 219 | 137 | 127 | 132 | 141 | 131 | 136 | --- | --- | 164 | |
| 30 | --- | --- | --- | 133 | 128 | 130 | 149 | 140 | 144 | --- | --- | 172 | |
| 31 | --- | --- | --- | 145 | 123 | 136 | --- | --- | --- | --- | --- | 176 | |
| MONTH | 408 | 150 | 221 | 224 | 119 | 155 | 157 | 94 | 129 | --- | --- | 163 | |

| DAY | MAX | JUNE | | | JULY | | | AUGUST | | | SEPTEMBER | | |
|-------|-----|------|------|-----|------|------|-----|--------|------|-----|-----------|------|--|
| | | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | |
| 1 | --- | --- | 180 | 232 | 198 | 210 | 233 | 224 | 227 | 291 | 286 | 289 | |
| 2 | --- | --- | 181 | 225 | 197 | 208 | 243 | 225 | 233 | 293 | 290 | 292 | |
| 3 | --- | --- | 180 | 248 | 225 | 237 | 244 | 224 | 234 | 299 | 291 | 294 | |
| 4 | --- | --- | 174 | 258 | 217 | 227 | 237 | 224 | 231 | 303 | 298 | 300 | |
| 5 | --- | --- | 182 | 225 | 211 | 219 | 289 | 232 | 253 | 301 | 291 | 294 | |
| 6 | --- | --- | 191 | 214 | 211 | 213 | 365 | 285 | 339 | 304 | 292 | 297 | |
| 7 | --- | --- | 199 | 227 | 214 | 220 | 356 | 276 | 315 | 319 | 304 | 312 | |
| 8 | 201 | 191 | 196 | 228 | 220 | 224 | 276 | 264 | 270 | 326 | 310 | 320 | |
| 9 | --- | --- | 190 | 223 | 217 | 220 | 392 | 264 | 301 | 310 | 220 | 254 | |
| 10 | 194 | 184 | 189 | 229 | 217 | 223 | 456 | 373 | 412 | 252 | 231 | 240 | |
| 11 | 200 | 186 | 191 | 228 | 222 | 224 | 441 | 283 | 352 | 278 | 252 | 271 | |
| 12 | 249 | 192 | 210 | 224 | 213 | 219 | 533 | 421 | 477 | 284 | 274 | 279 | |
| 13 | 242 | 199 | 207 | 214 | 187 | 196 | 485 | 392 | 441 | 304 | 284 | 294 | |
| 14 | 215 | 201 | 206 | 222 | 195 | 208 | 482 | 321 | 383 | 316 | 304 | 310 | |
| 15 | 258 | 202 | 210 | 222 | 218 | 220 | 412 | 318 | 353 | 367 | 313 | 351 | |
| 16 | 285 | 214 | 259 | 247 | 211 | 218 | 488 | 291 | 329 | 352 | 331 | 337 | |
| 17 | 276 | 210 | 236 | 247 | 231 | 240 | 479 | 312 | 349 | 332 | 294 | 310 | |
| 18 | 321 | 248 | 296 | 232 | 213 | 220 | 340 | 305 | 312 | --- | --- | 205 | |
| 19 | 331 | 247 | 288 | 217 | 207 | 211 | 322 | 304 | 309 | 176 | 167 | 173 | |
| 20 | 305 | 235 | 264 | 211 | 199 | 204 | 313 | 295 | 308 | 191 | 176 | 184 | |
| 21 | 268 | 231 | 258 | 213 | 197 | 200 | 327 | 147 | 255 | 206 | 191 | 198 | |
| 22 | 286 | 248 | 264 | 204 | 199 | 201 | 220 | 188 | 204 | 214 | 206 | 211 | |
| 23 | 287 | 268 | 278 | 205 | 197 | 201 | 282 | 220 | 249 | 224 | 214 | 219 | |
| 24 | 268 | 209 | 218 | 244 | 170 | 207 | 292 | 271 | 280 | 233 | 224 | 228 | |
| 25 | 217 | 202 | 205 | 249 | 242 | 246 | 288 | 270 | 278 | 241 | 233 | 236 | |
| 26 | 236 | 202 | 209 | 271 | 242 | 258 | 272 | 269 | 270 | 249 | 241 | 245 | |
| 27 | 229 | 201 | 208 | 281 | 261 | 271 | 281 | 270 | 275 | 256 | 243 | 248 | |
| 28 | 245 | 216 | 232 | 276 | 250 | 263 | 289 | 280 | 283 | 262 | 190 | 243 | |
| 29 | 246 | 204 | 225 | 269 | 246 | 263 | 304 | 289 | 295 | 190 | 166 | 176 | |
| 30 | 236 | 202 | 215 | 255 | 241 | 251 | 313 | 294 | 307 | 186 | 176 | 181 | |
| 31 | --- | --- | --- | 241 | 220 | 226 | 303 | 288 | 294 | --- | --- | --- | |
| MONTH | --- | --- | 218 | 281 | 170 | 224 | 533 | 147 | 304 | --- | --- | 260 | |

MERRIMACK RIVER BASIN

01095375 QUINAPOXET RIVER AT CANADA MILLS NEAR HOLDEN, MA--Continued

WATER TEMPERATURE (DEG. C), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY | MAX | OCTOBER | | NOVEMBER | | | DECEMBER | | | JANUARY | | |
|-------|------|---------|------|----------|------|------|----------|------|------|---------|-----|------|
| | | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
| 1 | 13.5 | 12.2 | 12.8 | 12.3 | 10.3 | 11.3 | 5.0 | 3.5 | 4.4 | 3.1 | 2.0 | 2.3 |
| 2 | 13.7 | 11.6 | 12.6 | 12.2 | 11.2 | 11.7 | 3.5 | 1.1 | 2.6 | 2.4 | 1.8 | 2.1 |
| 3 | 12.3 | 10.4 | 11.3 | 13.4 | 11.6 | 12.4 | 1.1 | .1 | .6 | 3.0 | 2.3 | 2.6 |
| 4 | 10.9 | 9.7 | 10.4 | 12.5 | 10.6 | 11.7 | 1.6 | .2 | .9 | 3.5 | 2.9 | 3.1 |
| 5 | 11.2 | 9.7 | 10.4 | 10.6 | 9.8 | 10.0 | 1.2 | .1 | .7 | 2.9 | 2.0 | 2.3 |
| 6 | 10.8 | 9.1 | 9.9 | 11.0 | 10.4 | 10.7 | .9 | .0 | .4 | 2.3 | .9 | 1.9 |
| 7 | 10.6 | 8.2 | 9.5 | 10.9 | 9.7 | 10.4 | .8 | .0 | .3 | .9 | .3 | .6 |
| 8 | 11.7 | 8.9 | 10.3 | 9.7 | 6.7 | 8.4 | 1.2 | .4 | .7 | .4 | .0 | .1 |
| 9 | 13.1 | 10.9 | 12.0 | 6.8 | 5.5 | 6.2 | 1.3 | -0.1 | .5 | .0 | .0 | .0 |
| 10 | 12.9 | 11.8 | 12.3 | 6.5 | 4.8 | 5.6 | 1.9 | 1.2 | 1.6 | .0 | .0 | .0 |
| 11 | 13.0 | 10.7 | 11.9 | 6.3 | 4.7 | 5.5 | 2.1 | 1.3 | 1.7 | .0 | .0 | .0 |
| 12 | 11.9 | 11.0 | 11.5 | 7.8 | 6.3 | 7.0 | 1.8 | 1.2 | 1.5 | .1 | .0 | .1 |
| 13 | 13.3 | 11.5 | 12.3 | 8.5 | 6.1 | 7.7 | 1.4 | .5 | 1.0 | .6 | .0 | .3 |
| 14 | 12.4 | 10.6 | 11.7 | 6.1 | 3.8 | 4.9 | .8 | .0 | .4 | .0 | .0 | .0 |
| 15 | 13.3 | 11.7 | 12.5 | 4.3 | 3.1 | 3.7 | 1.4 | .0 | .8 | .0 | .0 | .0 |
| 16 | 11.9 | 10.5 | 11.2 | 4.6 | 2.9 | 3.8 | 1.4 | .5 | .9 | .0 | .0 | .0 |
| 17 | 11.0 | 9.4 | 10.3 | 4.9 | 4.3 | 4.6 | 2.2 | .8 | 1.5 | .0 | .0 | .0 |
| 18 | 10.7 | 9.2 | 10.2 | 6.0 | 4.7 | 5.2 | 1.6 | .5 | 1.1 | .1 | .0 | .0 |
| 19 | 9.2 | 7.6 | 8.6 | 7.3 | 5.0 | 6.0 | 1.4 | .8 | 1.0 | .1 | .0 | .0 |
| 20 | 8.5 | 6.5 | 7.6 | 7.6 | 6.4 | 7.3 | 1.6 | .8 | 1.1 | .1 | .0 | .0 |
| 21 | 10.5 | 7.4 | 9.1 | 7.2 | 6.0 | 6.5 | 1.2 | .4 | .8 | .1 | .0 | .0 |
| 22 | 10.1 | 8.5 | 9.4 | 6.8 | 5.4 | 6.0 | 1.9 | .7 | 1.3 | .1 | .0 | .1 |
| 23 | 8.5 | 6.8 | 7.8 | 6.0 | 4.8 | 5.4 | 2.6 | 1.5 | 1.9 | .1 | .0 | .0 |
| 24 | 7.3 | 5.8 | 6.7 | 5.7 | 4.1 | 5.0 | 3.2 | 1.7 | 2.5 | .1 | .0 | .0 |
| 25 | 7.3 | 5.0 | 6.2 | 5.8 | 4.3 | 5.4 | 2.6 | 1.7 | 2.2 | .1 | .0 | .0 |
| 26 | 9.5 | 6.9 | 8.1 | 5.1 | 3.5 | 4.4 | 2.0 | 1.6 | 1.7 | .1 | .0 | .0 |
| 27 | 11.5 | 9.5 | 10.7 | 5.5 | 4.4 | 5.0 | 2.2 | 1.4 | 1.6 | .1 | .0 | .0 |
| 28 | 11.4 | 10.0 | 10.7 | 6.4 | 5.2 | 5.5 | 2.4 | 1.1 | 1.7 | .0 | .0 | .0 |
| 29 | 11.3 | 10.3 | 10.7 | 7.3 | 4.5 | 6.1 | 2.8 | 1.6 | 2.1 | .1 | .0 | .0 |
| 30 | 10.8 | 9.7 | 10.2 | 5.2 | 4.2 | 4.7 | 3.6 | 2.1 | 2.7 | .1 | .0 | .0 |
| 31 | 11.2 | 9.2 | 10.1 | --- | --- | --- | 3.0 | 2.1 | 2.4 | .1 | .0 | .0 |
| MONTH | 13.7 | 5.0 | 10.3 | 13.4 | 2.9 | 6.9 | 5.0 | -0.1 | 1.4 | 3.5 | 0.0 | 0.5 |

| DAY | MAX | FEBRUARY | | MARCH | | | APRIL | | | MAY | | |
|-------|-----|----------|------|-------|-----|------|-------|------|------|------|------|------|
| | | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
| 1 | 0.1 | 0.0 | 0.0 | 4.7 | 1.8 | 3.1 | 4.4 | 4.0 | 4.2 | 17.6 | 13.2 | 15.3 |
| 2 | .1 | .0 | .0 | 4.8 | 2.4 | 3.3 | 4.1 | 3.7 | 3.8 | 16.7 | 14.7 | 15.7 |
| 3 | .1 | .0 | .1 | 4.6 | 2.5 | 3.3 | 4.0 | 3.6 | 3.8 | 15.6 | 14.1 | 15.3 |
| 4 | .4 | .0 | .2 | 4.0 | 2.8 | 3.3 | 4.4 | 3.8 | 4.1 | 15.4 | 12.7 | 13.9 |
| 5 | .7 | .1 | .4 | 3.7 | 2.8 | 3.3 | 5.5 | 3.2 | 4.1 | 14.6 | 11.9 | 13.2 |
| 6 | .7 | .0 | .3 | 4.5 | 2.8 | 3.9 | 6.2 | 2.8 | 4.3 | 16.2 | 11.8 | 14.0 |
| 7 | 1.8 | .4 | 1.1 | 4.8 | 2.6 | 3.4 | 6.8 | 3.6 | 4.9 | 18.3 | 13.5 | 15.6 |
| 8 | .7 | .0 | .2 | 3.3 | 2.6 | 2.9 | 8.0 | 4.0 | 5.9 | 16.0 | 12.5 | 14.2 |
| 9 | 1.4 | .0 | .6 | 3.1 | 2.4 | 2.7 | 8.6 | 5.0 | 6.7 | 13.8 | 12.6 | 13.1 |
| 10 | 2.5 | .8 | 1.5 | 3.9 | 2.0 | 2.8 | 9.4 | 5.0 | 7.0 | 15.6 | 12.1 | 13.9 |
| 11 | 2.0 | .4 | 1.1 | 4.2 | 1.9 | 2.8 | 8.4 | 5.9 | 7.2 | 18.5 | 13.9 | 16.2 |
| 12 | 1.4 | -.1 | .6 | 2.9 | 1.8 | 2.4 | 9.7 | 6.5 | 7.9 | 20.1 | 15.4 | 17.7 |
| 13 | 2.2 | .3 | 1.1 | 4.5 | 1.1 | 2.4 | 7.9 | 6.0 | 6.9 | 19.3 | 16.6 | 18.0 |
| 14 | 2.4 | .6 | 1.3 | 3.9 | .9 | 2.3 | 7.3 | 6.2 | 7.1 | 20.0 | 15.3 | 17.7 |
| 15 | 1.2 | -.1 | .5 | 5.4 | 2.2 | 3.4 | 8.2 | 6.7 | 7.1 | 21.7 | 17.5 | 19.6 |
| 16 | .2 | .0 | .0 | 3.4 | .5 | 2.2 | 9.3 | 6.0 | 7.6 | 19.9 | 17.7 | 18.8 |
| 17 | .3 | .0 | .1 | 2.5 | .6 | 1.7 | 11.4 | 7.2 | 9.2 | 20.2 | 17.0 | 18.6 |
| 18 | .7 | .0 | .3 | 3.2 | 1.3 | 2.2 | 12.7 | 9.3 | 10.9 | 19.5 | 17.4 | 18.5 |
| 19 | 1.2 | .0 | .5 | 3.0 | 1.5 | 2.2 | 14.6 | 9.9 | 12.2 | 18.9 | 16.9 | 18.2 |
| 20 | 1.6 | .0 | .9 | 4.4 | .4 | 2.3 | 15.1 | 11.6 | 13.1 | 19.7 | 15.6 | 17.6 |
| 21 | 1.9 | 1.2 | 1.6 | 4.5 | 2.2 | 3.1 | 14.2 | 10.8 | 12.3 | 19.7 | 16.3 | 18.0 |
| 22 | 3.2 | 1.2 | 1.9 | 4.4 | 1.3 | 2.4 | 16.3 | 11.8 | 13.9 | 18.6 | 14.6 | 16.3 |
| 23 | 2.9 | .5 | 1.5 | 5.0 | 1.2 | 2.9 | 14.4 | 11.7 | 12.7 | 18.1 | 14.0 | 16.0 |
| 24 | 2.0 | .3 | 1.2 | 6.6 | 2.3 | 4.2 | 15.0 | 11.4 | 12.8 | 17.0 | 15.2 | 15.9 |
| 25 | 2.5 | .1 | 1.2 | 5.8 | 3.8 | 4.7 | 13.4 | 10.1 | 11.7 | 15.2 | 14.3 | 14.9 |
| 26 | 2.6 | .0 | 1.2 | 8.0 | 4.3 | 5.8 | 11.2 | 10.1 | 10.8 | 14.3 | 13.5 | 13.8 |
| 27 | 2.8 | .0 | 1.3 | 7.0 | 5.3 | 5.9 | 14.1 | 10.9 | 12.3 | 17.0 | 13.2 | 15.2 |
| 28 | 3.8 | .6 | 2.0 | 5.7 | 4.2 | 5.1 | 13.8 | 11.2 | 12.2 | 16.6 | 15.3 | 15.7 |
| 29 | 3.5 | 1.3 | 2.4 | 7.5 | 3.9 | 5.2 | 15.4 | 10.6 | 12.8 | 16.4 | 14.3 | 15.3 |
| 30 | --- | --- | --- | 6.2 | 3.9 | 4.7 | 16.8 | 12.4 | 14.4 | 16.9 | 12.7 | 14.8 |
| 31 | --- | --- | --- | 4.6 | 4.1 | 4.4 | --- | --- | --- | 17.0 | 13.5 | 15.4 |
| MONTH | 3.8 | -0.1 | 0.9 | 8.0 | 0.4 | 3.4 | 16.8 | 2.8 | 8.8 | 21.7 | 11.8 | 16.0 |

MERRIMACK RIVER BASIN

01096000 SQUANNACOOK RIVER NEAR WEST GROTON, MA

LOCATION.--Lat 42° 38' 03", long 71° 39' 30", Middlesex County, Hydrologic Unit 01070004, on left bank 0.7 mi downstream from Trout Brook and 2.7 mi northwest of West Groton.

DRAINAGE AREA.--Total above gage is 65.9 mi²; net above gage is 63.7 mi², excludes 2.16 mi², above outlet of Ashby Reservoir.

PERIOD OF RECORD.--Discharge: October 1949 to current year.

Water-quality records: Water year 1957.

REVISED RECORDS.--WDR MA-RI-84-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 244.27 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Occasional regulation at low flow by mill upstream; regulation greater prior to 1961. Entire flow from 2.16 mi² upstream from outlet of Ashby Reservoir diverted for municipal supply of Fitchburg except for occasional periods of spill. Satellite gage-height telemeter at station.

AVERAGE DISCHARGE.--55 years (water years 1950–2004), 112 ft³/s, 23.88 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,220 ft³/s, Apr. 6, 1987, gage height, 8.16 ft; minimum daily discharge, 2.0 ft³/s, Sept. 7, 1965.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,060 ft³/s, Apr. 2, gage height, 8.07 ft; minimum discharge, 12 ft³/s, Aug. 9, Sept. 5, 8.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004 DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|------|------|------|------|-------|------|------|------|------|------|
| 1 | 49 | 197 | 94 | 198 | 53 | 65 | 527 | 159 | 96 | 29 | 21 | 16 |
| 2 | 40 | 147 | 83 | 171 | 51 | 95 | 3070 | 143 | 98 | 27 | 20 | 15 |
| 3 | 34 | 129 | 71 | 159 | 51 | 152 | 1340 | 144 | 89 | 25 | 17 | 14 |
| 4 | 32 | 131 | 64 | 169 | 55 | 187 | 665 | 218 | 78 | 27 | 16 | 13 |
| 5 | 32 | 139 | 61 | 191 | 55 | 167 | 511 | 265 | 71 | 23 | 18 | 13 |
| 6 | 31 | 173 | 62 | 186 | 56 | 165 | 395 | 192 | 65 | 23 | 17 | 14 |
| 7 | 29 | 178 | 66 | 154 | 61 | 216 | 296 | 156 | 59 | e22 | 18 | 13 |
| 8 | 27 | 142 | 75 | e120 | 64 | 182 | 254 | 133 | 55 | 21 | 18 | 13 |
| 9 | 26 | 112 | e73 | e98 | 59 | 143 | 220 | 118 | 52 | 40 | 14 | 28 |
| 10 | 24 | 99 | 70 | e81 | 57 | 120 | 200 | 117 | 58 | 34 | 13 | 55 |
| 11 | 23 | 96 | 82 | e74 | 56 | 111 | 174 | 111 | 64 | 29 | 13 | 46 |
| 12 | 24 | 99 | 311 | e74 | 55 | 111 | 156 | 104 | 53 | 26 | 15 | 33 |
| 13 | 24 | 105 | 310 | e80 | 54 | 109 | 189 | 96 | 45 | 22 | 19 | 27 |
| 14 | 24 | 110 | e216 | e77 | 53 | 99 | 849 | 84 | 41 | 25 | 20 | 23 |
| 15 | 71 | 99 | e174 | e68 | 50 | 97 | 753 | 78 | 39 | 27 | 23 | 20 |
| 16 | 156 | 88 | e160 | e59 | e49 | 102 | 448 | 78 | 37 | 28 | 24 | 18 |
| 17 | 97 | 81 | e165 | e57 | 48 | 101 | 319 | 78 | 37 | 28 | 25 | 18 |
| 18 | 69 | 79 | 464 | e62 | 47 | 96 | 246 | 74 | 44 | 26 | 25 | 75 |
| 19 | 56 | 76 | 581 | e63 | 47 | 89 | 207 | 87 | 48 | 34 | 23 | 299 |
| 20 | 47 | 83 | 333 | e60 | 46 | 83 | 181 | 88 | 48 | 37 | 22 | 144 |
| 21 | 41 | 98 | 232 | e56 | 47 | 105 | 162 | 72 | 35 | 33 | 38 | 81 |
| 22 | 40 | 95 | 180 | e54 | 48 | 148 | 146 | 69 | 34 | 27 | 73 | 58 |
| 23 | 45 | 83 | 159 | e52 | 49 | 127 | 180 | 70 | 33 | 21 | 58 | 46 |
| 24 | 43 | 77 | 163 | e50 | 49 | 111 | 311 | 77 | 32 | 22 | 40 | 36 |
| 25 | 40 | 79 | 407 | e49 | 48 | 109 | 234 | 161 | 30 | 21 | 31 | 30 |
| 26 | 40 | 75 | 479 | e48 | 47 | 122 | 205 | 195 | 30 | 18 | 26 | 27 |
| 27 | 48 | 71 | 330 | 47 | 46 | 162 | 360 | 239 | 33 | 17 | 23 | 25 |
| 28 | 155 | 69 | 241 | 49 | 47 | 202 | 342 | 231 | 30 | 22 | 20 | 26 |
| 29 | 309 | 86 | 200 | 52 | 53 | 164 | 228 | 196 | 30 | 24 | 19 | 58 |
| 30 | 573 | 104 | 187 | 54 | --- | 132 | 179 | 141 | 31 | 24 | 17 | 105 |
| 31 | 313 | --- | 210 | 54 | --- | 133 | --- | 107 | --- | 21 | 17 | --- |
| TOTAL | 2562 | 3200 | 6303 | 2766 | 1501 | 4005 | 13347 | 4081 | 1495 | 803 | 743 | 1389 |
| MEAN | 82.6 | 107 | 203 | 89.2 | 51.8 | 129 | 445 | 132 | 49.8 | 25.9 | 24.0 | 46.3 |
| MAX | 573 | 197 | 581 | 198 | 64 | 216 | 3070 | 265 | 98 | 40 | 73 | 299 |
| MIN | 23 | 69 | 61 | 47 | 46 | 65 | 146 | 69 | 30 | 17 | 13 | 13 |
| CFSM | 1.30 | 1.67 | 3.19 | 1.40 | 0.81 | 2.03 | 6.98 | 2.07 | 0.78 | 0.41 | 0.38 | 0.73 |
| IN. | 1.50 | 1.87 | 3.68 | 1.62 | 0.88 | 2.34 | 7.79 | 2.38 | 0.87 | 0.47 | 0.43 | 0.81 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 2004, BY WATER YEAR (WY)

| | MEAN | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 53.1 | 96.6 | 121 | 119 | 128 | 226 | 275 | 146 | 84.3 | 36.4 | 29.1 | 31.1 |
| MAX | 296 | 304 | 349 | 323 | 328 | 554 | 654 | 343 | 330 | 84.7 | 98.8 | 245 |
| (WY) | 1956 | 1956 | 1997 | 1956 | 1970 | 1983 | 1987 | 1954 | 1998 | 1951 | 1986 | 1954 |
| MIN | 9.41 | 12.6 | 22.7 | 20.1 | 33.6 | 81.5 | 75.8 | 51.9 | 18.5 | 8.26 | 6.21 | 6.80 |
| (WY) | 1965 | 1965 | 1966 | 1981 | 1980 | 1989 | 1985 | 1965 | 1999 | 1965 | 1966 | 1965 |

| SUMMARY STATISTICS | FOR 2003 CALENDAR YEAR | | FOR 2004 WATER YEAR | | WATER YEARS 1950 - 2004 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|-------------|
| ANNUAL TOTAL | 46877 | | 42195 | | | |
| ANNUAL MEAN | 128 | | 115 | | 112 | |
| HIGHEST ANNUAL MEAN | | | | | 174 | |
| LOWEST ANNUAL MEAN | | | | | 35.9 | |
| HIGHEST DAILY MEAN | 802 | Mar 22 | 3070 | Apr 2 | 3420 | Apr 6 1987 |
| LOWEST DAILY MEAN | 14 | Sep 13 | 13 | Aug 10 | 2.0 | Sep 7 1965 |
| ANNUAL SEVEN-DAY MINIMUM | 15 | Sep 9 | 14 | Sep 2 | 4.3 | Aug 28 1966 |
| MAXIMUM PEAK FLOW | | | 4060 | Apr 2 | 4220 | Apr 6 1987 |
| MAXIMUM PEAK STAGE | | | 8.07 | Apr 2 | 8.16 | Apr 6 1987 |
| INSTANTANEOUS LOW FLOW | | | 12 | Aug 9 | | |
| ANNUAL RUNOFF (CFSM) | 2.02 | | 1.81 | | 1.76 | |
| ANNUAL RUNOFF (INCHES) | 27.38 | | 24.64 | | 23.88 | |
| 10 PERCENT EXCEEDS | 310 | | 219 | | 252 | |
| 50 PERCENT EXCEEDS | 84 | | 66 | | 66 | |
| 90 PERCENT EXCEEDS | 23 | | 22 | | 15 | |

e Estimated

MERRIMACK RIVER BASIN

01096500 NASHUA RIVER AT EAST PEPPERELL, MA

LOCATION.--Lat 42° 40' 03", long 71° 34' 32", Middlesex County, Hydrologic Unit 01070004, on right bank 200 ft downstream from powerplant of James River--Pepperell Co. at East Pepperell and 0.8 mi upstream from Nissitissit River.

DRAINAGE AREA.--Total above gage, 435 mi², net above gage, 316 mi², excludes 119 mi² for use of Boston metropolitan district and city of Worcester.

PERIOD OF RECORD.--Discharge: October 1935 to current year.

Water-quality records: Water years 1952-53, 1973-74.

REVISED RECORDS.--WDR MA-RI-84-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 169.04 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Extremes and daily discharge include water released while diverting flow of Nashua River for use of Boston metropolitan district and water diverted into basin from Ware River Basin since 1955 for municipal use of Fitchburg. Prior to October 1981, water diverted around station through plant of James River--Pepperell Co. was added to daily figures. Flow regulated by powerplant immediately upstream. Telephone and satellite gage-height telemeters at station.

AVERAGE DISCHARGE.--69 years (water years 1936-2004), 582 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 20,900 ft³/s, Mar. 20, 1936, gage height, 19.1 ft, from floodmarks, from rating curve extended above 12,000 ft³/s on basis of velocity-area studies; minimum daily discharge, 1.1 ft³/s, Aug. 13, 1939.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,140 ft³/s, Apr. 3, gage height, 10.81 ft; minimum discharge, 39 ft³/s, Sept. 14, 15, 17.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004 DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|-------|-------|------|-------|-------|-------|-------|------|-------|-------|
| 1 | 1770 | 1300 | 562 | 959 | 285 | 257 | 1410 | 1120 | 745 | 221 | 320 | 391 |
| 2 | 1760 | 962 | 538 | 897 | 276 | 333 | 4250 | 1030 | 546 | 230 | 314 | 415 |
| 3 | 1690 | 800 | 495 | 850 | 280 | 513 | 6010 | 979 | 657 | 245 | 302 | 345 |
| 4 | 1670 | 758 | 382 | 856 | 288 | 765 | 5240 | 1110 | 705 | 252 | 308 | 103 |
| 5 | 1670 | 733 | 322 | 904 | 294 | 727 | 3470 | 1340 | 679 | 265 | 315 | 103 |
| 6 | 1700 | 807 | 325 | 933 | 294 | 688 | 2280 | 1240 | 586 | 283 | 319 | 103 |
| 7 | 1720 | 844 | 332 | 862 | 298 | 739 | 1700 | 1080 | 425 | 270 | 317 | 81 |
| 8 | 1660 | 767 | 348 | 741 | 319 | 842 | 1400 | 966 | 451 | 246 | 309 | 51 |
| 9 | 1640 | 677 | 372 | 652 | 323 | 819 | 1230 | 890 | 468 | 191 | 304 | 270 |
| 10 | 1680 | 625 | 398 | 508 | 317 | 743 | 1100 | 880 | 488 | 259 | 176 | 412 |
| 11 | 1680 | 564 | 428 | 411 | 313 | 703 | 991 | 864 | 528 | 352 | 201 | 409 |
| 12 | 1720 | 584 | 979 | 485 | 309 | 679 | 900 | 822 | 509 | 324 | 268 | 388 |
| 13 | 1760 | 582 | 1270 | 533 | 303 | 667 | 936 | 783 | 476 | 385 | 392 | 339 |
| 14 | 1790 | 648 | 989 | 513 | 300 | 685 | 1750 | 761 | 455 | 377 | 453 | 168 |
| 15 | 1900 | 589 | 794 | 462 | 296 | 664 | 2970 | 737 | 446 | 358 | 427 | 102 |
| 16 | 2450 | 537 | 839 | 434 | 293 | 651 | 2970 | 686 | 291 | 391 | 376 | 173 |
| 17 | 2400 | 446 | 826 | 375 | 289 | 646 | 2380 | 619 | 314 | 376 | 291 | 123 |
| 18 | 1920 | 531 | 1320 | 331 | 284 | 407 | 1930 | 640 | 379 | 358 | 414 | 318 |
| 19 | 411 | 445 | 2110 | 446 | 279 | 341 | 1640 | 655 | 505 | 423 | 411 | 1210 |
| 20 | 335 | 390 | 1970 | 422 | 274 | 349 | 1430 | 656 | 507 | 406 | 307 | 1450 |
| 21 | 352 | 597 | 1390 | 393 | 269 | 372 | 1210 | 638 | 461 | 339 | 244 | 961 |
| 22 | 310 | 543 | 1080 | 382 | 256 | 566 | 1150 | 618 | 387 | 324 | 696 | 715 |
| 23 | 275 | 486 | 947 | 341 | 247 | 593 | 1130 | 552 | 346 | 322 | 713 | 616 |
| 24 | 281 | 439 | 919 | 302 | 250 | 399 | 1370 | 429 | 330 | 331 | 560 | 561 |
| 25 | 278 | 457 | 1290 | 300 | 250 | 501 | 1410 | 746 | 327 | 369 | 476 | 500 |
| 26 | 262 | 466 | 1860 | 295 | 250 | 583 | 1280 | 899 | 332 | 345 | 448 | 456 |
| 27 | 322 | 460 | 1740 | 290 | 250 | 685 | 1520 | 1000 | 320 | 330 | 426 | 433 |
| 28 | 625 | 535 | 1350 | 288 | 250 | 753 | 1720 | 1110 | 289 | 331 | 417 | 420 |
| 29 | 1120 | 472 | 1120 | 290 | 253 | 774 | 1530 | 1050 | 242 | 351 | 401 | 568 |
| 30 | 1720 | 565 | 1010 | 289 | --- | 697 | 1280 | 936 | 221 | 343 | 338 | 847 |
| 31 | 1840 | --- | 982 | 287 | --- | 714 | --- | 816 | --- | 333 | 277 | --- |
| TOTAL | 40711 | 18609 | 29287 | 16031 | 8189 | 18855 | 59587 | 26652 | 13415 | 9930 | 11520 | 13031 |
| MEAN | 1313 | 620 | 945 | 517 | 282 | 608 | 1986 | 860 | 447 | 320 | 372 | 434 |
| MAX | 2450 | 1300 | 2110 | 959 | 323 | 842 | 6010 | 1340 | 745 | 423 | 713 | 1450 |
| MIN | 262 | 390 | 322 | 287 | 247 | 257 | 900 | 429 | 221 | 191 | 176 | 51 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1936 - 2004, BY WATER YEAR (WY)

| | | | | | | | | | | | | |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 325 | 477 | 599 | 604 | 662 | 1131 | 1270 | 728 | 499 | 255 | 218 | 233 |
| MAX | 1356 | 1781 | 1616 | 1417 | 1544 | 3930 | 3676 | 1382 | 1976 | 1366 | 966 | 1671 |
| (WY) | 1956 | 1956 | 1997 | 1979 | 1970 | 1936 | 1987 | 1953 | 1982 | 1938 | 1938 | 1938 |
| MIN | 91.1 | 94.7 | 134 | 116 | 186 | 386 | 369 | 236 | 107 | 90.0 | 69.6 | 72.9 |
| (WY) | 1942 | 2002 | 1966 | 1981 | 1980 | 1989 | 1985 | 1965 | 1999 | 1966 | 2002 | 2002 |

SUMMARY STATISTICS FOR 2003 CALENDAR YEAR FOR 2004 WATER YEAR WATER YEARS 1936 - 2004

| | | | | | | | | | |
|--------------------------|--------|--|--|--------|--|--|--------|--|--|
| ANNUAL TOTAL | 292407 | | | 265817 | | | 582 | | |
| ANNUAL MEAN | 801 | | | 726 | | | 1956 | | |
| HIGHEST ANNUAL MEAN | | | | | | | 969 | | |
| LOWEST ANNUAL MEAN | | | | | | | 214 | | |
| HIGHEST DAILY MEAN | 2920 | | | Mar 23 | | | 19400 | | |
| LOWEST DAILY MEAN | 184 | | | Sep 10 | | | 1.1 | | |
| ANNUAL SEVEN-DAY MINIMUM | 218 | | | Sep 7 | | | 14 | | |
| MAXIMUM PEAK FLOW | | | | 6140 | | | Apr 3 | | |
| MAXIMUM PEAK STAGE | | | | 10.81 | | | Apr 3 | | |
| INSTANTANEOUS LOW FLOW | | | | 39 | | | Sep 14 | | |
| 10 PERCENT EXCEEDS | 1710 | | | 1640 | | | 1260 | | |
| 50 PERCENT EXCEEDS | 639 | | | 498 | | | 369 | | |
| 90 PERCENT EXCEEDS | 313 | | | 273 | | | 98 | | |

MERRIMACK RIVER BASIN

01098530 SUDBURY RIVER AT SAXONVILLE, MA

LOCATION.--Lat 42° 19'31", long 71° 23'53", Middlesex County, Hydrologic Unit 01070005, on left bank at downstream side of new Danforth Street Bridge, at Saxonville, 600 ft east of Elm Street, 700 ft downstream from confluence with Lake Cochituate Outlet, and 0.7 mi downstream from Saxonville Dam.

DRAINAGE AREA.--106 mi².

PERIOD OF RECORD.--November 1979 to current year.
Water-quality records: Water years 1994-95.

GAGE.--Water-stage recorder. Datum of gage is 110.55 ft above National Geodetic Vertical Datum of 1929 (Massachusetts Department of Public Works benchmark).

REMARKS.--Records good except those for estimated daily discharge, which are poor. Flow regulated by reservoirs upstream and affected by diversions and spill. Flow diverted as needed for use of Boston metropolitan district. Part of flow from Wachusett Reservoir on Nashua River is diverted into Sudbury Reservoir en route to Boston metropolitan district.

AVERAGE DISCHARGE.--24 years (water years 1981-2004), 193 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,420 ft³/s, June 7, 1982, gage height, 13.30 ft; maximum gage height, 13.47 ft, Apr. 8, 1987; minimum daily discharge, 4.0 ft³/s, Sept. 12, 13, 2001.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,020 ft³/s, Apr. 2, gage height, 10.38 ft; minimum discharge, 17 ft³/s, Oct. 12.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004 DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|-------|------|------|------|-------|------|------|------|------|------|
| 1 | 27 | 420 | 166 | 311 | 108 | 159 | 616 | 327 | 184 | 44 | 39 | 110 |
| 2 | 25 | 374 | 159 | 304 | 106 | 219 | 992 | 303 | 232 | 70 | e34 | 97 |
| 3 | 27 | 352 | 154 | 295 | 106 | 242 | 915 | 294 | 215 | 54 | 43 | 45 |
| 4 | 33 | 349 | 146 | 300 | e117 | 240 | 822 | 359 | 197 | 50 | 103 | 35 |
| 5 | 35 | 341 | 151 | 314 | e125 | 216 | 764 | 334 | 184 | 61 | 132 | e32 |
| 6 | 28 | 282 | 178 | 292 | e138 | 190 | 698 | 318 | 177 | 64 | 110 | 31 |
| 7 | 23 | 256 | 184 | 273 | e150 | 188 | 640 | 276 | 167 | 51 | 59 | 30 |
| 8 | 21 | 239 | 179 | e269 | e167 | 196 | 587 | 198 | 114 | 52 | 50 | 88 |
| 9 | 20 | 218 | e178 | e241 | 181 | 217 | 512 | 188 | 94 | 70 | 46 | 174 |
| 10 | 18 | 211 | 187 | e215 | 168 | 207 | 425 | 192 | 93 | 44 | 44 | 169 |
| 11 | 18 | 224 | 263 | e200 | 170 | 202 | 391 | 200 | 87 | 40 | 50 | 154 |
| 12 | 24 | 224 | 362 | e170 | 167 | 201 | 387 | 217 | 78 | 44 | 45 | 149 |
| 13 | 30 | 225 | 344 | 139 | 164 | 193 | 505 | 205 | 71 | 46 | 229 | 144 |
| 14 | 24 | 217 | 328 | e121 | 160 | 180 | 838 | 194 | 66 | 57 | 134 | 138 |
| 15 | 218 | 209 | e349 | 131 | 158 | 152 | 824 | 185 | 66 | 51 | 176 | 117 |
| 16 | 189 | 210 | e380 | e109 | e133 | 87 | 764 | 190 | 63 | 59 | 172 | 51 |
| 17 | 174 | 209 | 447 | 121 | e118 | 93 | 688 | 171 | 61 | 102 | 196 | 45 |
| 18 | 172 | 221 | 687 | 120 | e92 | 99 | 622 | 128 | 66 | 103 | 180 | 283 |
| 19 | 168 | 247 | 619 | 120 | 63 | 145 | 567 | 153 | 65 | 117 | 166 | 266 |
| 20 | 162 | 256 | 565 | e99 | 72 | 147 | 480 | 139 | 58 | 107 | 142 | 215 |
| 21 | 144 | 261 | 496 | e121 | 124 | 193 | 354 | 127 | 51 | 85 | 131 | 228 |
| 22 | 55 | 255 | 452 | e121 | 127 | 182 | 314 | 117 | 46 | 28 | 152 | 231 |
| 23 | 40 | 249 | 459 | e118 | 128 | 139 | 364 | 114 | 47 | 19 | 129 | 215 |
| 24 | 41 | 245 | 506 | e118 | 128 | 129 | 403 | 144 | 43 | 185 | 171 | 218 |
| 25 | 33 | 242 | 557 | e118 | 126 | 140 | 377 | 269 | 26 | 136 | 163 | 209 |
| 26 | 30 | 169 | 496 | e115 | 125 | 180 | 408 | 249 | 37 | 114 | 155 | 193 |
| 27 | 76 | 153 | 382 | e107 | 125 | 194 | 469 | 270 | 36 | 169 | 143 | 173 |
| 28 | 222 | 153 | 349 | 115 | 126 | 191 | 448 | 275 | 26 | 202 | 124 | 195 |
| 29 | 485 | 196 | 323 | 113 | 130 | 180 | 408 | 239 | 28 | 215 | 118 | 394 |
| 30 | 510 | 170 | 304 | 109 | --- | 160 | 369 | 211 | 43 | 165 | 100 | 382 |
| 31 | 477 | --- | 298 | 110 | --- | 216 | --- | 186 | --- | 57 | 71 | --- |
| TOTAL | 3549 | 7377 | 10648 | 5409 | 3802 | 5477 | 16951 | 6772 | 2721 | 2661 | 3607 | 4811 |
| MEAN | 114 | 246 | 343 | 174 | 131 | 177 | 565 | 218 | 90.7 | 85.8 | 116 | 160 |
| MAX | 510 | 420 | 687 | 314 | 181 | 242 | 992 | 359 | 232 | 215 | 229 | 394 |
| MIN | 18 | 153 | 146 | 99 | 63 | 87 | 314 | 114 | 26 | 19 | 34 | 30 |
| CFSM | 1.08 | 2.32 | 3.24 | 1.65 | 1.24 | 1.67 | 5.33 | 2.06 | 0.86 | 0.81 | 1.10 | 1.51 |
| IN. | 1.25 | 2.59 | 3.74 | 1.90 | 1.33 | 1.92 | 5.95 | 2.38 | 0.95 | 0.93 | 1.27 | 1.69 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 2004, BY WATER YEAR (WY)

| | | | | | | | | | | | | |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 108 | 164 | 240 | 217 | 246 | 342 | 378 | 214 | 180 | 73.3 | 78.2 | 66.8 |
| MAX | 376 | 385 | 572 | 471 | 480 | 757 | 920 | 415 | 739 | 156 | 192 | 160 |
| (WY) | 1997 | 1990 | 1997 | 1982 | 1990 | 1983 | 1987 | 1998 | 1982 | 1998 | 1989 | 2004 |
| MIN | 8.17 | 15.0 | 26.5 | 59.5 | 67.6 | 121 | 98.7 | 75.2 | 31.3 | 10.9 | 10.7 | 8.78 |
| (WY) | 2002 | 2002 | 2002 | 1981 | 1980 | 1985 | 1985 | 1986 | 1993 | 1993 | 1999 | 2001 |

| SUMMARY STATISTICS | FOR 2003 CALENDAR YEAR | FOR 2004 WATER YEAR | WATER YEARS 1980 - 2004 |
|--------------------------|------------------------|---------------------|-------------------------|
| ANNUAL TOTAL | 84644 | 73785 | |
| ANNUAL MEAN | 232 | 202 | 193 |
| HIGHEST ANNUAL MEAN | | | 253 |
| LOWEST ANNUAL MEAN | | | 90.0 |
| HIGHEST DAILY MEAN | 757 | Mar 31 | 992 |
| LOWEST DAILY MEAN | 18 | Oct 10 | 18 |
| ANNUAL SEVEN-DAY MINIMUM | 22 | Oct 6 | 22 |
| MAXIMUM PEAK FLOW | | 1020 | Apr 2 |
| MAXIMUM PEAK STAGE | | 10.38 | Apr 2 |
| INSTANTANEOUS LOW FLOW | | 17 | Oct 12 |
| ANNUAL RUNOFF (CFSM) | 2.19 | 1.90 | 1.82 |
| ANNUAL RUNOFF (INCHES) | 29.71 | 25.89 | 24.78 |
| 10 PERCENT EXCEEDS | 484 | 404 | 427 |
| 50 PERCENT EXCEEDS | 188 | 168 | 136 |
| 90 PERCENT EXCEEDS | 50 | 44 | 26 |

e Estimated

MERRIMACK RIVER BASIN

01099500 CONCORD RIVER BELOW RIVER MEADOW BROOK AT LOWELL, MA

LOCATION.--Lat 42° 38' 12", long 71° 18' 09", Middlesex County, Hydrologic Unit 01070005, on right bank 300 ft downstream from Rogers Street Bridge at Lowell, 0.3 mi downstream from River Meadow Brook, and 0.8 mi upstream from mouth.

DRAINAGE AREA.--Total above gage, 400 mi²; net above gage, 307 mi²—diversion as needed from 92.6 mi² for use by Boston metropolitan district.

PERIOD OF RECORD.--Discharge: October 1936 to current year. October, November 1936, monthly discharge only, published in WSP 1301.

Water-quality records: Water years 1953, 1967–74.

REVISED RECORDS.--WDR MA-RI-84-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 67.41 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for estimated daily discharge, which are poor. Low flow regulated by mills upstream. Daily discharge includes undiverted water from 92.6 mi² in basins of Sudbury River and Lake Cochituate. Prior to December 1961, diversion upstream for use of city of Lowell.

Satellite and telephone gage-height telemeter at station.

AVERAGE DISCHARGE.--68 years (water years 1937–2004), 648 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,410 ft³/s, Jan. 28, 1979, gage height, 9.60 ft; maximum gage height of 9.60 ft also occurred Apr. 10, 1987; minimum daily discharge, 4.0 ft³/s, Sept. 29, 1957.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,060 ft³/s, Apr. 5; gage height, 7.96 ft; minimum discharge, 40 ft³/s, June 30.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004 DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|-------|
| 1 | 274 | 1150 | 535 | 1270 | 296 | 405 | 1230 | 1610 | 756 | 128 | 417 | 284 |
| 2 | 227 | 1190 | 519 | 1190 | 290 | 460 | 2210 | 1510 | 722 | 153 | 344 | 249 |
| 3 | 201 | 1170 | 485 | 1130 | 290 | 560 | 2590 | 1420 | 691 | 161 | 274 | 227 |
| 4 | 183 | 1100 | 459 | 1090 | 319 | 615 | 2900 | 1440 | 663 | 155 | 218 | 198 |
| 5 | 186 | 1050 | 434 | 1070 | 341 | 643 | 3030 | 1410 | 633 | 151 | 217 | 177 |
| 6 | 174 | 1030 | 420 | 1050 | 358 | 671 | 2970 | 1400 | 598 | 148 | 219 | 162 |
| 7 | 166 | 972 | 362 | 1020 | 406 | 682 | 2850 | 1360 | 577 | 147 | 224 | 150 |
| 8 | 159 | 919 | 412 | 955 | 473 | 677 | 2690 | 1280 | 537 | 146 | 207 | 150 |
| 9 | 150 | 883 | 439 | e843 | 497 | 671 | 2510 | 1210 | 500 | 203 | 182 | 242 |
| 10 | 124 | 826 | 457 | e788 | 498 | 650 | 2320 | 1130 | 475 | 176 | 166 | 311 |
| 11 | 124 | 775 | 566 | e737 | 500 | 624 | 2120 | 1060 | 432 | 166 | 147 | 341 |
| 12 | 150 | 732 | 784 | 682 | 492 | 627 | 1940 | 992 | 402 | 154 | 141 | 358 |
| 13 | 189 | 708 | 866 | 659 | 479 | 612 | 1880 | 938 | 367 | 144 | 361 | 340 |
| 14 | 172 | 648 | 927 | e603 | 469 | 596 | 2200 | 897 | 328 | 150 | 364 | 308 |
| 15 | 287 | 650 | 989 | e549 | 460 | 579 | 2350 | 844 | 303 | 169 | 402 | 286 |
| 16 | 364 | 607 | 1080 | e504 | 431 | 552 | 2560 | 802 | 275 | 174 | 439 | 261 |
| 17 | 429 | 588 | 1190 | e470 | 411 | 520 | 2650 | 770 | 254 | 158 | 453 | 232 |
| 18 | 440 | 566 | 1460 | 442 | 380 | 499 | 2590 | 733 | 269 | 174 | 447 | 470 |
| 19 | 424 | 549 | 1600 | 425 | 364 | 463 | 2470 | 700 | 274 | 178 | 420 | 811 |
| 20 | 396 | 542 | 1740 | e395 | 339 | 459 | 2300 | 661 | 261 | 186 | 416 | 893 |
| 21 | 368 | 566 | 1790 | e371 | 322 | 504 | 2140 | 631 | 250 | 184 | 575 | 942 |
| 22 | 337 | 574 | 1740 | e357 | 331 | 561 | 1970 | 594 | 230 | 175 | 780 | 921 |
| 23 | 317 | 571 | 1660 | e347 | 346 | 605 | 1880 | 584 | 205 | 152 | 693 | 852 |
| 24 | 273 | 560 | 1600 | e330 | 360 | 608 | 1790 | 592 | 189 | 231 | 653 | 771 |
| 25 | 254 | 555 | 1680 | e326 | 360 | 601 | 1720 | 628 | 178 | 404 | 605 | 701 |
| 26 | 244 | 549 | 1720 | e323 | 358 | 597 | 1740 | 633 | 169 | 497 | 538 | 630 |
| 27 | 277 | 548 | 1720 | 316 | 355 | 617 | 1780 | 707 | 166 | 507 | 476 | 564 |
| 28 | 357 | 534 | 1670 | 308 | 355 | 623 | 1760 | 769 | 160 | 532 | 440 | 566 |
| 29 | 675 | 555 | 1570 | 305 | 374 | 637 | 1760 | 810 | 154 | 506 | 381 | 718 |
| 30 | 899 | 539 | 1470 | 301 | --- | 635 | 1710 | 812 | 118 | 487 | 334 | 806 |
| 31 | 1040 | --- | 1370 | 297 | --- | 673 | --- | 789 | --- | 466 | 352 | --- |
| TOTAL | 9860 | 22206 | 33714 | 19453 | 11254 | 18226 | 66610 | 29716 | 11136 | 7362 | 11885 | 13921 |
| MEAN | 318 | 740 | 1088 | 628 | 388 | 588 | 2220 | 959 | 371 | 237 | 383 | 464 |
| MAX | 1040 | 1190 | 1790 | 1270 | 500 | 682 | 3030 | 1610 | 756 | 532 | 780 | 942 |
| MIN | 124 | 534 | 362 | 297 | 290 | 405 | 1230 | 584 | 118 | 128 | 141 | 150 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1937 - 2004, BY WATER YEAR (WY)

| | | | | | | | | | | | | |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 321 | 521 | 710 | 725 | 845 | 1253 | 1327 | 815 | 536 | 266 | 235 | 233 |
| MAX | 1320 | 1866 | 1853 | 1996 | 1856 | 2510 | 3149 | 1599 | 2502 | 1512 | 1403 | 1694 |
| (WY) | 1997 | 1956 | 1997 | 1979 | 1970 | 1983 | 1987 | 1954 | 1982 | 1938 | 1955 | 1954 |
| MIN | 38.3 | 86.3 | 133 | 150 | 230 | 479 | 377 | 283 | 116 | 50.0 | 33.1 | 25.4 |
| (WY) | 1942 | 2002 | 1966 | 1981 | 1980 | 1989 | 1966 | 1941 | 1964 | 1949 | 1966 | 1957 |

| SUMMARY STATISTICS | FOR 2003 CALENDAR YEAR | FOR 2004 WATER YEAR | WATER YEARS 1937 - 2004 |
|--------------------------|------------------------|---------------------|-------------------------|
| ANNUAL TOTAL | 295270 | 255343 | |
| ANNUAL MEAN | 809 | 698 | 648 |
| HIGHEST ANNUAL MEAN | | | 1112 |
| LOWEST ANNUAL MEAN | | | 242 |
| HIGHEST DAILY MEAN | 2430 | Apr 2 | 3030 |
| LOWEST DAILY MEAN | 124 | Oct 10 | 118 |
| ANNUAL SEVEN-DAY MINIMUM | 143 | Sep 9 | 145 |
| MAXIMUM PEAK FLOW | | | 3060 |
| MAXIMUM PEAK STAGE | | 7.96 | Apr 5 |
| INSTANTANEOUS LOW FLOW | | 40 | Jun 30 |
| 10 PERCENT EXCEEDS | 1620 | | 1660 |
| 50 PERCENT EXCEEDS | 666 | | 520 |
| 90 PERCENT EXCEEDS | 231 | | 175 |

e Estimated

MERRIMACK RIVER BASIN

01100000 MERRIMACK RIVER BELOW CONCORD RIVER AT LOWELL, MA--Continued
WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1954, 1966-74, 1999 to current year.

REMARKS.--Selected samples were analyzed for pesticide compounds on schedule 2001 (listed with non-detection values or minimum reporting levels in the section "Explanation of the Records"); only pesticide compounds identified by the analyses (either as estimated values or as values at or above the non-detection level or minimum reporting level) for one or more samples are listed in the water-quality data tables.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | TIME | INSTAN- TANEOUS DIS- CHARGE, CFS (00061) | BARO- METRIC PRES- SURE, MM HG (00025) | DIS- SOLVED OXYGEN, MG/L (00300) | PH, WATER, UNFLTRD FIELD, STD UNITS (00400) | SPECIF. CONDU- TANCE, WAT UNF US/CM 25 DEGC (00095) | TEMPER- ATURE, AIR, DEG C (00020) | TEMPER- ATURE, WATER, DEG C (00010) | ALKALINITY, WAT FLT INC TIT FIELD, MG/L AS CACO3 (39086) | BICARBONATE, WAT FLT INCRM. TITR. , MG/L (00453) | CHLOR- IDE, WATER, MG/L (00940) | SULFATE WATER, FLTRD, MG/L (00945) |
|----------|------|---|---|--|---|---|---|---|--|---|---|--|
| NOV 2003 | | | | | | | | | | | | |
| 12... | 1000 | 9,360 | 755 | 12.2 | -- | 133 | 7.8 | 5.7 | 10 | 12 | 27.0 | 5.9 |
| DEC | | | | | | | | | | | | |
| 03... | 0945 | 10,700 | 766 | 13.0 | 6.3 | 118 | -7.4 | 2.2 | 12 | 15 | 22.6 | 6.0 |
| JAN 2004 | | | | | | | | | | | | |
| 13... | 0945 | E7,420 | 752 | 14.5 | 7.0 | 175 | .1 | .1 | 13 | 16 | 36.5 | 7.7 |
| FEB | | | | | | | | | | | | |
| 11... | 0945 | 4,420 | 755 | 13.8 | 7.2 | 328 | 3.2 | .1 | 20 | 24 | 78.8 | 9.5 |
| APR | | | | | | | | | | | | |
| 27... | 1000 | 15,500 | 749 | 9.5 | 6.7 | 176 | 11.4 | 12.4 | 14 | 16 | 38.9 | 7.3 |
| MAY | | | | | | | | | | | | |
| 17... | 0930 | 6,810 | 767 | 8.5 | 6.9 | 180 | 16.0 | 20.3 | 16 | 20 | 39.4 | 6.8 |
| JUN | | | | | | | | | | | | |
| 28... | 0945 | 3,350 | 758 | 8.0 | 7.1 | 196 | 21.3 | 22.2 | 17 | 21 | 41.9 | 8.4 |
| JUL | | | | | | | | | | | | |
| 14... | 0930 | 3,150 | 750 | 7.4 | 6.5 | 178 | 18.7 | 22.3 | 14 | 16 | 37.5 | 7.1 |
| AUG | | | | | | | | | | | | |
| 23... | 1000 | 7,220 | 758 | 7.6 | 7.4 | 177 | 22.1 | 22.2 | 15 | 18 | 38.3 | 6.5 |
| SEP | | | | | | | | | | | | |
| 01... | 1000 | 5,570 | 758 | 7.7 | 7.2 | 160 | 22.1 | 24.5 | 14 | 17 | 34.1 | 5.8 |

| DATE | AMMONIA WATER, FLTRD, MG/L AS N (00608) | NITRITE + NITRATE WATER FLTRD, MG/L AS N (00631) | NITRITE WATER, FLTRD, MG/L AS N (00613) | ORTHO- PHOSPHATE, WATER, FLTRD, MG/L AS P (00671) | PHOS- PHORUS, WATER, UNFLTRD MG/L (00665) | TOTAL NITROGEN, WAT UNF BY ANALYSIS, MG/L (62855) | ATRA- ZINE, WATER, FLTRD, UG/L (39632) | CARBARYL, WATER, FLTRD 0.7U GF UG/L (82680) | METOLA- CHLOR, WATER, FLTRD, UG/L (39415) | PROME- TON, WATER, FLTRD, UG/L (04037) | SUSPENDED SEDIMENT CONCEN- TRATION MG/L (80154) |
|----------|--|---|---|--|--|--|---|--|--|---|--|
| NOV 2003 | | | | | | | | | | | |
| 12... | 0.14 | 0.19 | E0.004 | 0.013 | 0.037 | 0.60 | <0.007 | <0.041 | <0.013 | <0.01 | 3 |
| DEC | | | | | | | | | | | |
| 03... | .12 | .24 | E.005 | .010 | .036 | .54 | -- | -- | -- | -- | 4 |
| JAN 2004 | | | | | | | | | | | |
| 13... | .21 | .30 | E.006 | .014 | .037 | .74 | -- | -- | -- | -- | 2 |
| FEB | | | | | | | | | | | |
| 11... | .35 | .59 | .039 | .045 | .076 | 1.25 | E.006 | E.005 | E.006 | .01 | 2 |
| APR | | | | | | | | | | | |
| 27... | .13 | .23 | E.005 | .009 | .047 | .66 | <.007 | <.041 | <.013 | <.01 | 7 |
| MAY | | | | | | | | | | | |
| 17... | .12 | .33 | .009 | .013 | .049 | .71 | E.005 | E.008 | E.005 | <.01 | 4 |
| JUN | | | | | | | | | | | |
| 28... | .14 | .57 | .016 | .009 | .060 | 1.10 | .011 | <.041 | E.009 | <.01 | 3 |
| JUL | | | | | | | | | | | |
| 14... | .06 | .54 | .011 | .018 | .053 | .79 | .011 | <.041 | E.009 | E.004 | 3 |
| AUG | | | | | | | | | | | |
| 23... | .10 | .38 | .011 | .031 | .068 | .78 | <.010 | E.010 | <.013 | <.01 | 4 |
| SEP | | | | | | | | | | | |
| 01... | .12 | .48 | .019 | .035 | .077 | .93 | <.007 | E.008 | <.013 | <.01 | 2 |

< Less than

E Estimated value

M Presence verified, not quantified

MERRIMACK RIVER BASIN

01100568 SHAWSHEEN RIVER AT HANSCOM FIELD NEAR BEDFORD, MA

LOCATION.--Lat 42°28'01", long 71°16'22", Middlesex County, Hydrologic Unit 01070002, on left bank 300 ft downstream from FAA hangar, on Hanscom Field, and 1.6 mi south of Bedford.

DRAINAGE AREA.--2.13 mi².

PERIOD OF RECORD.--Discharge: October 1995 to current year.

Precipitation: March 1996 to current year.

Water quality: September 1995 to September 2001.

REVISED RECORDS.--WDR MA-RI-03-1: Drainage area.

GAGE.--Water-stage recorder and tipping bucket rain gage. Elevation of gage is 115 ft above National Geodetic Vertical Datum of 1929, from topographic map. Telephone gage-height and rainfall telemeter at station.

REMARKS.--Records poor (discharge affected by backwater from beaver dam all year). Collection, computation, and publication of precipitation data do not necessarily conform to standards used by the National Weather Service.

AVERAGE DISCHARGE.--9 years (water years 1996-2004), 4.95 ft³/s, 30.94 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 684 ft³/s, June 13, 1998, gage height, 8.69 ft, from rating curve extended above 170 ft³/s; minimum discharge, 0.10 ft³/s, many days in water years 2001 and 2002.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 180 ft³/s (estimated), Aug. 13, gage height, 6.01 ft (affected by backwater from beaver dam); minimum discharge, 2.3 ft³/s, Sept. 15.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|------|-------|------|------|-------|-------|-------|------|-------|-------|-------|
| 1 | e2.5 | e3.1 | e3.1 | e3.9 | e2.6 | e2.8 | e45 | e4.7 | e2.7 | e2.4 | e2.3 | e2.3 |
| 2 | e2.5 | e3.4 | e2.9 | e4.2 | e2.8 | e3.3 | e18 | e5.0 | e3.0 | e2.5 | e2.3 | e2.3 |
| 3 | e2.4 | e2.8 | e2.7 | e4.4 | e3.3 | e3.2 | e9.2 | e5.7 | e4.0 | e2.3 | e2.4 | e2.5 |
| 4 | e2.8 | e3.4 | e2.7 | e4.7 | e6.0 | e3.0 | e8.2 | e6.7 | e3.5 | e2.3 | e2.4 | e2.3 |
| 5 | e2.9 | e3.4 | e2.8 | e4.9 | e3.0 | e3.5 | e6.8 | e5.5 | e2.7 | e2.3 | e2.4 | e2.4 |
| 6 | e2.4 | e4.4 | e2.7 | e4.4 | e3.5 | e3.7 | e6.4 | e4.0 | e3.0 | e2.3 | e2.3 | e2.5 |
| 7 | e2.9 | e3.8 | e3.2 | e4.4 | e5.8 | e3.5 | e5.9 | e4.5 | e3.0 | e2.4 | e2.3 | e2.3 |
| 8 | e2.4 | e2.5 | e3.2 | e3.7 | e4.1 | e3.2 | e5.5 | e3.7 | e2.4 | e3.9 | e2.3 | e4.5 |
| 9 | e2.4 | e3.1 | e3.0 | e2.9 | e3.3 | e3.2 | e5.2 | e4.0 | e3.0 | e5.8 | e2.3 | e6.0 |
| 10 | e2.3 | e2.6 | e3.0 | e3.2 | e3.0 | e3.0 | e5.1 | e5.2 | e4.2 | e3.6 | e2.3 | e3.8 |
| 11 | e2.4 | e2.8 | e12 | e3.4 | e3.5 | e3.2 | e4.6 | e4.5 | e3.0 | e2.6 | e2.4 | e2.5 |
| 12 | e6.2 | e3.2 | e10 | e2.7 | e3.2 | e3.1 | e4.7 | e3.5 | e2.7 | e2.6 | e5.6 | e2.5 |
| 13 | e4.8 | e2.8 | e5.4 | e3.4 | e3.5 | e3.1 | e9.6 | e3.2 | e3.0 | e3.2 | e18 | e2.8 |
| 14 | e2.4 | e3.2 | e4.7 | e2.7 | e3.3 | e3.0 | e11 | e3.5 | e3.0 | e4.5 | e4.9 | 2.7 |
| 15 | e8.0 | e3.1 | e9.0 | e3.2 | e2.7 | e2.7 | e7.4 | e3.7 | e2.7 | e3.9 | e2.8 | 2.3 |
| 16 | e3.1 | e2.9 | e6.5 | e2.9 | e2.5 | e3.1 | e6.3 | e3.7 | e2.7 | e2.9 | e4.6 | 3.0 |
| 17 | e2.9 | e2.8 | e7.1 | e2.5 | e2.6 | e2.7 | e5.9 | e3.7 | e3.5 | e2.6 | e2.8 | 6.1 |
| 18 | e2.5 | e2.8 | e9.2 | e3.0 | e2.8 | e3.1 | e5.4 | e4.0 | e4.9 | e2.6 | e2.8 | e17 |
| 19 | e2.4 | e3.1 | e6.5 | e3.0 | e2.8 | e3.3 | e5.0 | e3.7 | e3.5 | e2.6 | e2.6 | e6.9 |
| 20 | e2.6 | e3.4 | e5.2 | e3.0 | e2.6 | e3.8 | e4.7 | e3.5 | e2.8 | e2.5 | e2.6 | e3.6 |
| 21 | e2.3 | e4.6 | e4.9 | e2.4 | e2.8 | e4.9 | e4.6 | e3.2 | e3.0 | e2.6 | e9.8 | e2.8 |
| 22 | e2.5 | e4.4 | e4.8 | e2.8 | e2.6 | e4.7 | e4.8 | e3.7 | e2.3 | e2.9 | e7.1 | e3.2 |
| 23 | e2.3 | e2.8 | e5.4 | e3.2 | e2.4 | e4.1 | e7.8 | e5.0 | e2.3 | e3.6 | e3.4 | e2.5 |
| 24 | e2.3 | e3.1 | e7.0 | e2.4 | e2.4 | e4.0 | e6.8 | e4.2 | e2.6 | e23 | e2.7 | e2.4 |
| 25 | e2.3 | e3.8 | e8.2 | e2.6 | e2.4 | e4.1 | e5.9 | e5.0 | e2.9 | e7.5 | e2.5 | e2.5 |
| 26 | e2.6 | e3.4 | e5.7 | e2.6 | e2.6 | e4.2 | e6.4 | e4.0 | e3.1 | e2.6 | e2.6 | e2.3 |
| 27 | e4.0 | e2.5 | e4.2 | e2.3 | e2.8 | e4.8 | e7.8 | e4.7 | e2.5 | e2.6 | e2.4 | e3.2 |
| 28 | e5.7 | e3.4 | e4.7 | e2.3 | e2.6 | e3.9 | e5.7 | e5.2 | e2.3 | e2.9 | e2.5 | e6.7 |
| 29 | e9.9 | e4.1 | e4.7 | e2.6 | e2.8 | e3.7 | e4.5 | e5.2 | e2.3 | e3.2 | e2.4 | e11 |
| 30 | e8.2 | e3.9 | e4.4 | e2.4 | --- | e4.0 | e5.0 | e3.5 | e2.3 | e2.6 | e2.3 | e7.1 |
| 31 | e3.8 | --- | e3.9 | e2.6 | --- | e13 | --- | e3.0 | --- | e2.4 | e2.5 | --- |
| TOTAL | 108.7 | 98.6 | 162.8 | 98.7 | 90.3 | 118.9 | 239.2 | 132.7 | 88.9 | 115.7 | 112.6 | 124.0 |
| MEAN | 3.51 | 3.29 | 5.25 | 3.18 | 3.11 | 3.84 | 7.97 | 4.28 | 2.96 | 3.73 | 3.63 | 4.13 |
| MAX | 9.9 | 4.6 | 12 | 4.9 | 6.0 | 13 | 45 | 6.7 | 4.9 | 23 | 18 | 17 |
| MIN | 2.3 | 2.5 | 2.7 | 2.3 | 2.4 | 2.7 | 4.5 | 3.0 | 2.3 | 2.3 | 2.3 | 2.3 |
| CFSM | 1.65 | 1.54 | 2.47 | 1.49 | 1.46 | 1.80 | 3.74 | 2.01 | 1.39 | 1.75 | 1.71 | 1.94 |
| IN. | 1.90 | 1.72 | 2.84 | 1.72 | 1.58 | 2.08 | 4.18 | 2.32 | 1.55 | 2.02 | 1.97 | 2.17 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 2004, BY WATER YEAR (WY)

| | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | | |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 5.11 | 4.37 | 4.80 | 4.83 | 4.45 | 6.38 | 6.71 | 5.02 | 6.28 | 3.11 | 2.87 | 4.31 |
| MAX | 19.6 | 8.55 | 11.2 | 7.57 | 7.65 | 15.8 | 12.3 | 8.65 | 21.9 | 6.62 | 7.56 | 9.87 |
| (WY) | 1997 | 2003 | 2003 | 1999 | 1998 | 2001 | 2003 | 1998 | 1998 | 1996 | 2003 | 2003 |
| MIN | 0.94 | 2.29 | 2.19 | 2.12 | 2.59 | 2.51 | 2.59 | 1.96 | 1.08 | 0.61 | 0.74 | 1.45 |
| (WY) | 2001 | 2001 | 1996 | 2001 | 2000 | 2002 | 2002 | 1999 | 1999 | 2002 | 2002 | 2000 |

| SUMMARY STATISTICS | FOR 2003 CALENDAR YEAR | FOR 2004 WATER YEAR | WATER YEARS 1996 - 2004 |
|--------------------------|------------------------|---------------------|-------------------------|
| ANNUAL TOTAL | 2551.54 | 1491.1 | |
| ANNUAL MEAN | 6.99 | 4.07 | 4.85 |
| HIGHEST ANNUAL MEAN | | | 7.90 |
| LOWEST ANNUAL MEAN | | | 2.50 |
| HIGHEST DAILY MEAN | 51 | Jun 1 | 209 |
| LOWEST DAILY MEAN | 0.74 | Aug 11 | 0.10 |
| ANNUAL SEVEN-DAY MINIMUM | 2.1 | Jul 4 | 0.13 |
| MAXIMUM PEAK FLOW | | | 684 |
| MAXIMUM PEAK STAGE | | | a 6.01 |
| INSTANTANEOUS LOW FLOW | | | 2.3 |
| ANNUAL RUNOFF (CFSM) | 3.28 | 1.91 | 0.10 |
| ANNUAL RUNOFF (INCHES) | 44.56 | 26.04 | 2.28 |
| 10 PERCENT EXCEEDS | 12 | 6.4 | 30.94 |
| 50 PERCENT EXCEEDS | 4.6 | 3.2 | 8.7 |
| 90 PERCENT EXCEEDS | 2.5 | 2.4 | 3.0 |
| | | | 1.1 |

e Estimated

a Affected by backwater

MERRIMACK RIVER BASIN

01100568 SHAWSHEEN RIVER AT HANSCOM FIELD NEAR BEDFORD, MA--Continued

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY SUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|-----|------|------|------|------|------|------|------|------|------|
| 1 | 0.01 | 0.00 | --- | 0.00 | 0.00 | 0.00 | 0.57 | 0.00 | 0.06 | 0.00 | 0.05 | 0.00 |
| 2 | .00 | .01 | --- | .01 | .00 | .00 | .11 | .01 | .07 | .11 | .02 | .00 |
| 3 | .00 | .10 | --- | .14 | .11 | .00 | .00 | .17 | .05 | .00 | .00 | .00 |
| 4 | .09 | .01 | --- | .09 | .01 | .07 | .09 | .11 | .00 | .00 | .00 | .00 |
| 5 | .00 | .20 | --- | .00 | .00 | .01 | .05 | .00 | .00 | .03 | .23 | .00 |
| 6 | .00 | .01 | --- | .00 | .02 | .05 | .00 | .00 | .04 | .00 | .00 | .00 |
| 7 | .00 | .00 | --- | .00 | .07 | .00 | --- | .01 | .00 | .00 | .00 | .00 |
| 8 | .00 | .00 | --- | .00 | .00 | .00 | --- | .00 | .00 | .27 | .00 | .02 |
| 9 | .00 | .00 | --- | .00 | .06 | .01 | --- | .05 | .13 | .23 | .00 | .02 |
| 10 | .00 | .00 | --- | .00 | .01 | .06 | --- | .00 | .08 | .00 | .01 | .00 |
| 11 | .00 | .05 | --- | .00 | .00 | .00 | --- | .00 | .00 | .00 | .00 | .00 |
| 12 | .25 | .02 | --- | .00 | .00 | .02 | --- | .00 | .00 | .00 | .07 | .00 |
| 13 | .00 | .05 | .00 | .04 | .00 | .00 | --- | .00 | .00 | .21 | .30 | .00 |
| 14 | .00 | .00 | .00 | .00 | .00 | .00 | --- | .00 | .01 | .11 | .09 | .01 |
| 15 | .18 | --- | .16 | .00 | .00 | .00 | --- | .00 | .00 | .03 | .16 | .00 |
| 16 | .00 | .00 | .01 | .00 | .00 | .00 | --- | .09 | .00 | .00 | .14 | .00 |
| 17 | .00 | .01 | .38 | .01 | .00 | .00 | --- | .00 | .04 | .01 | .12 | .00 |
| 18 | .00 | .00 | .00 | .00 | .00 | .01 | --- | .10 | .20 | .00 | .10 | .00 |
| 19 | .00 | .00 | .00 | .00 | .00 | .00 | --- | .01 | .00 | .00 | .07 | .00 |
| 20 | .00 | .11 | .00 | .00 | .00 | .08 | --- | .00 | .00 | .00 | .10 | .00 |
| 21 | .01 | .09 | .00 | .00 | .01 | .08 | --- | .00 | .00 | .00 | .26 | .00 |
| 22 | .00 | .00 | .00 | .01 | .00 | .00 | --- | .02 | .00 | .00 | .24 | .17 |
| 23 | .02 | .00 | --- | .00 | .00 | .00 | --- | .16 | .00 | .00 | .12 | .50 |
| 24 | .00 | .00 | --- | .00 | .00 | .00 | .00 | .20 | .00 | .49 | .03 | .52 |
| 25 | .00 | .04 | --- | .00 | .00 | .00 | .06 | .01 | .04 | .22 | .02 | .08 |
| 26 | .00 | .00 | .00 | .00 | .00 | .01 | .32 | .06 | .05 | .07 | .02 | .02 |
| 27 | .31 | .00 | .00 | .00 | .00 | .10 | .08 | .08 | .00 | .01 | .04 | .01 |
| 28 | .01 | .15 | .00 | .00 | .00 | .00 | .00 | .14 | .00 | .07 | .03 | .02 |
| 29 | .66 | .07 | .00 | .00 | .00 | .00 | .00 | .00 | .04 | .03 | .02 | .04 |
| 30 | .00 | .00 | .00 | .00 | --- | .00 | .00 | .00 | .00 | .03 | .06 | .06 |
| 31 | .00 | --- | .00 | .00 | --- | .31 | --- | .00 | --- | .03 | .05 | --- |
| TOTAL | 1.54 | --- | --- | 0.30 | 0.29 | 0.81 | --- | 1.22 | 0.81 | 1.95 | 2.35 | 1.47 |
| MAX | 0.66 | --- | --- | 0.14 | 0.11 | 0.31 | --- | 0.20 | 0.20 | 0.49 | 0.30 | 0.52 |

PARKER RIVER BASIN

01101000 PARKER RIVER AT BYFIELD, MA

LOCATION.--Lat 42° 45' 10", long 70° 56' 46", Essex County, Hydrologic Unit 01090001, on left bank 1,400 ft downstream from dam, 0.5 mi south of Byfield, 0.7 mi upstream from Wheeler Brook, and 5.5 mi southwest of Newburyport.

DRAINAGE AREA.--21.3 mi².

PERIOD OF RECORD.--Discharge: October 1945 to current year. October 1945 monthly discharge only, published in WSP 1301.

Water-quality records: Water years 2003-04.

REVISED RECORDS.--WDR MA-RI-84-1: Drainage area; WDR MA-RI-00-1: 1999.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 23.46 ft above National Geodetic Vertical Datum of 1929 (levels by Massachusetts Department of Public Works).

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Occasional regulation by mill and ponds upstream. Satellite gage-height telemeter at station.

AVERAGE DISCHARGE.--59 years (water years 1946-2004), 37.0 ft³/s, 23.60 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 883 ft³/s, Oct. 22, 1996, gage height, 7.82 ft; minimum daily discharge, 0.04 ft³/s, Sept. 3-7, 1995.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 560 ft³/s, Apr. 2, gage height, 5.86 ft; minimum discharge, 0.17 ft³/s, Oct. 3.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004 DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|------|------|------|-------|------|------|------|-------|-------|------|------|
| 1 | 2.3 | 47 | 24 | 74 | e14 | 19 | 128 | 79 | 56 | 7.7 | 24 | 25 |
| 2 | 2.4 | 40 | 27 | e72 | e14 | 23 | 499 | 69 | 51 | 8.0 | 21 | 23 |
| 3 | 2.0 | 43 | 20 | e64 | e15 | 25 | 507 | 62 | 51 | 6.7 | 17 | 19 |
| 4 | 2.9 | 47 | 19 | e63 | e16 | 28 | 424 | 69 | 47 | 5.6 | 16 | 17 |
| 5 | 2.4 | 49 | 25 | e60 | e18 | 28 | 354 | 74 | 42 | 5.1 | 19 | 16 |
| 6 | 2.3 | 50 | 22 | e58 | e19 | 31 | 316 | 69 | 37 | 4.9 | 19 | 15 |
| 7 | 2.8 | 46 | 20 | e58 | e19 | 33 | 311 | 62 | 34 | 7.0 | 17 | 13 |
| 8 | 2.1 | 38 | 21 | 47 | e20 | 32 | 275 | 61 | 32 | 12 | 15 | 12 |
| 9 | 3.1 | 32 | 22 | 38 | e21 | 29 | 234 | 57 | 30 | 19 | 13 | 22 |
| 10 | 2.1 | 27 | 21 | e30 | e21 | 27 | 193 | 51 | 30 | 18 | 11 | 29 |
| 11 | 1.6 | 24 | 31 | e29 | e20 | 22 | 158 | 47 | 28 | 14 | 10 | 31 |
| 12 | 4.2 | 26 | 55 | e28 | e20 | 19 | 131 | 43 | 26 | 11 | 11 | 28 |
| 13 | 9.3 | 27 | 76 | e27 | e18 | 18 | 119 | 37 | 23 | 13 | 47 | 22 |
| 14 | 7.1 | 27 | 75 | e26 | 17 | 16 | 145 | 33 | 20 | 23 | 53 | 19 |
| 15 | 32 | 25 | 82 | e25 | 16 | 15 | 163 | 30 | 18 | 27 | 59 | 17 |
| 16 | 35 | 21 | 90 | e24 | 15 | 15 | 161 | 30 | 16 | 26 | 66 | 16 |
| 17 | 34 | 21 | 98 | e23 | 15 | 14 | 148 | 31 | 14 | 22 | 70 | 17 |
| 18 | 32 | 19 | 133 | e21 | 13 | 13 | 133 | 34 | 17 | 18 | 71 | 39 |
| 19 | 32 | 15 | 147 | e19 | 11 | 12 | 117 | 42 | 17 | 15 | 65 | 76 |
| 20 | 27 | 16 | 139 | e18 | 9.7 | 12 | 99 | 42 | 15 | 16 | 58 | 87 |
| 21 | 25 | 21 | 124 | e16 | 11 | 20 | 87 | 39 | 13 | 14 | 54 | 75 |
| 22 | 20 | 24 | 111 | e16 | 12 | 28 | 80 | 36 | 11 | 13 | 48 | 62 |
| 23 | 16 | 23 | 101 | e15 | 13 | 29 | 80 | 36 | 10 | 12 | 56 | 51 |
| 24 | 13 | 20 | 98 | e15 | 13 | 28 | 85 | 39 | 8.9 | 29 | 50 | 42 |
| 25 | 13 | 20 | 115 | e15 | 13 | 26 | 83 | 67 | 8.1 | 34 | 42 | 35 |
| 26 | 13 | 18 | 123 | e15 | 14 | 28 | 82 | 86 | 10 | 29 | 31 | 29 |
| 27 | 16 | 15 | 117 | e15 | 15 | 35 | 98 | 86 | 13 | 24 | 25 | 24 |
| 28 | 22 | 15 | 104 | e15 | 16 | 41 | 106 | 84 | 10 | 27 | 22 | 21 |
| 29 | 48 | 22 | 95 | e14 | 17 | 39 | 98 | 86 | 9.9 | 32 | 20 | 27 |
| 30 | 54 | 24 | 88 | e14 | --- | 33 | 87 | 79 | 8.8 | 30 | 20 | 31 |
| 31 | 57 | --- | 81 | e14 | --- | 31 | --- | 65 | --- | 26 | 26 | --- |
| TOTAL | 535.6 | 842 | 2304 | 968 | 455.7 | 769 | 5501 | 1725 | 706.7 | 549.0 | 1076 | 940 |
| MEAN | 17.3 | 28.1 | 74.3 | 31.2 | 15.7 | 24.8 | 183 | 55.6 | 23.6 | 17.7 | 34.7 | 31.3 |
| MAX | 57 | 50 | 147 | 74 | 21 | 41 | 507 | 86 | 56 | 34 | 71 | 87 |
| MIN | 1.6 | 15 | 19 | 14 | 9.7 | 12 | 80 | 30 | 8.1 | 4.9 | 10 | 12 |
| CFSM | 0.81 | 1.32 | 3.49 | 1.47 | 0.74 | 1.16 | 8.61 | 2.61 | 1.11 | 0.83 | 1.63 | 1.47 |
| IN. | 0.94 | 1.47 | 4.02 | 1.69 | 0.80 | 1.34 | 9.61 | 3.01 | 1.23 | 0.96 | 1.88 | 1.64 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 2004, BY WATER YEAR (WY)

| | MEAN | MAX | (WY) | MIN | (WY) |
|------|------|------|------|------|------|
| 1946 | 15.7 | 186 | 1997 | 0.15 | 1998 |
| 1947 | 28.9 | 87.3 | 1973 | 0.76 | 2002 |
| 1948 | 41.7 | 117 | 1997 | 1.74 | 1966 |
| 1949 | 42.5 | 116 | 1958 | 2.98 | 1966 |
| 1950 | 49.8 | 122 | 1976 | 5.25 | 1980 |
| 1951 | 84.1 | 226 | 1983 | 24.8 | 2004 |
| 1952 | 84.8 | 249 | 1987 | 25.2 | 1985 |
| 1953 | 49.4 | 151 | 1983 | 14.8 | 2001 |
| 1954 | 28.2 | 138 | 1982 | 2.86 | 1999 |
| 1955 | 8.81 | 39.6 | 1972 | 0.43 | 1999 |
| 1956 | 5.87 | 34.7 | 2004 | 0.13 | 1995 |
| 1957 | 6.55 | 65.8 | 1954 | 0.11 | 1997 |

SUMMARY STATISTICS

| | FOR 2003 CALENDAR YEAR | FOR 2004 WATER YEAR | WATER YEARS 1946 - 2004 |
|--------------------------|------------------------|---------------------|-------------------------|
| ANNUAL TOTAL | 14592.53 | 16372.0 | |
| ANNUAL MEAN | 40.0 | 44.7 | |
| HIGHEST ANNUAL MEAN | | | 64.8 1984 |
| LOWEST ANNUAL MEAN | | | 13.2 1966 |
| HIGHEST DAILY MEAN | 182 Mar 31 | 507 Apr 3 | 858 Oct 22 1996 |
| LOWEST DAILY MEAN | 0.12 Sep 15 | 1.6 Oct 11 | 0.03 Sep 3 1999 |
| ANNUAL SEVEN-DAY MINIMUM | 0.86 Sep 10 | 2.3 Oct 5 | 0.04 Aug 31 1999 |
| MAXIMUM PEAK FLOW | | 560 Apr 2 | 883 Oct 22 1996 |
| MAXIMUM PEAK STAGE | | 5.86 Apr 2 | 7.82 Oct 22 1996 |
| INSTANTANEOUS LOW FLOW | | 0.17 Oct 3 | |
| ANNUAL RUNOFF (CFSM) | 1.88 | 2.10 | 1.74 |
| ANNUAL RUNOFF (INCHES) | 25.49 | 28.59 | 23.60 |
| 10 PERCENT EXCEEDS | 102 | 92 | 88 |
| 50 PERCENT EXCEEDS | 26 | 26 | 23 |
| 90 PERCENT EXCEEDS | 2.7 | 12 | 1.3 |

e Estimated

SAUGUS RIVER BASIN

01102345 SAUGUS RIVER AT SAUGUS IRONWORKS AT SAUGUS, MA

LOCATION.--Lat 42° 28' 05", long 71° 00' 27", Essex County, Hydrologic Unit 01090001, on left bank 20 ft upstream from Bridge Street opposite Saugus Ironworks National Historic Site, at Saugus.

DRAINAGE AREA.--20.8 mi².

PERIOD OF RECORD.--Discharge: March 1994 to current year.

Water-quality records: Water Years 1999–2001.

REVISED RECORDS.--WDR MA-RI-03-1: Drainage area.

GAGE.--Water stage recorder. Elevation of gage is 15 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for estimated daily discharges, which are poor. There is evidence of seasonal regulation by ponds upstream. Telephone gage-height telemeter at station.

AVERAGE DISCHARGE.--10 years (water years 1995–2004), 30.4 ft³/s, 19.83 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 942 ft³/s, Oct. 21, 1996, gage height, 6.58 ft; minimum discharge, about 0.60 ft³/s, Sept. 5, 6, 1995.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 813 ft³/s, Apr. 2, gage height, 6.30 ft; minimum discharge, 6.0 ft³/s, July 7.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|------|------|-------|-------|------|------|------|-------|-------|-------|-------|
| 1 | 12 | 40 | 20 | 47 | e9.2 | 13 | 259 | 62 | 26 | 7.7 | 15 | 15 |
| 2 | 11 | 37 | 18 | 43 | 9.2 | 15 | 602 | 59 | 24 | 11 | 14 | 12 |
| 3 | 11 | 36 | e16 | 44 | 13 | 17 | 300 | 62 | 27 | 9.0 | 13 | 11 |
| 4 | 12 | 34 | 16 | 46 | 40 | 17 | 247 | 81 | 23 | 7.2 | 11 | 11 |
| 5 | 13 | 36 | e15 | 49 | 20 | 19 | 228 | 66 | 20 | 7.6 | 14 | 9.6 |
| 6 | 11 | 41 | 14 | 46 | 18 | 23 | 198 | 58 | 19 | 7.3 | 12 | 8.8 |
| 7 | 11 | 36 | 21 | 39 | 30 | 23 | 180 | 55 | 20 | 6.4 | 10 | 9.7 |
| 8 | 10 | 31 | 27 | e33 | e27 | 22 | 162 | 51 | 18 | 11 | 9.7 | e28 |
| 9 | 10 | 28 | 29 | e30 | e22 | 20 | 143 | 49 | 19 | 23 | 8.7 | 47 |
| 10 | 9.7 | 26 | 22 | e28 | 19 | 20 | 132 | 48 | 23 | 17 | 8.1 | 33 |
| 11 | 9.4 | 25 | 54 | e28 | 19 | 20 | 105 | 41 | 18 | 13 | 9.5 | 16 |
| 12 | 27 | 24 | 114 | e25 | e17 | 20 | 90 | 34 | 15 | 11 | 9.9 | 13 |
| 13 | 37 | 24 | 78 | e24 | 16 | 19 | 101 | 26 | 13 | 13 | 81 | 12 |
| 14 | 21 | 21 | 58 | e24 | 15 | 18 | 146 | 20 | 13 | 21 | 40 | 10 |
| 15 | 52 | 19 | 122 | e22 | e14 | 17 | 134 | 22 | 12 | 14 | 47 | 9.4 |
| 16 | 47 | 18 | 109 | e19 | e13 | 16 | 123 | 24 | 12 | 11 | 43 | 9.1 |
| 17 | 28 | 18 | 102 | e14 | e12 | 16 | 112 | 24 | 11 | 9.6 | 33 | 8.9 |
| 18 | 22 | 18 | 159 | e19 | e12 | 16 | 95 | 22 | 29 | 8.3 | 28 | 53 |
| 19 | 20 | 18 | 122 | e19 | e11 | 16 | 87 | 25 | 26 | 11 | 21 | 56 |
| 20 | 18 | 21 | 103 | e16 | e11 | 19 | 70 | 20 | 15 | 12 | 19 | 30 |
| 21 | 17 | 25 | 91 | e12 | 11 | 28 | 64 | 18 | 12 | 10 | 37 | 22 |
| 22 | 17 | 22 | 86 | 11 | 12 | 28 | 57 | 18 | 11 | 8.5 | 49 | 18 |
| 23 | 16 | 20 | 74 | e11 | 12 | 22 | 72 | 25 | 10 | 7.7 | 30 | 16 |
| 24 | 15 | 19 | 81 | e10 | 11 | 20 | 75 | 23 | 8.9 | 60 | 22 | 14 |
| 25 | 14 | 20 | 108 | e10 | 11 | 20 | 63 | 30 | 8.3 | 61 | 19 | 14 |
| 26 | 13 | 18 | 92 | e9.9 | 10 | 21 | 72 | 26 | 12 | 27 | 17 | 13 |
| 27 | 22 | 17 | 79 | e9.7 | 9.9 | 27 | 90 | 33 | 12 | 20 | 15 | 12 |
| 28 | 27 | 19 | 71 | e9.5 | 11 | 24 | 81 | 35 | 8.4 | 30 | 14 | 27 |
| 29 | 58 | 29 | 68 | e9.4 | 13 | 20 | 71 | 31 | 8.0 | 29 | 14 | 58 |
| 30 | 65 | 23 | 58 | e9.3 | --- | 19 | 66 | 23 | 7.6 | 25 | 14 | 44 |
| 31 | 49 | --- | 53 | e9.2 | --- | 39 | --- | 26 | --- | 18 | 18 | --- |
| TOTAL | 705.1 | 763 | 2080 | 726.0 | 448.3 | 634 | 4225 | 1137 | 481.2 | 527.3 | 695.9 | 640.5 |
| MEAN | 22.7 | 25.4 | 67.1 | 23.4 | 15.5 | 20.5 | 141 | 36.7 | 16.0 | 17.0 | 22.4 | 21.4 |
| MAX | 65 | 41 | 159 | 49 | 40 | 39 | 602 | 81 | 29 | 61 | 81 | 58 |
| MIN | 9.4 | 17 | 14 | 9.2 | 9.2 | 13 | 57 | 18 | 7.6 | 6.4 | 8.1 | 8.8 |
| CFSM | 1.09 | 1.22 | 3.23 | 1.13 | 0.74 | 0.98 | 6.77 | 1.76 | 0.77 | 0.82 | 1.08 | 1.03 |
| IN. | 1.26 | 1.36 | 3.72 | 1.30 | 0.80 | 1.13 | 7.56 | 2.03 | 0.86 | 0.94 | 1.24 | 1.15 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 2004, BY WATER YEAR (WY)

| | MEAN | MAX | MIN | WY | MEAN | MAX | MIN | WY | MEAN | MAX | MIN | WY |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1994 | 22.0 | 122 | 2.35 | 1997 | 23.2 | 49.2 | 2.68 | 1998 | 37.3 | 108 | 6.45 | 1999 |
| 1995 | 35.2 | 62.3 | 10.4 | 1999 | 35.9 | 80.7 | 13.7 | 2000 | 60.3 | 139 | 20.5 | 1995 |
| 1996 | 63.5 | 141 | 13.0 | 2001 | 63.5 | 141 | 7.89 | 1995 | 27.4 | 117 | 2.23 | 1999 |
| 1997 | 31.3 | 65.3 | 7.89 | 1999 | 31.3 | 65.3 | 1999 | 1999 | 11.1 | 24.1 | 1.39 | 1999 |
| 1998 | 27.4 | 117 | 2.23 | 1999 | 11.1 | 24.1 | 1.39 | 1999 | 8.88 | 22.4 | 1.39 | 1999 |
| 1999 | 11.1 | 24.1 | 1.39 | 1999 | 8.88 | 22.4 | 1.39 | 1999 | 11.2 | 25.5 | 2.11 | 1997 |

SUMMARY STATISTICS

| | FOR 2003 CALENDAR YEAR | FOR 2004 WATER YEAR | WATER YEARS 1994 - 2004 |
|--------------------------|------------------------|---------------------|-------------------------|
| ANNUAL TOTAL | 13707.7 | 13063.3 | |
| ANNUAL MEAN | 37.6 | 35.7 | |
| HIGHEST ANNUAL MEAN | | | 30.4 |
| LOWEST ANNUAL MEAN | | | 45.0 |
| HIGHEST DAILY MEAN | 159 | Dec 18 | 14.5 |
| LOWEST DAILY MEAN | 4.5 | Sep 13 | 812 |
| ANNUAL SEVEN-DAY MINIMUM | 5.6 | Sep 9 | 0.50 |
| MAXIMUM PEAK FLOW | | | 0.53 |
| MAXIMUM PEAK STAGE | | | 8.0 |
| INSTANTANEOUS LOW FLOW | | | 813 |
| ANNUAL RUNOFF (CFSM) | 1.81 | | 6.30 |
| ANNUAL RUNOFF (INCHES) | 24.52 | | 6.0 |
| 10 PERCENT EXCEEDS | 85 | | Apr 2 |
| 50 PERCENT EXCEEDS | 26 | | Apr 2 |
| 90 PERCENT EXCEEDS | 10 | | Jul 7 |
| | | | 6.58 |
| | | | 0.06 |
| | | | 19.83 |
| | | | 72 |
| | | | 16 |
| | | | 9.9 |
| | | | 2.9 |

e Estimated

MYSTIC RIVER BASIN

01102500 ABERJONA RIVER AT WINCHESTER, MA
(National Water Quality Assessment Site)

LOCATION.--Lat 42° 26' 50", long 71° 08' 22", Middlesex County, Hydrologic Unit 01090001, on left bank at Winchester, 0.5 mi upstream from head of Mystic Lakes.

DRAINAGE AREA.--Total above gage is 24.7 mi²; net above gage is 24.1 mi², excludes 0.6 mi² drained by Winchester North Reservoir.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Discharge: April 1939 to current year.

Water-quality records: Water year 1958-59, 1973, 1999 to current year.

REVISED RECORDS.--WDR MA-RI-79-1: 1955. WDR MA-RI-84-1: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is zero ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for estimated daily discharge, which are fair. Flow affected by diversions for industrial use and for municipal supply of Woburn and Winchester, and by wastage and leakage from Winchester North Reservoir. Some regulation by Winchester at dam 1,800 ft upstream. Telephone and satellite gage-height telemeter at station.

AVERAGE DISCHARGE.--65 years (water years 1940-2004), 29.9 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,590 ft³/s, Mar. 22, 2001, gage height, 16.90 ft (affected by backwater from Upper Mystic Lake), from rating curve extended above 400 ft³/s on basis of slope-area measurement of peak flow; no flow for part of Oct. 10, 12, 1950, caused by pumpage from gage pool; minimum daily discharge, 0.25 ft³/s, Oct. 10, 1950.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge since 1886, that of Mar. 22, 2001.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 990 ft³/s, Apr. 2, gage height, 15.09 ft; minimum discharge, 1.7 ft³/s, Nov. 4.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004 DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|-------|------|------|------|-------|-------|------|------|-------|-------|--------|--------|
| 1 | 6.8 | 42 | 20 | 39 | 11 | 8.8 | 344 | 48 | 25 | 18 | 19 | 19 |
| 2 | 5.6 | 33 | 17 | 38 | 11 | 9.7 | 926 | 45 | 28 | 16 | 17 | 14 |
| 3 | 5.5 | 31 | 15 | 39 | 11 | 13 | 425 | 57 | 30 | 11 | 14 | 12 |
| 4 | 9.7 | 19 | 13 | 41 | 49 | 15 | 218 | 108 | 23 | e8.7 | 12 | 12 |
| 5 | 11 | 36 | 12 | 48 | 28 | 15 | 167 | 76 | 19 | e8.0 | 9.1 | 10 |
| 6 | 7.0 | 48 | 14 | 50 | 23 | 18 | 124 | 55 | 18 | e8.0 | 12 | 9.5 |
| 7 | 5.8 | 34 | 16 | 42 | 54 | 17 | 99 | 47 | 19 | e7.6 | 11 | 9.1 |
| 8 | 5.9 | 27 | 15 | 31 | 40 | 18 | 85 | 42 | 18 | 7.6 | 9.3 | 38 |
| 9 | 5.3 | 20 | 22 | 30 | 26 | 17 | 76 | 41 | 18 | 34 | 8.5 | 111 |
| 10 | 4.7 | 18 | 16 | 28 | 22 | 15 | 67 | 42 | 31 | 39 | 7.4 | 69 |
| 11 | 4.9 | 18 | 67 | 26 | 20 | 15 | 60 | 38 | 20 | 18 | 7.2 | 37 |
| 12 | 49 | 20 | 146 | 24 | 18 | 15 | 56 | 34 | 14 | 12 | 11 | 24 |
| 13 | 42 | 22 | 86 | 23 | 16 | 15 | 85 | 31 | 12 | 11 | 188 | 18 |
| 14 | 15 | 20 | 54 | 22 | 14 | 13 | 199 | 29 | 12 | 26 | 156 | 16 |
| 15 | 107 | 16 | 152 | 20 | 13 | 12 | 169 | 27 | 12 | 28 | 94 | 14 |
| 16 | 68 | 14 | 134 | 18 | 12 | 12 | 107 | 30 | 10 | 20 | 82 | 12 |
| 17 | 32 | 13 | 108 | 17 | 11 | 14 | 79 | 32 | 10 | 15 | 49 | 21 |
| 18 | 20 | 13 | 192 | 17 | 11 | 14 | 69 | 29 | 47 | 12 | 25 | 143 |
| 19 | 15 | 14 | 132 | 18 | 11 | 14 | 63 | 36 | 34 | 11 | 27 | 173 |
| 20 | 13 | 22 | 88 | 17 | 10 | 14 | 51 | 28 | 16 | e11 | 29 | 63 |
| 21 | 12 | 46 | 67 | 15 | 11 | 34 | 49 | 24 | 12 | e9.7 | 75 | 42 |
| 22 | 12 | 33 | 57 | 15 | 10 | 32 | 47 | 22 | 10 | 8.4 | 133 | 31 |
| 23 | 12 | 24 | 52 | 14 | 11 | 23 | 90 | 36 | 9.6 | 7.3 | 72 | 25 |
| 24 | 9.9 | 20 | 65 | 13 | 11 | 20 | 86 | 37 | 8.6 | 24 | 42 | 22 |
| 25 | 8.6 | 21 | 97 | 12 | 11 | 19 | 58 | 47 | 8.3 | 69 | 32 | 19 |
| 26 | 8.1 | 18 | 84 | 12 | 10 | 19 | 82 | 39 | 14 | 70 | 26 | 17 |
| 27 | 42 | 16 | 65 | 11 | 9.7 | 29 | 113 | 62 | 12 | 53 | 13 | 23 |
| 28 | 46 | 18 | 54 | 12 | 9.5 | 27 | 83 | 59 | 8.4 | 44 | 18 | 56 |
| 29 | 135 | 36 | 49 | 12 | 9.1 | 23 | 62 | 52 | 8.8 | 38 | 16 | 130 |
| 30 | 123 | 25 | 45 | 11 | --- | 20 | 53 | 34 | 8.0 | 26 | 15 | 89 |
| 31 | 60 | --- | 43 | 11 | --- | 60 | --- | 26 | --- | 22 | 25 | --- |
| TOTAL | 901.8 | 737 | 1997 | 726 | 503.3 | 590.5 | 4192 | 1313 | 515.7 | 693.3 | 1254.5 | 1278.6 |
| MEAN | 29.1 | 24.6 | 64.4 | 23.4 | 17.4 | 19.0 | 140 | 42.4 | 17.2 | 22.4 | 40.5 | 42.6 |
| MAX | 135 | 48 | 192 | 50 | 54 | 60 | 926 | 108 | 47 | 70 | 188 | 173 |
| MIN | 4.7 | 13 | 12 | 11 | 9.1 | 8.8 | 47 | 22 | 8.0 | 7.3 | 7.2 | 9.1 |
| MED | 12 | 21 | 54 | 18 | 11 | 15 | 84 | 38 | 14 | 16 | 19 | 22 |
| CFSM | 1.21 | 1.02 | 2.67 | 0.97 | 0.72 | 0.79 | 5.80 | 1.76 | 0.71 | 0.93 | 1.68 | 1.77 |
| IN. | 1.39 | 1.14 | 3.08 | 1.12 | 0.78 | 0.91 | 6.47 | 2.03 | 0.80 | 1.07 | 1.94 | 1.97 |
| STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 2004, BY WATER YEAR (WY) | | | | | | | | | | | | |
| MEAN | 14.9 | 23.9 | 32.6 | 36.7 | 40.9 | 64.5 | 55.6 | 33.9 | 24.0 | 11.0 | 10.9 | 10.8 |
| MAX | 125 | 102 | 95.7 | 169 | 104 | 172 | 175 | 134 | 159 | 40.4 | 79.4 | 78.2 |
| (WY) | 1997 | 1956 | 1970 | 1979 | 1984 | 2001 | 1987 | 1954 | 1982 | 1959 | 1955 | 1954 |
| MIN | 0.48 | 0.59 | 0.63 | 2.34 | 4.39 | 19.0 | 12.5 | 11.3 | 3.01 | 0.69 | 0.62 | 0.49 |
| (WY) | 1942 | 1942 | 1942 | 1966 | 1980 | 2004 | 1966 | 1965 | 1957 | 1950 | 1957 | 1957 |

MYSTIC RIVER BASIN

01102500 ABERJONA RIVER AT WINCHESTER, MA--Continued

WATER-DISCHARGE RECORDS--Continued

| SUMMARY STATISTICS | FOR 2003 CALENDAR YEAR | | FOR 2004 WATER YEAR | | WATER YEARS 1939 - 2004 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|-------------|
| ANNUAL TOTAL | 15143.3 | | 14702.7 | | | |
| ANNUAL MEAN | 41.5 | | 40.2 | | 29.9 | |
| HIGHEST ANNUAL MEAN | | | | | 58.3 1984 | |
| LOWEST ANNUAL MEAN | | | | | 8.23 1966 | |
| HIGHEST DAILY MEAN | 200 | Mar 30 | 926 | Apr 2 | 1110 | Mar 23 2001 |
| LOWEST DAILY MEAN | 4.5 | Sep 22 | 4.7 | Oct 10 | 0.25 | Oct 10 1950 |
| ANNUAL SEVEN-DAY MINIMUM | 5.7 | Sep 8 | 6.4 | Oct 5 | 0.31 | Dec 6 1941 |
| MAXIMUM PEAK FLOW | | | 990 | Apr 2 | 1590 | Mar 22 2001 |
| MAXIMUM PEAK STAGE | | | 15.09 | Apr 2 | 16.90 | Mar 22 2001 |
| INSTANTANEOUS LOW FLOW | | | 1.7 | Nov 4 | 0.00 | Oct 10 1950 |
| ANNUAL RUNOFF (CFSM) | 1.72 | | 1.67 | | 1.24 | |
| ANNUAL RUNOFF (INCHES) | 23.37 | | 22.69 | | 16.88 | |
| 10 PERCENT EXCEEDS | 87 | | 85 | | 69 | |
| 50 PERCENT EXCEEDS | 31 | | 22 | | 17 | |
| 90 PERCENT EXCEEDS | 9.7 | | 9.7 | | 1.6 | |

e Estimated

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1958-59, 1973, October 1998 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: July 1999 to September 2000 (discontinued).

WATER TEMPERATURE: July 1999 to September 2000 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE: Maximum recorded, 4,710 $\mu\text{S}/\text{cm}$, Jan. 31, 2000; minimum, 65 $\mu\text{S}/\text{cm}$, Sept. 14, 1999.

WATER TEMPERATURE: Maximum recorded, 26.0°C, July 7, 1999; minimum, 0.1°C, Jan. 31, 2000.

REMARKS.--Selected samples were analyzed for pesticide compounds on schedule 2001 (listed with non-detection values or minimum reporting levels in the section "Explanation of the Records"); only pesticide compounds identified by the analyses (either as estimated values or as values at or above the non-detection level or minimum reporting level) for one or more samples are listed in the water-quality data tables.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| Time | INSTAN- TANEOUS DIS- CHARGE, CFS (00061) | TUR- BIDITY, NTU (00076) | BARO- METRIC PRES- SURE, MM HG (00025) | DIS- SOLVED OXYGEN, MG/L (00300) | PH, WATER, UNFLTRD FIELD, STD UNITS (00400) | SPECIF. CONDUCTANCE, WAT UNF US/CM 25 DEG C (00095) | TEMPER- ATURE, AIR, DEG C (00020) | TEMPER- ATURE, WATER, DEG C (00010) | ALKALINITY, WAT FLT INC TIT FIELD, MG/L AS CaCO_3 (39086) |
|------------|---|-----------------------------------|---|--|--|--|---|---|---|
| NOV 2003 | | | | | | | | | |
| 12... 0845 | 19 | -- | 756 | 13.0 | 6.9 | 691 | 8.4 | 7.1 | 68 |
| DEC | | | | | | | | | |
| 03... 0830 | 15 | -- | 768 | 12.0 | 7.4 | 705 | -8.7 | 1.3 | 65 |
| JAN 2004 | | | | | | | | | |
| 13... 0830 | 24 | -- | 755 | 12.2 | 6.6 | 1,890 | -9 | .9 | 69 |
| FEB | | | | | | | | | |
| 11... 0800 | 20 | -- | 757 | 11.4 | 7.2 | 1,190 | .3 | 1.9 | 54 |
| MAR | | | | | | | | | |
| 29... 0930 | 22 | -- | 772 | 11.7 | 7.4 | 946 | 5.4 | 6.8 | 57 |
| APR | | | | | | | | | |
| 02... 1330 | 958 | -- | 749 | 10.9 | 6.6 | 438 | -- | 5.1 | -- |
| 27... 0800 | 121 | -- | 750 | 9.4 | 6.8 | 537 | 9.7 | 10.5 | 39 |
| MAY | | | | | | | | | |
| 17... 0800 | 32 | -- | 769 | 7.8 | 6.7 | 713 | 14.8 | 16.8 | 51 |
| JUN | | | | | | | | | |
| 28... 0815 | 8.8 | -- | 760 | 6.1 | 6.8 | 671 | 26.2 | 19.1 | 56 |
| JUL | | | | | | | | | |
| 08... 1045 | 7.2 | 4.8 | 757 | 5.4 | 6.8 | 809 | 24.2 | 21.0 | -- |
| 14... 0815 | 23 | -- | 752 | 7.4 | 6.6 | 398 | 18.2 | 18.6 | 34 |
| AUG | | | | | | | | | |
| 03... 0930 | 15 | -- | -- | -- | -- | -- | -- | -- | -- |
| 23... 0830 | 67 | -- | 758 | 7.3 | 7.3 | 415 | 18.0 | 20.0 | 37 |
| 31... 1400 | 25 | 5.1 | 757 | 6.3 | 7.4 | 666 | 27.8 | 23.7 | -- |
| SEP | | | | | | | | | |
| 01... 0815 | 19 | -- | 761 | 6.7 | 7.3 | 581 | 19.7 | 22.0 | 45 |
| 22... 1030 | 32 | 4.9 | 761 | 8.0 | 7.1 | 530 | 21.4 | 17.3 | -- |

MYSTIC RIVER BASIN

01102500 ABERJONA RIVER AT WINCHESTER, MA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | BICAR- BONATE, WAT FLT INCRM. TITR., FIELD, MG/L (00453) | CHLOR- IDE, WATER, FLTRD, MG/L (00940) | SULFATE WATER, FLTRD, MG/L (00945) | AMMONIA + ORG-N, WATER, UNFLTRD MG/L AS N (00625) | AMMONIA WATER, FLTRD, MG/L AS N (00608) | NITRITE + NITRATE WATER FLTRD, MG/L AS N (00631) | NITRITE WATER, FLTRD, MG/L AS N (00613) | ORTHO- PHOS- PHATE, WATER, FLTRD, MG/L AS P (00671) | PHOS- PHORUS, WATER, UNFLTRD MG/L (00665) | TOTAL NITRO- GEN, WAT UNF BY ANAL YSIS, MG/L (62855) |
|----------|---|---|--|--|--|---|--|--|--|---|
| NOV 2003 | | | | | | | | | | |
| 12... | 83 | 153 | 26.4 | -- | 1.45 | 1.38 | 0.023 | <0.006 | 0.035 | 3.25 |
| DEC | | | | | | | | | | |
| 03... | 80 | 156 | 25.7 | -- | 1.22 | 1.35 | .014 | <.006 | .029 | 3.02 |
| JAN 2004 | | | | | | | | | | |
| 13... | 85 | 532 | 29.1 | -- | 1.25 | 1.48 | .009 | <.006 | .022 | 2.94 |
| FEB | | | | | | | | | | |
| 11... | 66 | 317 | 23.4 | -- | 1.11 | 1.13 | .013 | .006 | .053 | 2.83 |
| MAR | | | | | | | | | | |
| 29... | 69 | 241 | 25.7 | -- | 1.40 | 1.44 | .025 | <.006 | .036 | 3.18 |
| APR | | | | | | | | | | |
| 02... | -- | 111 | 11.8 | -- | .48 | .90 | E.005 | .008 | .099 | 1.79 |
| 27... | 47 | 126 | 16.9 | -- | .48 | 1.08 | .019 | <.006 | .033 | 2.00 |
| MAY | | | | | | | | | | |
| 17... | 62 | 172 | 19.6 | -- | .44 | 1.48 | .078 | <.006 | .045 | 2.26 |
| JUN | | | | | | | | | | |
| 28... | 68 | 151 | 24.9 | -- | .58 | 1.93 | .144 | <.006 | .047 | 2.90 |
| JUL | | | | | | | | | | |
| 08... | -- | -- | -- | 0.92 | .389 | 2.17 | -- | -- | .043 | -- |
| 14... | 42 | 87.4 | 14.2 | -- | .30 | 1.09 | .069 | E.004 | .067 | 1.76 |
| AUG | | | | | | | | | | |
| 03... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 23... | 45 | 90.7 | 14.0 | -- | .14 | .89 | .042 | E.004 | .054 | 1.58 |
| 31... | -- | -- | -- | .68 | .10 | 1.73 | .035 | -- | .05 | -- |
| SEP | | | | | | | | | | |
| 01... | 55 | 125 | 17.5 | -- | .15 | 1.35 | .040 | E.003 | .037 | 1.79 |
| 22... | -- | -- | -- | .68 | .12 | 1.08 | .020 | -- | E.03 | -- |

MYSTIC RIVER BASIN

01102500 ABERJONA RIVER AT WINCHESTER, MA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | CHLORO- PHYLL A PERI- PHYTON, CHROMO- FLUORO, MG/M2 (70957) | CIAT, WATER, FLTRD, UG/L (04040) | ATRA- ZINE, WATER, FLTRD, UG/L (39632) | CAR- BARYL, WATER, FLTRD, 0.7U GF UG/L (82680) | DIAZI- NON, WATER, FLTRD, UG/L (39572) | METOLA- CHLOR, WATER, FLTRD, UG/L (39415) | PENDI- METH- ALIN, WATER, FLTRD, 0.7U GF UG/L (82683) | PROME- TON, WATER, FLTRD, UG/L (04037) | TRI- FLUR- ALIN, WATER, FLTRD, 0.7U GF UG/L (82661) | SUS- PENDE SEDI- MENT CONCEN- TRATION MG/L (80154) |
|----------|--|--|---|--|---|--|--|---|--|---|
| NOV 2003 | | | | | | | | | | |
| 12... | -- | <0.006 | E0.005 | E0.008 | 0.006 | E0.005 | <0.022 | 0.01 | <0.009 | 4 |
| DEC | | | | | | | | | | |
| 03... | -- | -- | -- | -- | -- | -- | -- | -- | -- | 6 |
| JAN 2004 | | | | | | | | | | |
| 13... | -- | -- | -- | -- | -- | -- | -- | -- | -- | 5 |
| FEB | | | | | | | | | | |
| 11... | -- | E.005 | .007 | E.018 | <.010 | E.007 | <.022 | .02 | E.005 | 5 |
| MAR | | | | | | | | | | |
| 29... | -- | -- | -- | -- | -- | -- | -- | -- | -- | 8 |
| APR | | | | | | | | | | |
| 02... | -- | -- | -- | -- | -- | -- | -- | -- | -- | 29 |
| 27... | -- | <.006 | E.006 | E.014 | .012 | <.013 | E.019 | .01 | <.009 | 9 |
| MAY | | | | | | | | | | |
| 17... | -- | E.005 | .011 | E.484 | .009 | E.008 | <.022 | .01 | <.009 | 10 |
| JUN | | | | | | | | | | |
| 28... | -- | <.006 | .015 | E.509 | <.010 | E.007 | <.022 | .01 | <.009 | 4 |
| JUL | | | | | | | | | | |
| 08... | 24.8 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 14... | -- | <.006 | <.010 | E.270 | .021 | <.013 | <.022 | <.01 | <.009 | 9 |
| AUG | | | | | | | | | | |
| 03... | 70.9 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 23... | -- | <.006 | <.010 | E.009 | <.005 | <.013 | <.022 | .02 | <.009 | 10 |
| 31... | 6.4 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| SEP | | | | | | | | | | |
| 01... | -- | <.006 | <.007 | E.037 | <.005 | <.013 | <.022 | <.01 | <.009 | 3 |
| 22... | 38.0 | -- | -- | -- | -- | -- | -- | -- | -- | -- |

< Less than

E Estimated value

CHARLES RIVER BASIN

01103220 MISCOE BROOK NEAR FRANKLIN, MA

LOCATION.--Lat 42°02'27", long 71°25'38", Norfolk County, Hydrologic Unit 01090001, on left bank 20 ft upstream from South Street and 3.5 mi southwest of Franklin, MA.

DRAINAGE AREA.--1.15 mi².

PERIOD OF RECORD.--October 2000 to current year.

GAGE.--Water-stage recorder with satellite telemeter. Elevation of gage is 260 ft above National Geodetic Vertical Datum of 1929 (from topographic map).

REMARKS.--Records fair except those for estimated daily discharge and those for discharges less than 0.30 ft³/s, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 24 ft³/s, Mar. 22, 2001, gage height, 2.65 ft; minimum discharge, 0.02 ft³/s, Oct. 15, 2001, Aug. 16, 18, 19, 2002.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 15 ft³/s, Apr. 14, gage height, 2.08 ft; minimum discharge, 0.09 ft³/s, Aug. 10-12.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|-------|-------|-------|-------|------|-------|-------|------|-------|-------|
| 1 | 0.31 | 1.7 | 0.73 | 1.4 | 0.86 | 0.90 | 5.8 | 1.5 | 0.91 | 0.20 | 0.17 | 0.23 |
| 2 | 0.30 | 1.2 | 0.64 | 1.3 | 0.85 | 0.99 | 8.0 | 1.5 | 0.83 | 0.32 | 0.18 | 0.21 |
| 3 | 0.29 | 0.98 | 0.49 | 1.5 | 0.89 | 0.91 | 4.2 | 1.7 | 0.74 | 0.26 | 0.15 | 0.19 |
| 4 | 0.33 | 0.89 | 0.51 | 1.6 | 1.3 | 0.79 | 2.5 | 2.9 | 0.71 | 0.22 | 0.13 | 0.18 |
| 5 | 0.34 | 0.90 | e0.47 | 2.6 | 1.0 | 0.73 | 2.1 | 2.3 | 0.58 | 0.90 | 0.40 | 0.17 |
| 6 | 0.31 | 0.98 | e0.47 | 2.5 | 1.2 | 1.2 | 1.7 | 1.7 | 0.57 | 0.75 | 0.23 | 0.16 |
| 7 | 0.30 | 0.86 | e0.48 | 1.8 | 1.8 | 1.0 | 1.4 | 1.4 | 0.59 | 0.42 | 0.17 | 0.17 |
| 8 | 0.30 | 0.78 | 0.55 | 1.3 | 1.4 | 0.81 | 1.3 | 1.2 | 0.49 | 0.33 | 0.14 | 0.26 |
| 9 | 0.29 | 0.69 | 0.55 | 1.00 | 1.1 | 0.68 | 1.2 | 1.5 | 0.48 | 0.27 | 0.12 | 0.71 |
| 10 | 0.29 | 0.67 | 0.57 | 0.86 | 1.0 | 0.72 | 1.2 | 1.6 | 0.69 | 0.23 | 0.11 | 0.46 |
| 11 | 0.31 | 0.69 | 2.5 | 0.83 | 0.99 | 0.73 | 1.1 | 1.3 | 0.50 | 0.21 | 0.11 | 0.28 |
| 12 | 0.40 | 0.83 | 3.8 | 0.92 | 0.94 | 0.69 | 1.0 | 1.1 | 0.42 | 0.19 | 0.15 | 0.25 |
| 13 | 0.48 | 1.0 | 3.2 | 1.00 | 0.90 | 0.66 | 3.0 | 1.00 | 0.39 | 0.25 | 2.6 | 0.23 |
| 14 | 0.41 | 0.89 | 2.1 | 0.95 | 0.90 | 0.61 | 13 | 0.91 | 0.38 | 0.35 | 1.2 | 0.21 |
| 15 | 1.6 | 0.77 | 3.4 | 0.89 | 0.87 | 0.61 | 8.5 | 0.86 | 0.37 | 0.28 | 2.4 | 0.21 |
| 16 | 1.2 | 0.68 | 2.9 | 0.81 | 0.78 | 0.60 | 4.3 | 0.84 | 0.33 | 0.23 | 1.9 | 0.24 |
| 17 | 0.87 | 0.68 | 3.5 | 0.86 | 0.71 | 0.59 | 2.7 | 0.82 | 0.30 | 0.19 | 0.76 | 0.24 |
| 18 | 0.83 | 0.66 | 12 | 0.97 | 0.72 | 0.56 | 2.1 | 0.80 | 0.32 | 0.17 | 0.43 | 2.0 |
| 19 | 0.80 | 0.63 | 6.6 | 0.97 | 0.75 | 0.55 | 1.9 | 1.2 | 0.62 | 0.20 | 0.33 | 2.3 |
| 20 | 0.87 | 0.78 | 3.3 | 0.92 | 0.80 | 0.59 | 1.6 | 0.85 | 0.41 | 0.18 | 0.28 | 0.83 |
| 21 | 0.88 | 1.0 | 2.3 | 0.89 | 0.81 | 1.4 | 1.5 | 0.76 | 0.33 | 0.14 | 1.3 | 0.45 |
| 22 | 1.0 | 0.89 | 1.9 | 0.87 | 0.86 | 1.2 | 1.4 | 0.73 | 0.30 | 0.13 | 2.1 | 0.35 |
| 23 | 1.1 | 0.73 | 1.9 | 0.89 | 0.88 | 0.87 | 2.7 | 0.72 | 0.28 | 0.12 | 0.81 | 0.29 |
| 24 | 1.0 | 0.67 | 2.5 | 0.83 | 0.85 | 0.87 | 2.9 | 0.79 | 0.25 | 0.31 | 0.41 | 0.27 |
| 25 | 0.95 | 0.72 | 3.7 | 0.74 | 0.85 | 0.92 | 2.1 | 0.95 | 0.25 | 0.23 | 0.32 | 0.26 |
| 26 | 0.93 | 0.65 | 3.0 | 0.76 | 0.82 | 0.93 | 2.5 | 0.78 | 0.26 | 0.17 | 0.26 | 0.24 |
| 27 | 2.4 | 0.62 | 2.2 | 0.82 | 0.81 | 1.2 | 3.8 | 1.2 | 0.23 | 0.14 | 0.23 | 0.24 |
| 28 | 3.1 | 0.64 | 1.8 | 0.87 | 0.82 | 1.0 | 3.1 | 1.3 | 0.22 | 0.16 | 0.21 | 0.86 |
| 29 | 4.9 | 1.2 | 1.7 | 0.90 | 0.84 | 0.84 | 2.2 | 1.3 | 0.25 | 0.17 | 0.20 | 3.0 |
| 30 | 5.1 | 0.88 | 1.6 | 0.90 | --- | 0.73 | 1.7 | 0.80 | 0.22 | 0.14 | 0.19 | 2.4 |
| 31 | 2.8 | --- | 1.5 | 0.87 | --- | 1.5 | --- | 0.68 | --- | 0.13 | 0.31 | --- |
| TOTAL | 34.99 | 25.26 | 72.86 | 34.32 | 27.30 | 26.38 | 92.5 | 36.99 | 13.22 | 7.99 | 18.30 | 17.89 |
| MEAN | 1.13 | 0.84 | 2.35 | 1.11 | 0.94 | 0.85 | 3.08 | 1.19 | 0.44 | 0.26 | 0.59 | 0.60 |
| MAX | 5.1 | 1.7 | 12 | 2.6 | 1.8 | 1.5 | 13 | 2.9 | 0.91 | 0.90 | 2.6 | 3.0 |
| MIN | 0.29 | 0.62 | 0.47 | 0.74 | 0.71 | 0.55 | 1.0 | 0.68 | 0.22 | 0.12 | 0.11 | 0.16 |
| CFSM | 0.98 | 0.73 | 2.04 | 0.96 | 0.82 | 0.74 | 2.68 | 1.04 | 0.38 | 0.22 | 0.51 | 0.52 |
| IN. | 1.13 | 0.82 | 2.36 | 1.11 | 0.88 | 0.85 | 2.99 | 1.20 | 0.43 | 0.26 | 0.59 | 0.58 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2001 - 2004, BY WATER YEAR (WY)

| | 2001 | 2002 | 2003 | 2004 | 2001 | 2002 | 2003 | 2004 | 2001 | 2002 | 2003 | 2004 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 0.45 | 0.58 | 1.19 | 0.63 | 0.58 | 1.57 | 1.83 | 1.00 | 1.06 | 0.38 | 0.42 | 0.33 |
| MAX | 1.13 | 0.84 | 2.35 | 1.11 | 0.94 | 3.10 | 3.08 | 1.32 | 1.69 | 0.61 | 0.61 | 0.60 |
| (WY) | 2004 | 2004 | 2004 | 2004 | 2004 | 2001 | 2004 | 2002 | 2003 | 2003 | 2003 | 2004 |
| MIN | 0.11 | 0.21 | 0.36 | 0.36 | 0.37 | 0.61 | 0.65 | 0.70 | 0.44 | 0.15 | 0.11 | 0.14 |
| (WY) | 2002 | 2002 | 2002 | 2002 | 2002 | 2002 | 2002 | 2001 | 2004 | 2002 | 2002 | 2001 |

SUMMARY STATISTICS FOR 2003 CALENDAR YEAR FOR 2004 WATER YEAR WATER YEARS 2001 - 2004

| | | | | |
|--------------------------|--------|--------|-------|--------|
| ANNUAL TOTAL | 397.40 | 408.00 | | |
| ANNUAL MEAN | 1.09 | 1.11 | | |
| HIGHEST ANNUAL MEAN | | | 1.11 | 2004 |
| LOWEST ANNUAL MEAN | | | 0.43 | 2002 |
| HIGHEST DAILY MEAN | 12 | Jun 23 | 13 | Apr 14 |
| LOWEST DAILY MEAN | 0.18 | Jan 28 | 0.11 | Aug 10 |
| ANNUAL SEVEN-DAY MINIMUM | 0.20 | Jan 24 | 0.15 | Aug 6 |
| MAXIMUM PEAK FLOW | | | 15 | Apr 14 |
| MAXIMUM PEAK STAGE | | | 2.08 | Apr 14 |
| INSTANTANEOUS LOW FLOW | | | 0.09 | Aug 10 |
| ANNUAL RUNOFF (CFSM) | 0.947 | | 0.969 | 0.726 |
| ANNUAL RUNOFF (INCHES) | 12.86 | | 13.20 | 9.87 |
| 10 PERCENT EXCEEDS | 2.3 | | 2.4 | 1.7 |
| 50 PERCENT EXCEEDS | 0.66 | | 0.82 | 0.48 |
| 90 PERCENT EXCEEDS | 0.29 | | 0.21 | 0.16 |

e Estimated

CHARLES RIVER BASIN

01103280 CHARLES RIVER AT MEDWAY, MA

LOCATION.--Lat 42°08'23", long 71°23'24", Norfolk County, Hydrologic Unit 01090001, on right bank at upstream side of Walker Street bridge at intersection with Populatic Street, 0.5 mi east of Medway, MA.

DRAINAGE AREA.--65.7 mi².

PERIOD OF RECORD.--November 1997 to current year.

GAGE.--Water-stage recorder with satellite and telephone telemeter. Elevation of gage is 175 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--6 years (water years 1999–2004), 106 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,490 ft³/s, Mar. 23, 2001, gage height, 6.35 ft; minimum discharge, 2.0 ft³/s, Sept. 5, 1999.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 919 ft³/s, Apr. 15, gage height, 4.46 ft; minimum discharge, 15 ft³/s, Oct. 10–12.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|------|------|------|------|-------|------|------|------|------|------|
| 1 | 22 | 288 | 95 | 144 | e44 | e65 | 474 | 216 | 104 | 27 | 23 | 24 |
| 2 | 20 | 208 | 84 | 132 | e45 | 83 | 823 | 191 | 98 | 60 | 22 | 23 |
| 3 | 18 | 160 | 67 | 131 | e49 | 107 | 793 | 186 | 110 | 55 | 21 | 21 |
| 4 | 18 | 130 | 57 | 137 | e67 | 111 | 607 | 256 | 108 | 48 | 19 | 20 |
| 5 | 19 | 114 | e49 | e164 | e76 | 112 | 447 | 260 | 91 | 71 | 23 | 18 |
| 6 | 18 | 149 | e41 | e170 | e95 | 132 | 327 | 240 | 78 | 101 | 26 | 17 |
| 7 | 18 | 151 | e39 | e165 | e143 | 141 | 265 | 209 | 82 | 94 | 26 | 17 |
| 8 | 18 | 115 | e60 | e152 | e162 | 129 | 226 | 176 | 65 | 72 | 22 | 17 |
| 9 | 17 | 89 | e58 | e135 | e153 | 122 | 197 | 161 | 57 | 56 | 21 | 29 |
| 10 | 16 | 74 | 58 | e108 | e135 | 111 | 174 | 158 | 52 | 44 | 19 | 40 |
| 11 | 15 | 85 | 153 | e91 | e118 | 101 | 154 | 149 | 51 | 37 | 17 | 35 |
| 12 | 17 | 85 | e271 | e82 | e99 | 89 | 141 | 135 | 55 | 31 | 17 | 29 |
| 13 | 20 | 78 | e289 | e76 | e84 | 82 | 216 | 122 | 48 | 28 | 160 | 25 |
| 14 | 20 | 74 | e290 | e68 | e77 | 75 | 709 | 110 | 41 | 32 | 131 | 22 |
| 15 | 64 | 68 | e364 | e64 | e72 | 69 | 872 | 97 | 38 | 33 | 155 | 20 |
| 16 | 87 | 62 | e355 | e66 | e64 | 69 | 747 | 90 | 35 | 30 | 154 | 20 |
| 17 | 87 | 59 | e379 | e67 | e57 | 81 | 546 | 86 | 31 | 27 | 131 | 20 |
| 18 | 84 | 61 | e491 | e62 | e54 | 81 | 391 | 81 | 30 | 24 | 100 | 86 |
| 19 | 62 | 60 | e468 | e58 | 51 | 73 | 297 | 109 | 32 | 23 | 74 | 159 |
| 20 | 49 | 61 | e441 | e58 | 50 | 70 | 246 | 110 | 31 | 22 | 57 | 163 |
| 21 | 43 | 74 | e327 | e57 | 50 | 130 | 210 | 98 | 29 | 21 | 60 | 138 |
| 22 | 36 | 78 | 279 | e54 | e52 | 158 | 186 | 86 | 26 | 19 | 93 | 93 |
| 23 | 35 | 71 | 242 | e52 | e52 | 138 | 221 | 79 | 25 | 18 | 84 | 60 |
| 24 | 46 | 64 | 234 | e49 | e51 | 124 | 248 | 84 | 23 | 29 | 75 | 46 |
| 25 | 37 | 64 | 274 | e45 | e51 | 112 | 241 | 83 | 25 | 33 | 60 | 36 |
| 26 | 29 | 63 | 263 | e43 | e50 | 105 | 262 | 80 | 61 | 36 | 47 | 30 |
| 27 | 60 | 60 | 242 | e44 | e49 | 110 | 347 | 94 | 54 | 31 | 39 | 27 |
| 28 | 100 | 64 | 212 | e43 | e49 | 110 | 349 | 136 | 49 | 28 | 33 | 93 |
| 29 | 262 | 94 | 188 | e44 | e50 | 116 | 304 | 168 | 38 | 28 | 29 | 302 |
| 30 | 398 | 98 | 169 | e45 | --- | 121 | 252 | 154 | 31 | 28 | 25 | 372 |
| 31 | 406 | --- | 154 | e45 | --- | 175 | --- | 124 | --- | 26 | 26 | --- |
| TOTAL | 2141 | 2901 | 6693 | 2651 | 2149 | 3302 | 11272 | 4328 | 1598 | 1212 | 1789 | 2002 |
| MEAN | 69.1 | 96.7 | 216 | 85.5 | 74.1 | 107 | 376 | 140 | 53.3 | 39.1 | 57.7 | 66.7 |
| MAX | 406 | 288 | 491 | 170 | 162 | 175 | 872 | 260 | 110 | 101 | 160 | 372 |
| MIN | 15 | 59 | 39 | 43 | 44 | 65 | 141 | 79 | 23 | 18 | 17 | 17 |
| CFSM | 1.05 | 1.47 | 3.29 | 1.30 | 1.13 | 1.62 | 5.72 | 2.13 | 0.81 | 0.60 | 0.88 | 1.02 |
| IN. | 1.21 | 1.64 | 3.79 | 1.50 | 1.22 | 1.87 | 6.38 | 2.45 | 0.90 | 0.69 | 1.01 | 1.13 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 2004, BY WATER YEAR (WY)

| | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 46.4 | 65.4 | 108 | 119 | 143 | 246 | 230 | 142 | 152 | 52.2 | 29.6 | 38.3 | | |
| MAX | 82.8 | 101 | 216 | 227 | 257 | 406 | 376 | 271 | 339 | 138 | 57.7 | 94.8 | | |
| (WY) | 1999 | 2003 | 2004 | 1999 | 1998 | 2001 | 2004 | 1998 | 1998 | 1998 | 2004 | 1999 | | |
| MIN | 10.6 | 13.3 | 33.8 | 47.4 | 61.9 | 103 | 99.7 | 64.8 | 15.7 | 13.5 | 4.63 | 13.5 | | |
| (WY) | 2002 | 2002 | 2002 | 2002 | 2002 | 2002 | 1999 | 2001 | 1999 | 2002 | 1999 | 2001 | | |

SUMMARY STATISTICS FOR 2003 CALENDAR YEAR FOR 2004 WATER YEAR WATER YEARS 1998 - 2004

| | | | | | | | | | | | | | | |
|--------------------------|-------|-------|-------|--------|--|-------|--------|--|-------|------|--|--|-------------|--|
| ANNUAL TOTAL | 54797 | 42038 | | | | | | | | | | | | |
| ANNUAL MEAN | 150 | 115 | | | | | | | | 106 | | | | |
| HIGHEST ANNUAL MEAN | | | | | | | | | | 147 | | | 2003 | |
| LOWEST ANNUAL MEAN | | | | | | | | | | 56.9 | | | 2002 | |
| HIGHEST DAILY MEAN | | | 723 | Jun 24 | | 872 | Apr 15 | | 1410 | | | | Mar 23 2001 | |
| LOWEST DAILY MEAN | | | 13 | Sep 1 | | 15 | Oct 11 | | 2.1 | | | | Sep 4 1999 | |
| ANNUAL SEVEN-DAY MINIMUM | | | 16 | Sep 9 | | 17 | Oct 6 | | 3.0 | | | | Sep 1 1999 | |
| MAXIMUM PEAK FLOW | | | | | | 919 | Apr 15 | | 1490 | | | | Mar 23 2001 | |
| MAXIMUM PEAK STAGE | | | | | | 4.46 | Apr 15 | | 6.35 | | | | Mar 23 2001 | |
| INSTANTANEOUS LOW FLOW | | | | | | 15 | Oct 10 | | 2.0 | | | | Sep 5 1999 | |
| ANNUAL RUNOFF (CFSM) | | | 2.29 | | | 1.75 | | | 1.61 | | | | | |
| ANNUAL RUNOFF (INCHES) | | | 31.03 | | | 23.80 | | | 21.94 | | | | | |
| 10 PERCENT EXCEEDS | | | 331 | | | 261 | | | 253 | | | | | |
| 50 PERCENT EXCEEDS | | | 104 | | | 74 | | | 63 | | | | | |
| 90 PERCENT EXCEEDS | | | 29 | | | 23 | | | 13 | | | | | |

e Estimated

CHARLES RIVER BASIN

01104200 CHARLES RIVER AT WELLESLEY, MA

LOCATION.--Lat 42° 18'59", long 71° 13'42", Norfolk County, Hydrologic Unit 01090001, on left bank at east limits of Wellesley, 30 ft upstream from a horseshoe-shaped dam and 50 ft upstream from bridge on State Highway 9.

DRAINAGE AREA.--211 mi².

PERIOD OF RECORD.--Discharge: August 1959 to current year.

Water-quality records: Water year 1968.

GAGE.--Water-stage recorder and masonry dam. Datum of gage is 67.92 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for estimated daily discharge, which are fair. Flow affected by diversion to Mother Brook (station 01104000), and by diversions to and from basin for municipal supplies. Occasional regulation at dam 0.2 mi upstream and by other ponds upstream.

AVERAGE DISCHARGE.--45 years (water years 1960–2004), 288 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,410 ft³/s, Mar. 21, 1968, gage height, 6.20 ft; no flow Sept. 15, Oct. 6, 1959 (caused by closing of gates at dam at gage); minimum daily discharge, 1.0 ft³/s, Aug. 24, 31, Sept. 8, 1965.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,120 ft³/s, Apr. 5, gage height, 4.73 ft; minimum discharge, 18 ft³/s, July 28.

DISCHARGE, CUBIC FEET PER SECFCOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|-------|------|------|-------|-------|-------|------|------|------|------|
| 1 | 79 | 463 | 234 | 539 | 146 | 217 | 756 | 757 | 357 | 94 | 56 | 69 |
| 2 | 75 | 500 | 232 | 507 | 147 | 239 | 1080 | 728 | 326 | 97 | 52 | 65 |
| 3 | 78 | 512 | 219 | 481 | 149 | 276 | 1060 | 638 | 308 | 91 | 47 | 60 |
| 4 | 79 | 482 | 206 | 471 | 187 | 310 | 1070 | 669 | 322 | 102 | 43 | 51 |
| 5 | 80 | 461 | 191 | 482 | 189 | 328 | 1100 | 654 | 305 | 138 | 53 | 43 |
| 6 | 77 | 449 | 177 | 490 | 213 | 343 | 1100 | 632 | 289 | 172 | 51 | 38 |
| 7 | 59 | 410 | 154 | 501 | 296 | 356 | 1060 | 617 | 281 | 189 | 47 | 37 |
| 8 | 57 | 382 | 166 | e430 | 305 | 364 | 999 | 598 | 267 | 195 | 45 | 59 |
| 9 | 62 | 363 | 181 | e350 | 311 | 367 | 918 | 589 | 249 | 183 | 42 | 109 |
| 10 | 60 | 336 | 165 | e300 | 326 | 352 | 837 | 574 | 237 | 160 | 39 | 92 |
| 11 | 61 | 309 | 243 | e275 | 334 | 335 | 756 | 536 | 214 | 134 | 36 | 89 |
| 12 | 81 | 212 | 389 | e260 | 324 | 327 | 690 | 500 | 199 | 110 | 35 | 95 |
| 13 | 107 | 193 | 403 | e250 | 306 | 312 | 712 | 468 | 185 | 95 | 119 | 93 |
| 14 | 81 | 195 | 416 | e240 | 292 | 298 | 929 | 437 | 176 | 98 | 229 | 85 |
| 15 | 174 | 196 | 577 | e230 | 282 | 276 | 947 | 414 | 164 | 100 | 356 | 54 |
| 16 | 192 | 189 | 602 | e220 | 255 | 267 | 996 | 393 | 149 | 96 | 283 | 51 |
| 17 | 182 | 182 | 641 | e220 | 239 | 265 | 1040 | 374 | 133 | 93 | 272 | 62 |
| 18 | 186 | 177 | 822 | e220 | 219 | 257 | 1070 | 268 | 121 | 89 | 201 | 159 |
| 19 | 184 | 176 | 853 | e225 | 205 | 249 | 1070 | 281 | 112 | 85 | 181 | 243 |
| 20 | 177 | 179 | 857 | 225 | 202 | 246 | 1010 | 287 | 104 | 79 | 169 | 258 |
| 21 | 171 | 261 | 860 | 218 | 201 | 302 | 941 | 284 | 96 | 77 | 176 | 299 |
| 22 | 156 | 252 | 844 | 213 | 202 | 353 | 849 | 278 | 92 | 68 | 199 | 308 |
| 23 | 147 | 248 | 818 | 205 | 206 | 372 | 834 | 279 | 85 | 59 | 172 | 280 |
| 24 | 139 | 231 | 795 | 196 | 215 | 379 | 791 | 272 | 81 | 123 | 177 | 244 |
| 25 | 133 | 218 | 796 | 186 | 213 | 379 | 739 | 316 | 73 | 145 | 191 | 206 |
| 26 | 133 | 215 | 755 | 180 | 208 | 376 | 753 | 292 | 93 | 128 | 177 | 163 |
| 27 | 169 | 209 | 711 | 171 | 204 | 387 | 817 | 307 | 107 | 97 | 156 | 100 |
| 28 | 217 | 211 | 677 | 161 | 202 | 381 | 805 | 320 | 120 | 58 | 136 | 191 |
| 29 | 379 | 239 | 643 | 151 | 206 | 374 | 791 | 342 | 119 | 56 | 125 | 440 |
| 30 | 417 | 232 | 607 | 147 | --- | 368 | 780 | 351 | 107 | 59 | 78 | 475 |
| 31 | 419 | --- | 573 | 145 | --- | 402 | --- | 359 | --- | 61 | 67 | --- |
| TOTAL | 4611 | 8682 | 15807 | 8889 | 6784 | 10057 | 27300 | 13814 | 5471 | 3331 | 4010 | 4518 |
| MEAN | 149 | 289 | 510 | 287 | 234 | 324 | 910 | 446 | 182 | 107 | 129 | 151 |
| MAX | 419 | 512 | 860 | 539 | 334 | 402 | 1100 | 757 | 357 | 195 | 356 | 475 |
| MIN | 57 | 176 | 154 | 145 | 146 | 217 | 690 | 268 | 73 | 56 | 35 | 37 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1959 - 2004, BY WATER YEAR (WY)

| | | | | | | | | | | | | |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 149 | 239 | 332 | 338 | 391 | 548 | 560 | 345 | 250 | 117 | 101 | 92.7 |
| MAX | 495 | 561 | 805 | 1018 | 766 | 1048 | 1223 | 697 | 951 | 439 | 430 | 253 |
| (WY) | 1997 | 1990 | 1997 | 1979 | 1970 | 1983 | 1987 | 1998 | 1982 | 1998 | 1990 | 1961 |
| MIN | 23.2 | 34.0 | 52.6 | 43.8 | 95.7 | 211 | 154 | 124 | 64.7 | 24.5 | 13.0 | 14.9 |
| (WY) | 1966 | 1966 | 1966 | 1981 | 1980 | 1985 | 1985 | 1986 | 1999 | 1997 | 1965 | 1965 |

SUMMARY STATISTICS

| | FOR 2003 CALENDAR YEAR | | | FOR 2004 WATER YEAR | | | WATER YEARS 1959 - 2004 | | |
|--------------------------|------------------------|--|--|---------------------|--|--|-------------------------|--|--|
| ANNUAL TOTAL | 135433 | | | 113274 | | | | | |
| ANNUAL MEAN | 371 | | | 309 | | | 288 | | |
| HIGHEST ANNUAL MEAN | | | | | | | 458 | | |
| LOWEST ANNUAL MEAN | | | | | | | 108 | | |
| HIGHEST DAILY MEAN | 1030 | | | Mar 31 | | | 1100 | | |
| LOWEST DAILY MEAN | 38 | | | Sep 13 | | | 35 | | |
| ANNUAL SEVEN-DAY MINIMUM | 53 | | | Sep 12 | | | 42 | | |
| MAXIMUM PEAK FLOW | | | | | | | 1120 | | |
| MAXIMUM PEAK STAGE | | | | | | | 4.73 | | |
| INSTANTANEOUS LOW FLOW | | | | | | | 18 | | |
| 10 PERCENT EXCEEDS | 800 | | | 754 | | | 631 | | |
| 50 PERCENT EXCEEDS | 273 | | | 225 | | | 209 | | |
| 90 PERCENT EXCEEDS | 93 | | | 74 | | | 45 | | |

e Estimated

CHARLES RIVER BASIN

01104615 CHARLES RIVER ABOVE WATERTOWN DAM AT WATERTOWN, MA
(National Water-Quality Assessment Site)

PERIOD OF RECORD.--October 1998 to September 2003.

Discharge records: August 1999 to September 2000.

PERIOD OF DAILY RECORD.--

DISCHARGE: August 1999 to September 2000.

SPECIFIC CONDUCTANCE: August 1999 to September 2000.

WATER TEMPERATURE: August 1999 to September 2000.

INSTRUMENTATION.--Specific conductance and temperature water-quality monitor.

EXTREMES FOR PERIOD OF DAILY RECORD.--

DISCHARGE: Maximum discharge, 1,370 ft³/s, Sept. 10, 1999, gage height, 5.48 ft; minimum discharge, 14 ft³/s, Sept. 7, 1999.

SPECIFIC CONDUCTANCE: Maximum recorded, 1,200 us/cm, Jan. 31, 2000; minimum, 167 us/cm, June 6, 2000.

WATER TEMPERATURE: Maximum recorded, 26.0°C, Aug. 19, 1999; minimum, -0.2°C, Dec. 28, 1999.

REMARKS.--Instantaneous discharge estimated from Charles River at Waltham, MA gage, 01104500.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | TIME | INSTAN- TANEOUS DIS- CHARGE, CFS (00061) | TUR- BIDITY, NTU (00076) | BARO- METRIC PRES- SURE, MM HG (00025) | DIS- SOLVED OXYGEN, MG/L (00300) | PH, WATER, UNFLTRD FIELD, STD UNITS (00400) | SPECIF. CONduc- TANCE, WAT UNF US/CM 25 DEG C (00095) | TEMPER- ATURE, AIR, DEG C (00020) | TEMPER- ATURE, WATER, DEG C (00010) | ALKA- LINITY, WAT FLT INC TIT FIELD, MG/L AS CACO3 (39086) |
|----------|------|---|-----------------------------------|---|--|---|---|---|---|---|
| NOV 2003 | | | | | | | | | | |
| 13... | 0845 | E243 | -- | 739 | 10.9 | 6.7 | 385 | 13.1 | 7.2 | 33 |
| DEC | | | | | | | | | | |
| 04... | 0830 | E254 | -- | 768 | 13.9 | 7.1 | 428 | -3.2 | .9 | 36 |
| JAN 2004 | | | | | | | | | | |
| 14... | 0845 | E327 | -- | 764 | 14.8 | 7.2 | 540 | -20.3 | .1 | 32 |
| FEB | | | | | | | | | | |
| 12... | 0815 | E369 | -- | 766 | 14.3 | 7.3 | 735 | -5.8 | .1 | 31 |
| APR | | | | | | | | | | |
| 28... | 0800 | E1070 | -- | 754 | 9.6 | 7.2 | 373 | 8.0 | 13.2 | 24 |
| MAY | | | | | | | | | | |
| 18... | 0800 | E369 | -- | 764 | 7.7 | 6.7 | 427 | 16.1 | 19.8 | 35 |
| JUN | | | | | | | | | | |
| 29... | 0930 | E156 | -- | 758 | 5.8 | 6.9 | 502 | 17.7 | 21.5 | 47 |
| JUL | | | | | | | | | | |
| 15... | 0815 | E132 | -- | 749 | 5.4 | 6.9 | 479 | 18.5 | 21.0 | 40 |
| AUG | | | | | | | | | | |
| 02... | 1430 | E74 | -- | -- | -- | -- | -- | -- | -- | -- |
| 24... | 0900 | E263 | -- | 763 | 6.5 | 7.3 | 376 | 19.7 | 22.3 | 29 |
| SEP | | | | | | | | | | |
| 08... | 0745 | E78 | 5.4 | 761 | 6.3 | 7.2 | 472 | 22.0 | 22.2 | -- |
| 08... | 0800 | E78 | -- | 761 | 5.1 | 7.1 | 463 | 22.0 | 22.2 | 39 |

CHARLES RIVER BASIN

01104615 CHARLES RIVER ABOVE WATERTOWN DAM AT WATERTOWN, MA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | BICARBONATE, WAT FLT INCRM. TITR. , FIELD, MG/L (00453) | CHLOR- IDE, WATER, FLTRD, MG/L (00940) | SULFATE WATER, FLTRD, MG/L (00945) | AMMONIA + ORG-N, WATER, UNFLTRD MG/L AS N (00625) | AMMONIA WATER, FLTRD, MG/L AS N (00608) | NITRITE + NITRATE WATER FLTRD, MG/L AS N (00631) | NITRITE WATER, FLTRD, MG/L AS N (00613) | ORTHO- PHOSPHATE, WATER, FLTRD, MG/L AS P (00671) | PHOS- PHORUS, WATER, UNFLTRD MG/L (00665) |
|----------|--|---|--|--|--|---|--|--|--|
| NOV 2003 | | | | | | | | | |
| 13... | 40 | 86.1 | 9.7 | -- | 0.08 | 0.57 | 0.009 | 0.014 | 0.061 |
| DEC | | | | | | | | | |
| 04... | 44 | 98.3 | 11.8 | -- | .08 | .93 | .010 | .008 | .042 |
| JAN 2004 | | | | | | | | | |
| 14... | 39 | 130 | 14.1 | -- | .10 | 1.07 | .009 | .006 | .025 |
| FEB | | | | | | | | | |
| 12... | 38 | 188 | 14.0 | -- | .20 | 1.35 | .014 | .007 | .041 |
| APR | | | | | | | | | |
| 28... | 30 | 89.8 | 10.2 | -- | E.03 | .41 | E.007 | <.006 | .043 |
| MAY | | | | | | | | | |
| 18... | 42 | 102 | 9.5 | -- | .08 | .62 | .019 | .010 | .066 |
| JUN | | | | | | | | | |
| 29... | 57 | 120 | 10.8 | -- | .07 | .14 | .008 | E.003 | .051 |
| JUL | | | | | | | | | |
| 15... | 49 | 109 | 12.0 | -- | .14 | .58 | .029 | .021 | .074 |
| AUG | | | | | | | | | |
| 02... | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 24... | 35 | 84.9 | 9.3 | -- | .06 | .39 | .011 | .023 | .090 |
| SEP | | | | | | | | | |
| 08... | -- | -- | -- | 0.81 | .022 | .206 | -- | -- | .076 |
| 08... | 47 | 107 | 9.3 | -- | <.04 | .19 | <.008 | .007 | .083 |

| DATE | TOTAL NITROGEN, WAT UNF BY ANALYSIS, MG/L (62855) | CHLOROPHYLL A PERIPHYTON, CHROMO- FLUORO, MG/M2 (70957) | CIAT, WATER, FLTRD, UG/L (04040) | ATRA- ZINE, WATER, FLTRD, UG/L (39632) | CARBARYL, WATER, FLTRD 0.7U GF UG/L (82680) | DIAZI- NON, WATER, FLTRD, UG/L (39572) | FIPRO- NIL, WATER, FLTRD, UG/L (62166) | PROMETON, WATER, FLTRD, UG/L (04037) | SUSPENDED SEDIMENT CONCEN- TRATION MG/L (80154) |
|----------|--|--|--|---|--|---|---|--|--|
| NOV 2003 | | | | | | | | | |
| 13... | 1.21 | -- | <0.006 | E0.005 | E0.010 | <0.005 | <0.016 | 0.01 | 5 |
| DEC | | | | | | | | | |
| 04... | 1.46 | -- | -- | -- | -- | -- | -- | -- | 4 |
| JAN 2004 | | | | | | | | | |
| 14... | 1.43 | -- | -- | -- | -- | -- | -- | -- | 3 |
| FEB | | | | | | | | | |
| 12... | 1.90 | -- | E.004 | .007 | E.005 | <.005 | <.016 | .01 | 3 |
| APR | | | | | | | | | |
| 28... | .98 | -- | <.006 | .015 | E.009 | <.005 | <.016 | <.01 | 9 |
| MAY | | | | | | | | | |
| 18... | 1.22 | -- | <.006 | .008 | <.041 | <.005 | <.016 | <.01 | 9 |
| JUN | | | | | | | | | |
| 29... | .80 | -- | E.004 | .012 | E.017 | <.005 | <.016 | .01 | 6 |
| JUL | | | | | | | | | |
| 15... | 1.17 | -- | <.006 | .013 | <.041 | <.005 | <.016 | .01 | 6 |
| AUG | | | | | | | | | |
| 02... | -- | 101 | -- | -- | -- | -- | -- | -- | -- |
| 24... | 1.13 | -- | <.006 | <.010 | E.022 | .007 | <.016 | <.01 | 5 |
| SEP | | | | | | | | | |
| 08... | -- | 48.7 | -- | -- | -- | -- | -- | -- | -- |
| 08... | .92 | -- | <.006 | .019 | <.041 | <.005 | E.010 | <.01 | 7 |

< Less than
E Estimated value

CHARLES RIVER BASIN

01104683 MUDDY RIVER AT BROOKLINE, MA

LOCATION.--Lat 42° 20' 14", long 71° 06' 42", Norfolk County, Hydrologic Unit 01090001, on right bank, 10 ft downstream of Netherlands Road bridge in Olmsted Park, and 0.5 mi north of Brookline.

DRAINAGE AREA.--5.71 mi².

PERIOD OF RECORD.--Gage height: November 1999 to October 2000, August 2001 to current year.

Precipitation: August 2001 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 10.0 ft (Boston City Base Datum). Subtract 5.65 ft from gage height readings to obtain elevation above National Geodetic Vertical Datum (NGVD) of 1929.

REMARKS.--Gage height records good; precipitation records not rated. Daily or more frequent fluctuations related to pool stage fluctuations in lower Charles River Basin and operation of flood-control gates and pumps at Charles River Dam.

EXTREMES FOR PERIOD OF RECORD.--Maximum recorded gage height, 12.86 ft, June 6, 2000; minimum recorded, 7.22 ft, Oct. 16, 2002.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 13.64 ft, Apr. 1; minimum gage height, 7.36 ft, Aug. 15.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY | OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | | |
|-------|---------|------|------|----------|------|------|----------|------|------|---------|------|------|
| | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
| 1 | 7.45 | 7.39 | 7.41 | 7.91 | 7.65 | 7.75 | 7.57 | 7.51 | 7.53 | 7.62 | 7.60 | 7.61 |
| 2 | 7.45 | 7.39 | 7.41 | 7.91 | 7.62 | 7.71 | 7.74 | 7.54 | 7.61 | 7.65 | 7.60 | 7.62 |
| 3 | 7.48 | 7.45 | 7.47 | 8.17 | 7.60 | 7.89 | 7.56 | 7.50 | 7.53 | 7.73 | 7.61 | 7.67 |
| 4 | 7.72 | 7.47 | 7.58 | 7.82 | 7.62 | 7.69 | 7.63 | 7.50 | 7.56 | 7.84 | 7.69 | 7.76 |
| 5 | 7.61 | 7.48 | 7.52 | 8.90 | 7.60 | 8.02 | 7.69 | 7.53 | 7.59 | 8.02 | 7.83 | 7.96 |
| 6 | 7.48 | 7.41 | 7.44 | 8.69 | 7.70 | 8.04 | 7.65 | 7.54 | 7.58 | 7.98 | 7.66 | 7.79 |
| 7 | 7.52 | 7.42 | 7.47 | 7.71 | 7.61 | 7.66 | 7.65 | 7.58 | 7.62 | 7.79 | 7.60 | 7.69 |
| 8 | 7.56 | 7.44 | 7.51 | 7.74 | 7.59 | 7.65 | 7.58 | 7.55 | 7.56 | 7.61 | 7.57 | 7.58 |
| 9 | 7.50 | 7.43 | 7.46 | 7.75 | 7.60 | 7.65 | 7.57 | 7.53 | 7.55 | 7.57 | 7.55 | 7.56 |
| 10 | 7.51 | 7.47 | 7.49 | 7.74 | 7.60 | 7.67 | 7.61 | 7.55 | 7.57 | 7.56 | 7.54 | 7.55 |
| 11 | 7.55 | 7.46 | 7.49 | 7.80 | 7.64 | 7.70 | 10.98 | 7.61 | 8.91 | 7.55 | 7.53 | 7.54 |
| 12 | 10.02 | 7.46 | 8.25 | 7.76 | 7.61 | 7.67 | 9.93 | 7.94 | 8.63 | 7.56 | 7.54 | 7.55 |
| 13 | 8.81 | 7.55 | 7.91 | 8.05 | 7.60 | 7.77 | 7.94 | 7.67 | 7.77 | 7.57 | 7.54 | 7.55 |
| 14 | 7.55 | 7.49 | 7.51 | 7.67 | 7.61 | 7.64 | 7.88 | 7.63 | 7.66 | 7.55 | 7.52 | 7.53 |
| 15 | 10.75 | 7.48 | 8.87 | 7.65 | 7.62 | 7.63 | 11.01 | 7.88 | 9.68 | 7.53 | 7.52 | 7.52 |
| 16 | 7.99 | 7.60 | 7.71 | 7.65 | 7.62 | 7.63 | 8.59 | 7.87 | 8.10 | 7.55 | 7.52 | 7.53 |
| 17 | 7.78 | 7.60 | 7.68 | 7.65 | 7.62 | 7.63 | 10.37 | 7.83 | 8.33 | 7.53 | 7.51 | 7.52 |
| 18 | 7.93 | 7.56 | 7.70 | 7.76 | 7.62 | 7.68 | 10.37 | 8.25 | 9.09 | 7.59 | 7.50 | 7.54 |
| 19 | 7.91 | 7.61 | 7.72 | 7.67 | 7.61 | 7.64 | 8.25 | 7.91 | 8.03 | 7.57 | 7.51 | 7.53 |
| 20 | 7.83 | 7.65 | 7.74 | 8.44 | 7.63 | 7.86 | 7.98 | 7.80 | 7.88 | 7.51 | 7.49 | 7.50 |
| 21 | 7.81 | 7.53 | 7.66 | 9.21 | 7.85 | 8.53 | 7.85 | 7.73 | 7.78 | 7.50 | 7.49 | 7.49 |
| 22 | 7.60 | 7.50 | 7.54 | 7.85 | 7.59 | 7.66 | 7.78 | 7.70 | 7.73 | 7.51 | 7.49 | 7.49 |
| 23 | 7.63 | 7.53 | 7.58 | 7.63 | 7.52 | 7.57 | 7.82 | 7.69 | 7.74 | 7.50 | 7.47 | 7.49 |
| 24 | 7.73 | 7.53 | 7.61 | 7.58 | 7.51 | 7.53 | 8.75 | 7.69 | 8.00 | 7.50 | 7.48 | 7.49 |
| 25 | 7.82 | 7.56 | 7.68 | 7.72 | 7.51 | 7.62 | 8.54 | 7.83 | 8.08 | 7.50 | 7.48 | 7.49 |
| 26 | 7.79 | 7.55 | 7.70 | 7.55 | 7.51 | 7.53 | 7.83 | 7.72 | 7.77 | 7.49 | 7.48 | 7.49 |
| 27 | 8.49 | 7.53 | 8.05 | 7.59 | 7.50 | 7.53 | 7.72 | 7.66 | 7.69 | 7.49 | 7.47 | 7.49 |
| 28 | 8.46 | 7.56 | 7.88 | 8.15 | 7.50 | 7.63 | 7.67 | 7.64 | 7.65 | 7.48 | 7.46 | 7.47 |
| 29 | 10.57 | 7.56 | 9.11 | 8.48 | 7.65 | 8.03 | 7.67 | 7.64 | 7.65 | 7.47 | 7.44 | 7.45 |
| 30 | 8.41 | 7.79 | 7.97 | 7.65 | 7.52 | 7.56 | 7.67 | 7.63 | 7.64 | --- | --- | 7.44 |
| 31 | 7.88 | 7.67 | 7.74 | --- | --- | --- | 7.66 | 7.61 | 7.62 | --- | --- | 7.42 |
| MONTH | 10.75 | 7.39 | 7.74 | 9.21 | 7.50 | 7.73 | 11.01 | 7.50 | 7.91 | --- | --- | 7.56 |

CHARLES RIVER BASIN
01104683 MUDDY RIVER AT BROOKLINE, MA--Continued

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY | MAX | FEBRUARY | | | MARCH | | | APRIL | | | MAY | | |
|-------|------|----------|------|------|-------|------|-------|-------|-------|------|------|------|--|
| | | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | |
| 1 | 7.43 | 7.41 | 7.42 | 7.44 | 7.40 | 7.41 | 13.64 | 9.84 | 11.30 | 7.93 | 7.78 | 7.82 | |
| 2 | 7.43 | 7.41 | 7.41 | 7.54 | 7.41 | 7.46 | 13.60 | 9.12 | 11.04 | 7.92 | 7.77 | 7.81 | |
| 3 | 8.61 | 7.43 | 7.55 | 7.51 | 7.42 | 7.45 | 9.12 | 8.26 | 8.56 | 8.46 | 7.75 | 8.03 | |
| 4 | 8.72 | 7.59 | 8.09 | 7.55 | 7.41 | 7.46 | 8.26 | 8.05 | 8.15 | 9.12 | 7.91 | 8.43 | |
| 5 | 7.59 | 7.40 | 7.46 | 7.46 | 7.42 | 7.43 | 8.41 | 7.94 | 8.15 | 7.91 | 7.78 | 7.82 | |
| 6 | 8.79 | 7.40 | 7.73 | 7.69 | 7.42 | 7.58 | 8.06 | 7.82 | 7.91 | 8.20 | 7.83 | 7.99 | |
| 7 | 8.83 | 8.30 | 8.64 | 7.55 | 7.44 | 7.48 | 7.98 | 7.78 | 7.84 | 8.23 | 7.85 | 8.00 | |
| 8 | 8.30 | 7.55 | 7.80 | 7.59 | 7.43 | 7.50 | 7.82 | 7.75 | 7.78 | 8.10 | 7.84 | 7.94 | |
| 9 | 7.55 | 7.46 | 7.49 | 7.57 | 7.49 | 7.52 | 8.00 | 7.74 | 7.83 | 8.12 | 7.84 | 8.01 | |
| 10 | 7.92 | 7.50 | 7.75 | 7.49 | 7.47 | 7.48 | 8.05 | 7.71 | 7.80 | 8.20 | 7.85 | 8.00 | |
| 11 | 7.70 | 7.46 | 7.53 | 7.47 | 7.43 | 7.45 | 7.82 | 7.65 | 7.70 | 8.23 | 7.92 | 8.04 | |
| 12 | 7.46 | 7.44 | 7.44 | 7.63 | 7.43 | 7.51 | 7.65 | 7.63 | 7.64 | 8.47 | 8.00 | 8.19 | |
| 13 | 7.44 | 7.43 | 7.44 | 7.56 | 7.44 | 7.48 | 11.63 | 7.65 | 8.58 | 8.39 | 7.89 | 8.10 | |
| 14 | 7.44 | 7.43 | 7.44 | 7.45 | 7.41 | 7.42 | 11.56 | 8.39 | 9.30 | 8.01 | 7.78 | 7.87 | |
| 15 | 7.44 | 7.43 | 7.44 | 7.45 | 7.42 | 7.43 | 8.39 | 7.95 | 8.15 | 8.15 | 7.80 | 7.97 | |
| 16 | 7.43 | 7.43 | 7.43 | 7.60 | 7.43 | 7.51 | 7.99 | 7.81 | 7.88 | 8.10 | 7.80 | 7.92 | |
| 17 | 7.44 | 7.43 | 7.43 | 7.53 | 7.50 | 7.52 | 7.86 | 7.76 | 7.80 | 8.03 | 7.76 | 7.90 | |
| 18 | 7.46 | 7.44 | 7.45 | 7.53 | 7.49 | 7.51 | 7.81 | 7.72 | 7.75 | 7.97 | 7.63 | 7.81 | |
| 19 | 7.47 | 7.44 | 7.45 | --- | --- | 7.49 | 7.79 | 7.69 | 7.73 | 7.95 | 7.59 | 7.77 | |
| 20 | 7.45 | 7.44 | 7.44 | --- | --- | 7.87 | 8.18 | 7.65 | 7.81 | 7.81 | 7.60 | 7.69 | |
| 21 | 7.46 | 7.44 | 7.45 | 8.39 | 7.86 | 8.13 | 7.66 | 7.60 | 7.63 | 7.86 | 7.63 | 7.75 | |
| 22 | 7.46 | 7.45 | 7.45 | 7.86 | 7.60 | 7.71 | 7.84 | 7.58 | 7.65 | 7.78 | 7.64 | 7.69 | |
| 23 | 7.46 | 7.43 | 7.44 | 7.60 | 7.50 | 7.55 | 9.12 | 7.58 | 8.37 | 7.92 | 7.67 | 7.76 | |
| 24 | 7.43 | 7.41 | 7.42 | 7.52 | 7.48 | 7.50 | 8.00 | 7.71 | 7.83 | 8.39 | 7.67 | 7.83 | |
| 25 | 7.41 | 7.39 | 7.40 | 7.51 | 7.50 | 7.51 | 7.71 | 7.61 | 7.64 | 8.58 | 7.76 | 8.06 | |
| 26 | 7.40 | 7.39 | 7.39 | 7.59 | 7.51 | 7.54 | 8.44 | 7.67 | 8.10 | 7.90 | 7.69 | 7.78 | |
| 27 | 7.42 | 7.40 | 7.41 | 7.87 | 7.56 | 7.73 | 8.48 | 7.89 | 8.21 | 8.29 | 7.71 | 8.00 | |
| 28 | 7.44 | 7.40 | 7.41 | 7.66 | 7.54 | 7.58 | 8.32 | 7.90 | 8.02 | 8.45 | 7.68 | 7.98 | |
| 29 | 7.41 | 7.40 | 7.40 | 7.55 | 7.52 | 7.53 | 8.05 | 7.84 | 7.92 | 7.96 | 7.71 | 7.78 | |
| 30 | --- | --- | --- | 7.58 | 7.53 | 7.56 | 8.00 | 7.80 | 7.87 | 8.01 | 7.72 | 7.84 | |
| 31 | --- | --- | --- | 9.84 | 7.58 | 8.31 | --- | --- | --- | 7.92 | 7.68 | 7.77 | |
| MONTH | 8.83 | 7.39 | 7.54 | --- | --- | 7.57 | 13.64 | 7.58 | 8.20 | 9.12 | 7.59 | 7.91 | |

| DAY | MAX | JUNE | | | JULY | | | AUGUST | | | SEPTEMBER | | |
|-------|------|------|------|-------|------|------|-------|--------|------|-------|-----------|------|--|
| | | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | |
| 1 | 7.90 | 7.71 | 7.80 | 7.99 | 7.80 | 7.89 | 7.83 | 7.73 | 7.77 | 7.70 | 7.56 | 7.63 | |
| 2 | 8.94 | 7.76 | 8.21 | 8.44 | 7.83 | 8.04 | 7.91 | 7.76 | 7.82 | 7.74 | 7.56 | 7.66 | |
| 3 | 8.21 | 7.69 | 7.90 | 7.99 | 7.83 | 7.92 | 7.91 | 7.76 | 7.84 | 7.68 | 7.57 | 7.60 | |
| 4 | 7.90 | 7.64 | 7.76 | 7.94 | 7.83 | 7.89 | 7.87 | 7.55 | 7.77 | 7.82 | 7.64 | 7.73 | |
| 5 | 7.82 | 7.64 | 7.73 | 9.25 | 7.92 | 8.38 | 7.99 | 7.48 | 7.71 | 7.92 | 7.81 | 7.86 | |
| 6 | 7.95 | 7.65 | 7.79 | 8.25 | 7.97 | 8.08 | 7.65 | 7.52 | 7.57 | 7.83 | 7.72 | 7.74 | |
| 7 | 7.80 | 7.67 | 7.71 | 8.41 | 7.97 | 8.16 | 7.75 | 7.63 | 7.69 | 7.90 | 7.77 | 7.82 | |
| 8 | 7.94 | 7.67 | 7.77 | 8.04 | 7.86 | 7.93 | 7.75 | 7.60 | 7.68 | 10.18 | 7.90 | 8.68 | |
| 9 | 8.04 | 7.65 | 7.77 | 8.26 | 8.01 | 8.12 | 7.79 | 7.65 | 7.71 | 9.74 | 7.91 | 8.64 | |
| 10 | 8.00 | 7.61 | 7.73 | 8.30 | 7.95 | 8.10 | 7.79 | 7.48 | 7.67 | 7.91 | 7.63 | 7.69 | |
| 11 | 7.77 | 7.56 | 7.65 | 8.26 | 8.02 | 8.09 | 7.61 | 7.47 | 7.51 | 7.86 | 7.72 | 7.77 | |
| 12 | 7.75 | 7.57 | 7.64 | 8.25 | 8.05 | 8.15 | 8.57 | 7.44 | 7.66 | 7.91 | 7.82 | 7.87 | |
| 13 | 7.69 | 7.51 | 7.59 | 8.17 | 8.01 | 8.08 | 10.72 | 7.81 | 8.92 | 7.89 | 7.74 | 7.81 | |
| 14 | 7.85 | 7.58 | 7.68 | 8.21 | 7.72 | 7.99 | 7.81 | 7.36 | 7.51 | 7.82 | 7.66 | 7.72 | |
| 15 | 7.73 | 7.59 | 7.64 | 7.74 | 7.61 | 7.69 | 9.52 | 7.36 | 8.37 | 7.80 | 7.67 | 7.73 | |
| 16 | 7.79 | 7.58 | 7.67 | 7.69 | 7.54 | 7.61 | 7.90 | 7.49 | 7.63 | 7.84 | 7.67 | 7.76 | |
| 17 | 7.72 | 7.52 | 7.62 | 7.84 | 7.63 | 7.74 | 7.93 | 7.57 | 7.79 | 7.93 | 7.59 | 7.82 | |
| 18 | 7.70 | 7.53 | 7.61 | 7.83 | 7.64 | 7.74 | 7.85 | 7.58 | 7.69 | 11.02 | 7.53 | 9.20 | |
| 19 | 7.63 | 7.47 | 7.55 | 7.95 | 7.79 | 7.85 | 8.03 | 7.59 | 7.81 | 8.90 | 7.60 | 8.00 | |
| 20 | 7.70 | 7.47 | 7.61 | 7.95 | 7.79 | 7.85 | 8.01 | 7.57 | 7.75 | 7.66 | 7.51 | 7.56 | |
| 21 | 7.68 | 7.53 | 7.60 | 7.92 | 7.78 | 7.84 | 10.19 | 7.78 | 8.42 | 7.94 | 7.54 | 7.68 | |
| 22 | 7.67 | 7.53 | 7.59 | 7.89 | 7.77 | 7.82 | 9.19 | 7.79 | 8.14 | 8.15 | 7.76 | 7.92 | |
| 23 | 7.75 | 7.53 | 7.64 | 7.88 | 7.74 | 7.79 | 8.13 | 7.65 | 7.82 | 7.87 | 7.65 | 7.74 | |
| 24 | 7.72 | 7.56 | 7.64 | 11.11 | 7.76 | 8.91 | 8.18 | 7.75 | 7.98 | 7.81 | 7.67 | 7.73 | |
| 25 | 8.02 | 7.72 | 7.82 | 8.36 | 7.80 | 7.94 | 7.97 | 7.66 | 7.81 | 7.82 | 7.68 | 7.73 | |
| 26 | 8.01 | 7.67 | 7.83 | 8.02 | 7.78 | 7.88 | 7.89 | 7.72 | 7.78 | 7.82 | 7.58 | 7.73 | |
| 27 | 7.87 | 7.65 | 7.73 | 8.01 | 7.50 | 7.80 | 7.93 | 7.73 | 7.83 | 7.81 | 7.58 | 7.67 | |
| 28 | 8.05 | 7.74 | 7.87 | 7.68 | 7.41 | 7.54 | 8.05 | 7.79 | 7.92 | 11.50 | 7.58 | 8.91 | |
| 29 | 8.05 | 7.88 | 7.94 | 7.55 | 7.42 | 7.48 | 8.00 | 7.79 | 7.88 | 9.98 | 8.17 | 9.26 | |
| 30 | 8.07 | 7.78 | 7.91 | 7.62 | 7.52 | 7.57 | 7.89 | 7.68 | 7.83 | 8.17 | 7.66 | 7.81 | |
| 31 | --- | --- | --- | 7.76 | 7.61 | 7.70 | 7.92 | 7.63 | 7.74 | --- | --- | --- | |
| MONTH | 8.94 | 7.47 | 7.73 | 11.11 | 7.41 | 7.92 | 10.72 | 7.36 | 7.84 | 11.50 | 7.51 | 7.95 | |

CHARLES RIVER BASIN

01104683 MUDDY RIVER AT BROOKLINE, MA--Continued

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY SUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.01 | 0.00 | 0.21 | 0.00 | 0.00 | 0.00 |
| 2 | .05 | .03 | .00 | .02 | .00 | .01 | .41 | .01 | .62 | .34 | .00 | .00 |
| 3 | .00 | .27 | .00 | .00 | .00 | .01 | .00 | .55 | .05 | .00 | .00 | .00 |
| 4 | .21 | .01 | .00 | .00 | .00 | .20 | .13 | .42 | .00 | .00 | .00 | .00 |
| 5 | .00 | .75 | .00 | .00 | .00 | .00 | .11 | .00 | .00 | .75 | .42 | .00 |
| 6 | .00 | .00 | .00 | .00 | .00 | .16 | .00 | .00 | .17 | .00 | .00 | .00 |
| 7 | .00 | .00 | .00 | .01 | .00 | .00 | .00 | .02 | .00 | .00 | .00 | .00 |
| 8 | .00 | .00 | .06 | .00 | .00 | .08 | .00 | .00 | .00 | .12 | .00 | 1.06 |
| 9 | .00 | .00 | .17 | .00 | .00 | .09 | .00 | .23 | .21 | .00 | .00 | .82 |
| 10 | .00 | .00 | .40 | .00 | .00 | .07 | .00 | .00 | .04 | .00 | .00 | .01 |
| 11 | .00 | .13 | 1.19 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 12 | 1.52 | .01 | .00 | .02 | .00 | .08 | .04 | .00 | .00 | .00 | .66 | .00 |
| 13 | .00 | .21 | .00 | .05 | .00 | .00 | 2.23 | .00 | .00 | .51 | .82 | .00 |
| 14 | .00 | .00 | .76 | .00 | .00 | .00 | .24 | .00 | .00 | .33 | .00 | .00 |
| 15 | 1.48 | .00 | .03 | .00 | .00 | .00 | .09 | .00 | .00 | .00 | 1.22 | .00 |
| 16 | .00 | .00 | .01 | .00 | .00 | .00 | .00 | .21 | .00 | .00 | .14 | .06 |
| 17 | .00 | .04 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .06 | .00 |
| 18 | .04 | .00 | .01 | .00 | .00 | .09 | .00 | .17 | .06 | .01 | .00 | 2.17 |
| 19 | .02 | .00 | .00 | .00 | .00 | .14 | .00 | .02 | .00 | .09 | .00 | .00 |
| 20 | .00 | .58 | .00 | .00 | .00 | .36 | .00 | .00 | .00 | .00 | .10 | .00 |
| 21 | .01 | .35 | .00 | .00 | .00 | .33 | .00 | .00 | .00 | .00 | 1.08 | .00 |
| 22 | .06 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 23 | .11 | .00 | .00 | .00 | .00 | .00 | 1.09 | .03 | .00 | .00 | .00 | .00 |
| 24 | .00 | .00 | .02 | .00 | .00 | .00 | .01 | .64 | .00 | 1.57 | .00 | .00 |
| 25 | .00 | .12 | .00 | .00 | .00 | .01 | .07 | .02 | .17 | .08 | .00 | .00 |
| 26 | .00 | .00 | .01 | .00 | .00 | .01 | .79 | .08 | .13 | .00 | .00 | .00 |
| 27 | .95 | .00 | .00 | .00 | .00 | .21 | .45 | .30 | .00 | .00 | .00 | .00 |
| 28 | .02 | .45 | .00 | .00 | .00 | .00 | .00 | .39 | .00 | .17 | .00 | 2.10 |
| 29 | 1.60 | .11 | .00 | .00 | .00 | .00 | .00 | .00 | .06 | .00 | .00 | 1.02 |
| 30 | .00 | .00 | .03 | .00 | --- | .00 | .00 | .00 | .00 | .00 | .04 | .08 |
| 31 | .00 | --- | .00 | .00 | --- | 1.43 | --- | .00 | --- | .00 | .23 | --- |
| TOTAL | 6.07 | 3.06 | 2.69 | 0.10 | 0.00 | 3.28 | 9.67 | 3.09 | 1.72 | 3.97 | 4.77 | 7.32 |
| MAX | 1.60 | 0.75 | 1.19 | 0.05 | 0.00 | 1.43 | 4.01 | 0.64 | 0.62 | 1.57 | 1.22 | 2.17 |

NEPONSET RIVER BASIN

01105500 EAST BRANCH NEPONSET RIVER AT CANTON, MA

LOCATION.--Lat 42° 09' 16", long 71° 08' 47", Norfolk County, Hydrologic Unit 01090001, on right bank 100 ft downstream from Washington Street Bridge at Canton, 200 ft downstream from Forge Pond Dam, and 900 ft downstream from Massapoag Brook.

DRAINAGE AREA.--27.2 mi².

PERIOD OF RECORD.--Discharge: October 1952 to current year.

Water-quality records: Water years 1959, 1967–68, 2000.

REVISED RECORDS.--WSP 1901: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 80.18 ft above National Geodetic Vertical Datum of 1929 (Massachusetts Department of Public Works benchmark).

REMARKS.--Records good except those for estimated daily discharge, which are fair. Flow regulated by Forge, Bolivar, Massapoag, and Reservoir Ponds, and other ponds upstream. Flow affected by diversions for municipal supply of Canton and Stoughton. Satellite gage-height telemeter at station.

AVERAGE DISCHARGE.--52 years (water years 1953–2004), 51.4 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,790 ft³/s, Aug. 19, 1955, gage height, 8.18 ft, from rating curve extended above 690 ft³/s; minimum daily discharge, 0.60 ft³/s, July 7, Sept. 1, 1957.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 391 ft³/s, Apr. 2, gage height, 3.67 ft; minimum discharge, 6.6 ft³/s, Oct. 10.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|------|------|------|------|------|------|------|------|------|-------|------|
| 1 | 8.4 | 43 | 41 | 107 | 23 | 26 | 232 | 94 | 38 | 17 | 14 | 22 |
| 2 | 8.1 | 38 | 31 | 93 | 22 | 29 | 361 | 60 | 42 | 27 | 14 | 18 |
| 3 | 7.9 | 35 | e24 | 87 | 24 | 35 | 248 | 65 | 51 | 26 | 12 | 15 |
| 4 | 8.6 | 33 | e23 | 91 | 53 | 33 | 192 | 113 | 55 | 19 | 10 | 14 |
| 5 | 9.2 | 32 | e22 | 114 | 38 | 32 | 181 | 91 | 41 | 34 | 16 | 12 |
| 6 | 8.6 | 38 | e23 | 115 | 41 | 42 | 165 | 71 | 35 | 44 | 17 | 11 |
| 7 | 8.0 | 36 | e26 | e90 | 115 | 46 | 146 | 64 | 38 | 26 | 13 | 11 |
| 8 | 7.3 | 45 | e31 | e73 | e77 | 37 | 131 | 57 | 34 | 20 | 11 | 31 |
| 9 | 7.1 | 40 | 34 | e59 | e53 | 34 | 117 | 61 | 31 | 17 | 9.6 | 53 |
| 10 | 6.8 | 35 | 35 | e51 | 43 | 32 | 105 | 68 | 40 | 15 | 8.6 | 38 |
| 11 | 7.5 | 34 | 78 | 47 | 43 | 31 | 91 | 60 | 33 | 14 | 8.2 | 26 |
| 12 | 11 | 35 | 166 | 46 | 39 | 31 | 87 | 55 | 28 | 13 | 9.4 | 19 |
| 13 | 19 | 39 | 119 | 47 | 37 | 32 | 130 | 51 | 25 | 13 | 50 | 16 |
| 14 | 13 | 38 | 86 | e45 | 35 | 29 | 349 | 46 | 22 | 18 | 59 | 13 |
| 15 | 76 | 31 | 185 | e39 | 28 | 29 | 268 | 43 | 22 | 19 | 112 | 13 |
| 16 | 57 | 27 | 181 | e35 | 24 | 31 | 205 | 42 | 21 | 16 | 77 | 13 |
| 17 | 30 | 26 | 162 | 32 | 23 | 35 | 170 | 41 | 19 | 14 | 36 | 14 |
| 18 | 22 | 27 | 295 | 33 | 23 | 33 | 152 | 39 | 19 | 12 | 27 | 143 |
| 19 | 18 | 25 | 208 | 34 | 23 | 31 | 134 | 59 | 21 | 14 | 21 | 168 |
| 20 | 17 | 28 | 168 | 33 | 23 | 30 | 111 | 49 | 20 | 15 | 19 | 73 |
| 21 | 15 | 73 | 151 | 31 | 23 | 65 | 98 | 40 | 17 | 14 | 58 | 39 |
| 22 | 14 | 66 | 139 | 29 | 26 | 69 | 92 | 36 | 15 | 11 | 108 | 34 |
| 23 | 13 | 45 | 132 | 29 | 26 | 49 | 131 | 35 | 16 | 11 | 51 | 32 |
| 24 | 13 | 37 | 147 | e30 | 25 | 44 | 138 | 41 | 15 | 59 | 31 | 29 |
| 25 | 12 | 37 | 198 | e27 | 23 | 46 | 111 | 40 | 14 | 50 | 26 | 28 |
| 26 | 12 | 35 | 164 | 23 | 22 | 50 | 134 | 35 | 15 | 25 | 21 | 27 |
| 27 | 36 | 32 | 137 | 22 | 21 | 59 | 192 | 48 | 16 | 16 | 19 | 26 |
| 28 | 59 | 32 | 122 | 23 | 21 | 73 | 161 | 63 | 15 | 16 | 18 | 70 |
| 29 | 118 | 49 | 114 | 24 | 23 | 62 | 135 | 72 | 15 | 19 | 18 | 186 |
| 30 | 110 | 46 | 105 | 24 | -- | 55 | 113 | 48 | 18 | 16 | 18 | 150 |
| 31 | 62 | --- | 102 | 23 | --- | 68 | --- | 39 | --- | 15 | 26 | --- |
| TOTAL | 814.5 | 1137 | 3449 | 1556 | 997 | 1298 | 4880 | 1726 | 791 | 645 | 937.8 | 1344 |
| MEAN | 26.3 | 37.9 | 111 | 50.2 | 34.4 | 41.9 | 163 | 55.7 | 26.4 | 20.8 | 30.3 | 44.8 |
| MAX | 118 | 73 | 295 | 115 | 115 | 73 | 361 | 113 | 55 | 59 | 112 | 186 |
| MIN | 6.8 | 25 | 22 | 22 | 21 | 26 | 87 | 35 | 14 | 11 | 8.2 | 11 |

| STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1953 - 2004, BY WATER YEAR (WY) | | | | | | | | | | | | |
|---|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 29.9 | 46.5 | 64.5 | 67.7 | 71.2 | 94.5 | 89.7 | 53.8 | 37.9 | 19.2 | 21.4 | 22.0 |
| MAX | 127 | 161 | 159 | 177 | 132 | 177 | 210 | 142 | 186 | 70.5 | 203 | 76.5 |
| (WY) | 1997 | 1956 | 1993 | 1979 | 1970 | 1968 | 1987 | 1954 | 1998 | 1998 | 1955 | 1999 |
| MIN | 6.42 | 8.35 | 9.78 | 10.6 | 20.1 | 40.8 | 20.7 | 20.2 | 8.62 | 4.46 | 3.64 | 4.39 |
| (WY) | 1966 | 1966 | 1966 | 1966 | 1980 | 1985 | 1966 | 1965 | 1964 | 1965 | 1957 | 1997 |

| SUMMARY STATISTICS | | FOR 2003 CALENDAR YEAR | | | | FOR 2004 WATER YEAR | | | | WATER YEARS 1953 - 2004 | | | |
|--------------------------|--|------------------------|--|--------|--|---------------------|--|--------|--|-------------------------|--|-------------|--|
| ANNUAL TOTAL | | 21750.4 | | | | 19575.3 | | | | | | | |
| ANNUAL MEAN | | 59.6 | | | | 53.5 | | | | 51.4 | | | |
| HIGHEST ANNUAL MEAN | | | | | | | | | | 79.4 | | | |
| LOWEST ANNUAL MEAN | | | | | | | | | | 18.6 | | | |
| HIGHEST DAILY MEAN | | 295 | | Dec 18 | | 361 | | Apr 2 | | 1360 | | Aug 19 1955 | |
| LOWEST DAILY MEAN | | 6.8 | | Oct 10 | | 6.8 | | Oct 10 | | 0.60 | | Jul 7 1957 | |
| ANNUAL SEVEN-DAY MINIMUM | | 7.8 | | Oct 5 | | 7.8 | | Oct 5 | | 2.5 | | Sep 7 1993 | |
| MAXIMUM PEAK FLOW | | | | | | 391 | | | | 1790 | | | |
| MAXIMUM PEAK STAGE | | | | | | 3.67 | | | | 8.18 | | | |
| INSTANTANEOUS LOW FLOW | | | | | | 6.6 | | | | Oct 10 | | | |
| 10 PERCENT EXCEEDS | | 136 | | | | 131 | | | | 111 | | | |
| 50 PERCENT EXCEEDS | | 38 | | | | 34 | | | | 36 | | | |
| 90 PERCENT EXCEEDS | | 12 | | | | 14 | | | | 8.1 | | | |

e Estimated

NEPONSET RIVER BASIN

01105554 NEPONSET RIVER AT GREENLODGE STREET NEAR CANTON, MA

LOCATION.--Lat 42° 12'33", long 71° 08'47", Norfolk County, Hydrologic Unit 01090001, on right bank at upstream side of Greenlodge Street bridge, 1.5 mi northwest of Canton, MA.

DRAINAGE AREA.--83.7 mi².

PERIOD OF RECORD.--May to September 2004.

REMARKS.--Records good except those for estimated daily discharge, which are fair. Satellite gage-height telemeter at station.

EXTREMES FOR THE PERIOD MAY TO SEPTEMBER 2004.--Maximum discharge, 397 ft³/s, Sept. 30, gage height, 10.85 ft; minimum discharge, 32 ft³/s, Aug. 9, 10, Sept. 7.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|
| 1 | --- | --- | --- | --- | --- | --- | --- | --- | 152 | 46 | 47 | 69 |
| 2 | --- | --- | --- | --- | --- | --- | --- | --- | 149 | 91 | 46 | 53 |
| 3 | --- | --- | --- | --- | --- | --- | --- | --- | 158 | 82 | 43 | 45 |
| 4 | --- | --- | --- | --- | --- | --- | --- | --- | 171 | 63 | 39 | 40 |
| 5 | --- | --- | --- | --- | --- | --- | --- | --- | 155 | 105 | 59 | 37 |
| 6 | --- | --- | --- | --- | --- | --- | --- | e334 | 134 | 177 | 61 | 35 |
| 7 | --- | --- | --- | --- | --- | --- | --- | 304 | 132 | 129 | 49 | 33 |
| 8 | --- | --- | --- | --- | --- | --- | --- | 265 | 123 | 91 | 40 | 58 |
| 9 | --- | --- | --- | --- | --- | --- | --- | 241 | 112 | 73 | 35 | 116 |
| 10 | --- | --- | --- | --- | --- | --- | --- | 243 | 135 | 60 | 34 | 108 |
| 11 | --- | --- | --- | --- | --- | --- | --- | 230 | 119 | 53 | 34 | 78 |
| 12 | --- | --- | --- | --- | --- | --- | --- | 213 | 101 | 47 | 34 | 58 |
| 13 | --- | --- | --- | --- | --- | --- | --- | 195 | 89 | 46 | 104 | 47 |
| 14 | --- | --- | --- | --- | --- | --- | --- | 178 | 80 | 67 | 112 | 40 |
| 15 | --- | --- | --- | --- | --- | --- | --- | 165 | 76 | 70 | 187 | 36 |
| 16 | --- | --- | --- | --- | --- | --- | --- | 155 | 70 | 58 | 235 | 36 |
| 17 | --- | --- | --- | --- | --- | --- | --- | 149 | 63 | 50 | 185 | 38 |
| 18 | --- | --- | --- | --- | --- | --- | --- | 142 | 60 | 44 | 129 | 158 |
| 19 | --- | --- | --- | --- | --- | --- | --- | 176 | 64 | 43 | 94 | 320 |
| 20 | --- | --- | --- | --- | --- | --- | --- | 174 | 62 | 46 | 75 | 296 |
| 21 | --- | --- | --- | --- | --- | --- | --- | 155 | 53 | 42 | 99 | 209 |
| 22 | --- | --- | --- | --- | --- | --- | --- | 137 | 47 | 38 | 228 | 134 |
| 23 | --- | --- | --- | --- | --- | --- | --- | 134 | 47 | 36 | 204 | 101 |
| 24 | --- | --- | --- | --- | --- | --- | --- | 138 | 43 | 126 | 143 | 85 |
| 25 | --- | --- | --- | --- | --- | --- | --- | 140 | 43 | 178 | 101 | 76 |
| 26 | --- | --- | --- | --- | --- | --- | --- | 132 | 85 | 123 | 78 | 70 |
| 27 | --- | --- | --- | --- | --- | --- | --- | 152 | 69 | 79 | 65 | 62 |
| 28 | --- | --- | --- | --- | --- | --- | --- | 193 | 51 | 64 | 58 | 133 |
| 29 | --- | --- | --- | --- | --- | --- | --- | 245 | 46 | 66 | 54 | 338 |
| 30 | --- | --- | --- | --- | --- | --- | --- | 209 | 47 | 61 | 50 | 393 |
| 31 | --- | --- | --- | --- | --- | --- | --- | 167 | --- | 53 | 74 | --- |
| TOTAL | --- | --- | --- | --- | --- | --- | --- | --- | 2736 | 2307 | 2796 | 3302 |
| MEAN | --- | --- | --- | --- | --- | --- | --- | --- | 91.2 | 74.4 | 90.2 | 110 |
| MAX | --- | --- | --- | --- | --- | --- | --- | --- | 171 | 178 | 235 | 393 |
| MIN | --- | --- | --- | --- | --- | --- | --- | --- | 43 | 36 | 34 | 33 |
| CFSM | --- | --- | --- | --- | --- | --- | --- | --- | 1.09 | 0.89 | 1.08 | 1.32 |
| IN. | --- | --- | --- | --- | --- | --- | --- | --- | 1.22 | 1.03 | 1.24 | 1.47 |
| STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2004 - 2004, BY WATER YEAR (WY) | | | | | | | | | | | | |
| MEAN | --- | --- | --- | --- | --- | --- | --- | --- | 91.2 | 74.4 | 90.2 | 110 |
| MAX | --- | --- | --- | --- | --- | --- | --- | --- | 91.2 | 74.4 | 90.2 | 110 |
| (WY) | --- | --- | --- | --- | --- | --- | --- | --- | 2004 | 2004 | 2004 | 2004 |
| MIN | --- | --- | --- | --- | --- | --- | --- | --- | 91.2 | 74.4 | 90.2 | 110 |
| (WY) | --- | --- | --- | --- | --- | --- | --- | --- | 2004 | 2004 | 2004 | 2004 |

e Estimated

NEPONSET RIVER BASIN

011055566 NEPONSET RIVER AT MILTON VILLAGE, MA

LOCATION.--Lat 42°16'15", long 71°04'08", Norfolk County, Hydrologic Unit 01090001, 100 ft upstream from bridge on Adams Street, at Milton Village.

DRAINAGE AREA.--101 mi².

PERIOD OF RECORD.--November 1996 to current year.

GAGE.--Water stage recorder. Elevation of gage is 20 ft above sea level, from topographic map.

REMARKS.--Records good except those below 40 ft³/s, which are fair, and those for estimated daily discharge, which are poor. Record on most days is adjusted for tidal backwater, which lasts as much as 4 hours during times of high tide. Flow regulated by mills and reservoirs upstream. Flow affected by diversion from Charles River basin to Neponset River basin by Mother Brook (station 01104000) through Dedham and Hyde Park and by diversions to and from basin for municipal supplies. Telephone and satellite gage-height telemeter at station.AVERAGE DISCHARGE.--8 years (water years 1997--2004), 291 ft³/s.EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,720 ft³/s, June 18, 1998, gage height, 36.93 ft; minimum discharge, 4.8 ft³/s, Oct. 24, 1997, minimum daily discharge, 10 ft³/s, Oct. 23, 1997.EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,940 ft³/s, Apr. 2, gage height, 36.01 ft; minimum discharge, 12 ft³/s, Aug. 12.DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|-------|------|------|------|-------|-------|------|------|------|------|
| 1 | 44 | 547 | 212 | 754 | 129 | 123 | 1140 | 846 | 266 | 53 | 73 | 143 |
| 2 | 48 | 457 | 187 | 673 | 124 | 138 | 1830 | 757 | 253 | 101 | 64 | 95 |
| 3 | 42 | 383 | 163 | 613 | 122 | 167 | 1740 | 666 | 288 | 102 | 67 | 95 |
| 4 | 46 | 361 | 142 | 593 | 213 | 187 | 1730 | 868 | 294 | 78 | 55 | 81 |
| 5 | 51 | 314 | 128 | 637 | 215 | 188 | 1740 | 849 | 253 | 138 | 84 | 72 |
| 6 | 41 | 334 | e103 | 653 | 207 | 216 | 1670 | 774 | 222 | 234 | 90 | 65 |
| 7 | 41 | 289 | e106 | 585 | 448 | 255 | 1560 | 686 | 212 | 176 | 73 | 49 |
| 8 | 35 | 254 | e116 | e434 | 506 | 251 | 1430 | 592 | 183 | 122 | 61 | 126 |
| 9 | 34 | 222 | e134 | e217 | 445 | 231 | 1280 | 506 | 178 | 95 | 44 | 194 |
| 10 | 33 | 191 | 198 | e121 | 372 | 205 | 1120 | 496 | 188 | 78 | 50 | 177 |
| 11 | 34 | 174 | 472 | e90 | 330 | 199 | 979 | 435 | 177 | 68 | 46 | 127 |
| 12 | 50 | 150 | 897 | e88 | 300 | 200 | 821 | 395 | 150 | 54 | 47 | 95 |
| 13 | 76 | 220 | 970 | e100 | 259 | 195 | 918 | 342 | 127 | 59 | 215 | 66 |
| 14 | 51 | 231 | 960 | e129 | 230 | 182 | 1380 | 301 | 103 | 90 | 239 | 65 |
| 15 | 278 | 206 | 1330 | e175 | 203 | 169 | 1480 | 275 | 107 | 72 | 621 | 46 |
| 16 | 295 | 174 | 1330 | e243 | e165 | 160 | 1510 | 254 | 89 | 77 | 572 | 57 |
| 17 | 226 | 149 | 1410 | e285 | e151 | 163 | 1540 | 236 | 88 | 64 | 542 | 60 |
| 18 | 163 | 139 | 1660 | e292 | 136 | 157 | 1500 | 208 | 85 | 55 | 372 | 450 |
| 19 | 125 | 127 | 1660 | e264 | 133 | 135 | 1430 | 307 | 87 | 45 | 359 | 683 |
| 20 | 97 | 140 | 1640 | e239 | 126 | 140 | 1330 | 307 | 84 | 56 | 297 | 576 |
| 21 | 90 | 312 | 1570 | e213 | 122 | 272 | 1180 | 278 | 65 | 43 | 367 | 414 |
| 22 | 78 | 343 | 1480 | e188 | 127 | 363 | 1050 | 252 | 59 | 46 | 623 | 252 |
| 23 | 75 | 291 | 1400 | e172 | 129 | 338 | 1010 | 242 | 65 | 44 | 480 | 190 |
| 24 | 72 | 234 | 1340 | e160 | 129 | 294 | 1010 | 223 | 61 | 193 | 326 | 154 |
| 25 | 63 | 215 | 1340 | e144 | 123 | 272 | 935 | 254 | 72 | 218 | 209 | 127 |
| 26 | 56 | 194 | 1290 | e134 | 117 | 275 | 930 | 235 | 139 | 137 | 151 | 107 |
| 27 | 121 | 170 | 1220 | 130 | 114 | 300 | 1010 | 242 | 95 | 96 | 134 | 79 |
| 28 | 228 | 158 | 1120 | 135 | 112 | 320 | 1020 | 315 | 58 | 77 | 108 | 378 |
| 29 | 488 | 241 | 1030 | 135 | 115 | 300 | 980 | 415 | 63 | 64 | 92 | 903 |
| 30 | 605 | 243 | 937 | 135 | --- | 272 | 922 | 352 | 51 | 89 | 67 | 950 |
| 31 | 618 | --- | 852 | 132 | --- | 328 | --- | 288 | --- | 82 | 140 | --- |
| TOTAL | 4304 | 7463 | 27397 | 8863 | 5902 | 6995 | 38175 | 13196 | 4162 | 2906 | 6668 | 6876 |
| MEAN | 139 | 249 | 884 | 286 | 204 | 226 | 1272 | 426 | 139 | 93.7 | 215 | 229 |
| MAX | 618 | 547 | 1660 | 754 | 506 | 363 | 1830 | 868 | 294 | 234 | 623 | 950 |
| MIN | 33 | 127 | 103 | 88 | 112 | 123 | 821 | 208 | 51 | 43 | 44 | 46 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2004, BY WATER YEAR (WY)

| | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 102 | 162 | 364 | 321 | 349 | 547 | 685 | 350 | 345 | 137 | 96.3 | 106 | 1046 | 443 | 215 | 271 |
| MAX | 244 | 274 | 884 | 577 | 611 | 872 | 1272 | 783 | 1046 | 443 | 215 | 271 | 1998 | 1998 | 2004 | 1999 |
| (WY) | 1999 | 1997 | 2004 | 1999 | 1999 | 2001 | 2004 | 1998 | 1998 | 1998 | 2004 | 1999 | 1999 | 1999 | 1999 | 1999 |
| MIN | 20.9 | 26.5 | 75.9 | 102 | 124 | 199 | 197 | 140 | 39.6 | 29.2 | 24.5 | 19.3 | 1999 | 1997 | 2002 | 1997 |
| (WY) | 1998 | 2002 | 2002 | 2002 | 2002 | 2002 | 2002 | 2001 | 1999 | 1997 | 2002 | 1997 | 1999 | 1997 | 2002 | 1997 |

SUMMARY STATISTICS FOR 2003 CALENDAR YEAR FOR 2004 WATER YEAR WATER YEARS 1997 - 2004

| | | | |
|--------------------------|--------|--------|-------|
| ANNUAL TOTAL | 141297 | 132907 | 291 |
| ANNUAL MEAN | 387 | 363 | 426 |
| HIGHEST ANNUAL MEAN | | | 118 |
| LOWEST ANNUAL MEAN | | | 118 |
| HIGHEST DAILY MEAN | 1660 | Dec 18 | 1830 |
| LOWEST DAILY MEAN | 17 | Jul 21 | 33 |
| ANNUAL SEVEN-DAY MINIMUM | 38 | Oct 6 | 38 |
| MAXIMUM PEAK FLOW | | | 1940 |
| MAXIMUM PEAK STAGE | | | 36.01 |
| INSTANTANEOUS LOW FLOW | | | 12 |
| 10 PERCENT EXCEEDS | 918 | | 1010 |
| 50 PERCENT EXCEEDS | 227 | | 200 |
| 90 PERCENT EXCEEDS | 57 | | 61 |

e Estimated

WEYMOUTH FORE RIVER BASIN

01105584 TOWN BROOK AT DIVERSION TUNNEL AT QUINCY, MA

LOCATION.--Lat 42° 14' 40", long 71° 00' 16", Norfolk County, Hydrologic Unit 01090001, on left bank at spillway into Burgin Brook and diversion tunnel, 100 ft west of Burgin Parkway, and 0.5 mi south of Quincy.

DRAINAGE AREA.--About 2.0 mi² (partially culverted).

PERIOD OF RECORD.--Gage height: February 1999 to September 2000; March 2001 to current year.

Precipitation: February 1999 to September 2000; March 2001 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 14.90 ft above National Geodetic Vertical Datum (NGVD) of 1929. Elevation of spillway into diversion tunnel is 18.0 ft above NGVD. Elevation data provided by U.S. Army Corps of Engineers.

REMARKS.--Records good except for those for the period Sept. 19--21, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 18.85 ft above NGVD, June 30, 2001, but may have been higher during periods of no gage height record; minimum gage height, 14.78 ft, Sept. 7, 2001, but may have been lower during periods of no gage height record.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 18.52 ft above NGVD, July 2; minimum gage height, 16.25 ft, Oct. 3, 4, 6-8.

WATER LEVEL, IN FEET ABOVE NGVD OF 1929, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|---------|-------|-------|----------|-------|-------|----------|-------|-------|---------|-------|-------|
| | OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | | |
| 1 | 16.40 | 16.26 | 16.30 | 16.51 | 16.48 | 16.50 | 16.55 | 16.53 | 16.54 | 16.57 | 16.55 | 16.56 |
| 2 | 16.33 | 16.27 | 16.29 | 16.64 | 16.47 | 16.49 | 16.55 | 16.53 | 16.54 | 16.62 | 16.55 | 16.57 |
| 3 | 16.29 | 16.25 | 16.27 | 17.15 | 16.47 | 16.54 | 16.55 | 16.53 | 16.54 | 16.95 | 16.56 | 16.62 |
| 4 | 16.40 | 16.25 | 16.29 | 16.53 | 16.50 | 16.52 | 16.56 | 16.53 | 16.54 | 16.96 | 16.60 | 16.70 |
| 5 | 16.32 | 16.29 | 16.30 | 17.06 | 16.44 | 16.59 | 16.59 | 16.54 | 16.56 | 17.21 | 16.58 | 16.74 |
| 6 | 16.29 | 16.25 | 16.27 | 16.54 | 16.46 | 16.48 | 17.39 | 16.59 | 16.84 | 16.64 | 16.50 | 16.54 |
| 7 | 16.27 | 16.25 | 16.26 | 16.46 | 16.45 | 16.46 | 16.97 | 16.85 | 16.91 | 16.51 | 16.48 | 16.49 |
| 8 | 16.27 | 16.25 | 16.26 | 16.46 | 16.44 | 16.45 | 16.97 | 16.79 | 16.85 | 16.49 | 16.46 | 16.48 |
| 9 | 16.31 | 16.26 | 16.27 | 16.46 | 16.45 | 16.45 | 16.86 | 16.76 | 16.79 | 16.47 | 16.45 | 16.46 |
| 10 | 16.27 | 16.26 | 16.26 | 16.46 | 16.45 | 16.45 | 16.97 | 16.75 | 16.82 | 16.47 | 16.45 | 16.46 |
| 11 | 16.27 | 16.26 | 16.26 | 16.76 | 16.45 | 16.51 | 18.30 | 16.84 | 17.64 | 16.46 | 16.45 | 16.46 |
| 12 | 18.19 | 16.26 | 16.68 | 16.54 | 16.42 | 16.46 | 17.95 | 17.84 | 17.88 | 16.47 | 16.45 | 16.46 |
| 13 | 16.76 | 16.52 | 16.61 | 17.55 | 16.42 | 16.57 | 17.84 | 17.70 | 17.76 | 16.49 | 16.46 | 16.47 |
| 14 | 16.52 | 16.39 | 16.44 | 16.51 | 16.42 | 16.46 | 18.09 | 17.63 | 17.67 | 16.48 | 16.46 | 16.47 |
| 15 | 18.31 | 16.39 | 17.20 | 16.43 | 16.41 | 16.42 | 18.33 | 17.92 | 18.03 | 16.48 | 16.47 | 16.47 |
| 16 | 16.80 | 16.50 | 16.64 | 16.42 | 16.41 | 16.42 | 17.92 | 17.88 | 17.90 | 16.57 | 16.46 | 16.49 |
| 17 | 16.51 | 16.43 | 16.47 | 16.51 | 16.41 | 16.42 | 18.24 | 17.87 | 17.95 | 16.48 | 16.46 | 16.47 |
| 18 | 16.63 | 16.43 | 16.49 | 16.42 | 16.41 | 16.42 | 18.02 | 17.91 | 17.94 | 16.59 | 16.47 | 16.51 |
| 19 | 16.44 | 16.41 | 16.42 | 16.42 | 16.41 | 16.41 | 17.92 | 17.89 | 17.90 | 16.54 | 16.50 | 16.51 |
| 20 | 16.42 | 16.39 | 16.40 | 17.35 | 16.41 | 16.59 | 17.89 | 17.87 | 17.88 | 16.54 | 16.50 | 16.52 |
| 21 | 16.46 | 16.38 | 16.40 | 16.99 | 16.45 | 16.56 | 17.88 | 17.86 | 17.87 | 16.53 | 16.50 | 16.51 |
| 22 | 16.46 | 16.38 | 16.41 | 16.46 | 16.41 | 16.43 | 17.87 | 16.56 | 17.02 | 16.52 | 16.48 | 16.50 |
| 23 | 16.47 | 16.38 | 16.41 | 16.42 | 16.40 | 16.41 | 16.57 | 16.55 | 16.56 | 16.49 | 16.44 | 16.47 |
| 24 | 16.41 | 16.35 | 16.38 | 16.42 | 16.40 | 16.41 | 18.00 | 16.55 | 16.71 | 16.45 | 16.41 | 16.43 |
| 25 | 16.36 | 16.34 | 16.35 | 16.85 | 16.41 | 16.46 | 16.81 | 16.65 | 16.71 | 16.42 | 16.41 | 16.41 |
| 26 | 16.38 | 16.34 | 16.35 | 16.43 | 16.41 | 16.42 | 16.66 | 16.60 | 16.63 | 16.42 | 16.40 | 16.41 |
| 27 | 18.16 | 16.36 | 16.91 | 16.42 | 16.41 | 16.41 | 16.61 | 16.58 | 16.60 | 16.42 | 16.41 | 16.41 |
| 28 | 16.93 | 16.53 | 16.63 | 17.86 | 16.41 | 16.48 | 16.59 | 16.57 | 16.58 | 16.44 | 16.41 | 16.42 |
| 29 | 17.99 | 16.55 | 17.25 | 17.93 | 16.58 | 16.77 | 16.58 | 16.56 | 16.57 | 16.43 | 16.40 | 16.41 |
| 30 | 16.85 | 16.61 | 16.70 | 16.59 | 16.54 | 16.55 | 16.60 | 16.56 | 16.57 | 16.42 | 16.40 | 16.41 |
| 31 | 16.61 | 16.50 | 16.55 | --- | --- | --- | 16.58 | 16.55 | 16.56 | 16.41 | 16.40 | 16.41 |
| MONTH | 18.31 | 16.25 | 16.47 | 17.93 | 16.40 | 16.48 | 18.33 | 16.53 | 17.09 | 17.21 | 16.40 | 16.49 |

WEYMOUTH FORE RIVER BASIN

01105584 TOWN BROOK AT DIVERSION TUNNEL AT QUINCY, MA--Continued

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY SUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|------|------|------|------|-------|------|------|------|------|------|
| 1 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 3.92 | 0.00 | 0.22 | 0.07 | 0.00 | 0.00 |
| 2 | .03 | .04 | .00 | .03 | .00 | .00 | .35 | .02 | .03 | .67 | .00 | .00 |
| 3 | .00 | .14 | .00 | .18 | .51 | .00 | .00 | .35 | .16 | .00 | .00 | .00 |
| 4 | .08 | .02 | .00 | .25 | .00 | .05 | .13 | .48 | .00 | .00 | .00 | .00 |
| 5 | .00 | .37 | .01 | .45 | .00 | .01 | .20 | .00 | .00 | 1.08 | .45 | .00 |
| 6 | .00 | .01 | .93 | .02 | 1.19 | .22 | .00 | .00 | .17 | .00 | .00 | .00 |
| 7 | .00 | .00 | .01 | .00 | .09 | .00 | .00 | .01 | .00 | .00 | .00 | .00 |
| 8 | .00 | .00 | .03 | .00 | .00 | .05 | .00 | .00 | .00 | .00 | .00 | .59 |
| 9 | .00 | .00 | .06 | .00 | .00 | .00 | .00 | .21 | .17 | .00 | .00 | .27 |
| 10 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .01 | .00 | .00 | .00 |
| 11 | .00 | .13 | 1.05 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 12 | 1.26 | .00 | .00 | .02 | .00 | .04 | .05 | .00 | .00 | .00 | .38 | .00 |
| 13 | .00 | .27 | .00 | .00 | .00 | .00 | 2.62 | .00 | .00 | .14 | 1.06 | .00 |
| 14 | .00 | .00 | 1.20 | .00 | .00 | .00 | .30 | .00 | .00 | .65 | .08 | .00 |
| 15 | 2.11 | .00 | .97 | .00 | .00 | .00 | .26 | .00 | .00 | .01 | 1.51 | .00 |
| 16 | .00 | .00 | .00 | .00 | .00 | .03 | .00 | .08 | .00 | .00 | .13 | .05 |
| 17 | .00 | .04 | .72 | .00 | .00 | .03 | .00 | .00 | .00 | .00 | .02 | .00 |
| 18 | .13 | .00 | .01 | .16 | .00 | .09 | .00 | .22 | .02 | .00 | .00 | 3.78 |
| 19 | .02 | .00 | .00 | .00 | .00 | .00 | .00 | .19 | .02 | .15 | .00 | .00 |
| 20 | .00 | .55 | .00 | .00 | .00 | .23 | .00 | .00 | .00 | .00 | .00 | .00 |
| 21 | .04 | .18 | .00 | .00 | .01 | .35 | .00 | .00 | .00 | .00 | .84 | .00 |
| 22 | .01 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 23 | .03 | .00 | .00 | .00 | .00 | .00 | 1.00 | .09 | .00 | .00 | .00 | .00 |
| 24 | .00 | .00 | .48 | .00 | .00 | .00 | .03 | .17 | .00 | 1.78 | .00 | .00 |
| 25 | .00 | .11 | .03 | .00 | .00 | .01 | .01 | .09 | .21 | .01 | .00 | .00 |
| 26 | .01 | .00 | .00 | .00 | .00 | .00 | .95 | .00 | .19 | .00 | .00 | .00 |
| 27 | 1.55 | .00 | .00 | .00 | .00 | .27 | .38 | .28 | .00 | .00 | .00 | .00 |
| 28 | .04 | .38 | .00 | .02 | .00 | .00 | .00 | .73 | .00 | .10 | .00 | 2.71 |
| 29 | 1.72 | .26 | .00 | .00 | .00 | .00 | .00 | .00 | .05 | .01 | .00 | 1.39 |
| 30 | .00 | .00 | .02 | .00 | --- | .00 | .00 | .00 | .00 | .00 | .07 | .05 |
| 31 | .00 | --- | .00 | .00 | --- | 1.44 | --- | .00 | --- | .00 | .47 | --- |
| TOTAL | 7.03 | 2.50 | 5.52 | 1.13 | 1.80 | 2.82 | 10.20 | 2.92 | 1.25 | 4.67 | 5.01 | 8.84 |
| MAX | 2.11 | 0.55 | 1.20 | 0.45 | 1.19 | 1.44 | 3.92 | 0.73 | 0.22 | 1.78 | 1.51 | 3.78 |

WEYMOUTH FORE RIVER BASIN
01105585 TOWN BROOK AT QUINCY, MA

LOCATION.--Lat 42° 14' 52", long 70° 59' 52", Norfolk County, Hydrologic Unit 01090001, on left bank 200 ft downstream from Miller Stile Road at Quincy and 0.8 mi upstream from Town River Bay.

DRAINAGE AREA.--4.11 mi².

PERIOD OF RECORD.--Discharge: Water years 1973–86; 1999 to current year. Prior to October 1974 published as Town River at Quincy.
Water-quality records: May to August 1999, November 1999 to June 2000.

REVISED RECORDS.--WDR MA-RI-81-1: 1975–80 (P). WDR MA-RI-84-1; WDR MA-RI-03-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 5 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records fair except those for estimated daily discharges and those greater than 50 ft³/s, which are poor. Flow affected by unknown regulation.
Telephone gage-height telemeter at station.

AVERAGE DISCHARGE.--20 years (water years 1973–86, 1999–2004), 7.65 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 381 ft³/s May 13, 1975, gage height, 7.40 ft, from rating curve extended above 210 ft³/s on basis of U.S. Army Corps of Engineers computation of the backwater effect from culvert downstream; minimum daily discharge, 0.16 ft³/s Dec. 6, 2002.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 295 ft³/s July 2, gage height, 6.01 ft; minimum discharge, 0.35 ft³/s, Oct. 8–12.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|--------|------|-------|------|------|-------|-------|-------|-------|-------|--------|-------|
| 1 | 0.97 | 3.6 | 2.2 | 3.3 | e2.7 | 2.4 | 52 | 4.7 | 4.4 | 1.7 | 1.6 | 2.3 |
| 2 | 0.94 | 3.9 | 2.0 | 3.4 | 2.8 | 2.8 | 26 | 4.5 | 3.5 | 10 | 1.8 | 1.8 |
| 3 | 0.79 | 4.0 | 1.9 | 4.2 | 8.1 | 3.0 | 12 | 6.8 | 3.8 | 3.2 | 1.7 | 1.4 |
| 4 | 1.0 | 2.9 | 1.8 | 5.2 | 4.7 | 3.2 | 10 | 10 | 3.1 | 2.4 | 1.1 | 1.3 |
| 5 | 0.98 | 5.5 | 1.8 | 8.0 | 3.3 | 2.9 | 12 | 5.2 | 2.5 | 12 | 4.2 | 1.1 |
| 6 | 0.78 | 3.1 | 5.6 | 4.6 | 11 | 5.5 | 7.8 | 4.6 | 3.4 | 4.3 | 2.1 | 1.1 |
| 7 | 0.70 | 2.7 | 3.6 | 3.7 | 12 | 4.1 | 6.9 | 4.2 | 3.0 | 3.0 | 1.5 | 1.1 |
| 8 | 0.70 | 2.6 | 3.0 | e3.3 | 4.3 | 4.1 | 6.2 | 3.9 | 2.5 | 2.4 | 1.2 | 8.7 |
| 9 | 0.64 | 2.6 | 2.6 | e3.0 | 3.7 | 3.7 | 5.8 | 5.3 | 3.7 | 2.0 | 1.2 | 4.7 |
| 10 | 0.67 | 2.6 | 2.8 | e2.9 | 3.5 | 3.3 | 5.4 | 4.0 | 3.3 | 1.5 | 1.1 | 2.8 |
| 11 | 0.62 | 3.2 | 20 | e2.9 | 3.5 | 3.1 | 4.9 | 3.7 | 2.3 | 1.3 | 0.98 | 2.1 |
| 12 | 14 | 2.5 | 7.4 | 2.9 | 2.7 | 3.6 | 4.7 | 3.5 | 1.8 | 1.2 | 2.2 | 1.7 |
| 13 | 3.8 | 5.3 | 5.2 | 3.0 | 2.1 | 3.4 | 26 | 3.4 | 1.5 | 1.8 | 16 | 1.4 |
| 14 | 1.8 | 2.8 | 5.2 | e3.2 | 2.0 | 2.8 | 15 | 3.2 | 1.4 | 7.2 | 5.6 | 1.3 |
| 15 | 25 | 2.4 | 19 | e2.4 | 1.9 | 2.8 | 12 | 3.1 | 1.4 | 3.0 | 24 | 1.2 |
| 16 | 3.9 | 2.2 | 5.3 | 4.1 | 2.0 | 2.8 | 8.3 | 3.2 | 1.2 | 2.4 | 5.1 | 1.5 |
| 17 | 2.7 | 2.3 | 10 | 2.3 | 1.8 | 3.8 | 7.3 | 2.9 | 1.1 | 2.1 | 3.5 | 1.4 |
| 18 | 3.2 | 2.1 | 6.5 | 2.8 | 1.8 | 4.2 | 6.3 | 3.5 | 1.2 | 2.1 | 2.8 | 39 |
| 19 | 2.1 | 2.1 | 4.8 | 2.4 | 2.3 | e4.1 | 5.7 | 7.5 | 1.3 | 2.9 | 2.4 | 6.5 |
| 20 | 1.8 | 6.1 | 4.3 | 2.3 | 2.5 | e4.1 | 5.3 | 3.2 | 1.1 | 1.7 | 2.2 | 3.8 |
| 21 | 2.0 | 5.0 | 4.0 | 2.2 | 2.7 | e5.0 | 4.8 | 2.8 | 0.94 | 1.6 | 14 | 3.3 |
| 22 | 2.0 | 2.4 | 4.4 | 2.2 | 2.6 | 5.8 | 4.5 | 2.5 | 0.83 | 1.5 | 4.8 | 3.0 |
| 23 | 1.9 | 2.3 | 4.5 | 2.1 | 2.4 | 5.0 | 12 | 3.7 | 0.85 | 1.3 | 3.2 | 2.7 |
| 24 | 1.6 | 2.6 | 10 | 2.0 | 2.3 | 4.8 | 6.1 | 4.0 | 0.77 | 15 | 2.6 | 2.6 |
| 25 | 1.4 | 3.4 | 6.5 | 2.3 | 2.3 | 4.8 | 4.9 | 4.3 | 2.5 | 4.2 | 2.3 | 2.4 |
| 26 | 1.5 | 2.0 | 4.6 | 2.6 | 2.2 | 4.8 | 11 | 2.9 | 3.8 | 2.9 | 2.0 | 2.4 |
| 27 | 18 | 1.8 | 4.1 | 2.8 | 2.2 | 6.9 | 10 | 6.5 | 1.6 | 2.4 | 1.9 | 2.2 |
| 28 | 5.0 | 3.6 | 3.9 | 2.9 | 2.2 | 5.0 | 6.4 | 12 | 1.1 | 2.7 | 1.8 | 23 |
| 29 | 25 | 6.9 | 3.8 | 2.8 | 2.3 | 4.6 | 5.5 | 4.1 | 1.2 | 1.8 | 1.6 | 18 |
| 30 | 5.1 | 2.4 | 3.8 | e2.7 | --- | 4.3 | 5.0 | 3.1 | 0.85 | 1.7 | 2.0 | 6.8 |
| 31 | 3.7 | --- | 3.5 | e2.7 | --- | 16 | --- | 2.7 | --- | 1.7 | 6.8 | --- |
| TOTAL | 134.29 | 96.9 | 168.1 | 97.2 | 99.9 | 136.7 | 309.8 | 139.0 | 61.94 | 105.0 | 125.28 | 152.6 |
| MEAN | 4.33 | 3.23 | 5.42 | 3.14 | 3.44 | 4.41 | 10.3 | 4.48 | 2.06 | 3.39 | 4.04 | 5.09 |
| MAX | 25 | 6.9 | 20 | 8.0 | 12 | 16 | 52 | 12 | 4.4 | 15 | 24 | 39 |
| MIN | 0.62 | 1.8 | 1.8 | 2.0 | 1.8 | 2.4 | 4.5 | 2.5 | 0.77 | 1.2 | 0.98 | 1.1 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1973 - 2004, BY WATER YEAR (WY)

| | 1973 | 1974 | 1975 | 1976 | 1977 | 1978 | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | | |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--|--|
| MEAN | 5.31 | 6.93 | 8.26 | 10.1 | 10.4 | 12.4 | 10.2 | 7.36 | 7.48 | 4.23 | 5.13 | 4.16 | | | | | | | | | | | | | | | | | | | | | | |
| MAX | 15.1 | 18.5 | 20.3 | 36.0 | 29.3 | 33.8 | 26.5 | 18.9 | 32.2 | 9.33 | 12.3 | 7.97 | | | | | | | | | | | | | | | | | | | | | | |
| (WY) | 1978 | 1973 | 1973 | 1979 | 1984 | 1983 | 1983 | 1984 | 1982 | 1973 | 1976 | 1975 | | | | | | | | | | | | | | | | | | | | | | |
| MIN | 1.36 | 1.12 | 2.13 | 2.52 | 2.38 | 4.41 | 4.86 | 3.09 | 1.82 | 2.03 | 1.55 | 1.16 | | | | | | | | | | | | | | | | | | | | | | |
| (WY) | 2002 | 2002 | 1999 | 1981 | 1980 | 2004 | 1985 | 2001 | 1999 | 1974 | 2002 | 1980 | | | | | | | | | | | | | | | | | | | | | | |

SUMMARY STATISTICS

| | FOR 2003 CALENDAR YEAR | | | | FOR 2004 WATER YEAR | | | | WATER YEARS 1973 - 2004 | | | |
|--------------------------|------------------------|--|--|--|---------------------|--|--|--|-------------------------|--|--|--|
| ANNUAL TOTAL | 1989.86 | | | | 1626.71 | | | | | | | |
| ANNUAL MEAN | 5.45 | | | | 4.44 | | | | 7.65 | | | |
| HIGHEST ANNUAL MEAN | | | | | | | | | 15.6 | | | |
| LOWEST ANNUAL MEAN | | | | | | | | | 4.15 | | | |
| HIGHEST DAILY MEAN | 37 | | | | Jun 1 | | | | 210 | | | |
| LOWEST DAILY MEAN | 0.62 | | | | Oct 11 | | | | 0.16 | | | |
| ANNUAL SEVEN-DAY MINIMUM | 0.73 | | | | Oct 5 | | | | 0.36 | | | |
| MAXIMUM PEAK FLOW | | | | | 295 | | | | 381 | | | |
| MAXIMUM PEAK STAGE | | | | | 6.01 | | | | 7.40 | | | |
| INSTANTANEOUS LOW FLOW | | | | | 0.35 | | | | 17 | | | |
| 10 PERCENT EXCEEDS | 9.8 | | | | 8.0 | | | | 4.2 | | | |
| 50 PERCENT EXCEEDS | 4.1 | | | | 3.0 | | | | 1.3 | | | |
| 90 PERCENT EXCEEDS | 1.4 | | | | 1.3 | | | | | | | |

^a Years of operation not continuous; see Period of Record for actual years of operation.

^e Estimated

WEYMOUTH BACK RIVER BASIN

01105600 OLD SWAMP RIVER NEAR SOUTH WEYMOUTH, MA

LOCATION.--Lat 42° 11' 25", long 70° 56' 43", Norfolk County, Hydrologic Unit 01090001, on left bank between divided lanes of State Highways 3 and 128, 50 ft (revised) downstream from unnamed tributary entering from left, 0.4 mi upstream from Whitmans Pond, and 1.2 mi north of South Weymouth.

DRAINAGE AREA.--4.50 mi².

PERIOD OF RECORD.--Discharge: May 1966 to current year.

Water-quality records: Water years 1967-68, 1999-2000.

GAGE.--Water-stage recorder. Elevation of gage is 70 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Aug. 3, 1996, at site 50 ft downstream at same datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Satellite gage-height telemeter at station.

AVERAGE DISCHARGE.--38 years (water years 1967-2004), 9.06 ft³/s, 27.35 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 590 ft³/s, May 31, 1984, gage height, 5.02 ft; maximum gage height, 5.35 ft, Feb. 15, 1971 (ice jam); minimum discharge, 0.05 ft³/s, Sept. 10-13, 15, 16, 1995.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 171 ft³/s, Apr. 2, gage height, 4.62 ft; minimum discharge, 0.31 ft³/s, July 23, 24.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|
| 1 | 0.67 | 7.8 | 5.9 | 8.3 | 5.9 | 3.9 | 86 | 7.3 | 6.2 | 0.58 | 1.2 | 1.5 |
| 2 | 0.79 | 6.3 | 5.0 | 7.9 | 5.4 | 5.3 | 133 | 6.6 | 6.3 | 2.8 | 1.2 | 1.2 |
| 3 | 0.82 | 5.8 | 4.1 | 8.7 | 6.7 | 6.9 | 44 | 9.1 | 11 | 1.2 | 0.97 | 1.1 |
| 4 | 1.4 | 5.2 | 3.7 | 11 | 14 | 6.2 | 24 | 22 | 7.7 | 0.79 | 0.86 | 1.0 |
| 5 | 1.4 | 7.2 | 3.6 | 17 | 7.2 | 5.6 | 23 | 13 | 4.9 | 3.5 | 1.9 | 0.96 |
| 6 | 1.1 | 9.8 | 6.3 | 17 | 8.9 | 9.8 | 17 | 8.3 | 4.4 | 2.3 | 1.3 | 0.92 |
| 7 | 1.1 | 7.0 | 21 | 11 | 23 | 9.1 | 13 | 6.9 | 5.2 | 1.3 | 0.97 | 0.89 |
| 8 | 0.85 | 5.5 | 14 | e8.5 | e17 | 7.1 | 11 | 5.6 | 3.9 | 0.93 | 0.82 | 1.6 |
| 9 | 0.87 | 4.7 | 13 | e6.4 | e11 | 5.7 | 9.2 | 7.1 | 4.5 | 0.80 | 0.73 | 2.5 |
| 10 | 0.91 | 4.3 | 11 | 5.8 | 6.2 | 5.3 | 8.1 | 7.0 | 9.7 | 0.66 | 0.63 | 2.0 |
| 11 | 0.72 | 4.4 | 33 | 6.5 | 5.6 | 5.8 | 7.2 | 5.5 | 4.0 | 0.58 | 0.60 | 1.3 |
| 12 | 7.0 | 5.3 | 66 | 6.5 | e4.7 | 5.7 | 6.6 | 4.7 | 2.9 | 0.52 | 0.54 | 1.0 |
| 13 | 5.2 | 8.7 | 34 | 5.8 | 4.2 | 5.1 | 27 | 4.2 | 2.4 | 0.57 | 7.9 | 0.92 |
| 14 | 2.3 | 7.3 | 18 | 5.5 | 4.1 | 4.5 | 80 | 3.9 | 2.1 | 2.8 | 13 | 0.88 |
| 15 | 20 | 5.4 | 66 | 5.6 | e3.9 | 4.5 | 41 | 3.7 | 2.1 | 1.4 | 31 | 0.82 |
| 16 | 12 | 4.6 | 48 | e6.9 | e3.1 | 4.4 | 22 | 3.6 | 1.8 | 0.94 | 22 | 1.0 |
| 17 | 5.1 | 4.3 | 34 | e7.2 | e2.7 | 4.4 | 14 | 3.4 | 1.6 | 0.72 | 8.5 | 0.99 |
| 18 | 4.5 | 4.2 | 74 | e7.2 | 2.7 | 4.3 | 11 | 3.3 | 1.7 | 0.59 | 4.8 | 33 |
| 19 | 3.4 | 4.0 | 34 | e6.5 | e3.0 | 4.2 | 9.7 | 7.2 | 1.7 | 0.85 | 3.4 | 24 |
| 20 | 2.9 | 8.3 | 20 | e6.4 | e2.9 | 4.8 | 8.6 | 4.0 | 1.4 | 0.69 | 2.9 | 6.0 |
| 21 | 2.8 | 12 | 15 | e6.1 | 3.2 | 16 | 7.4 | 3.2 | 1.1 | 0.53 | 7.0 | 3.2 |
| 22 | 2.8 | 9.2 | 13 | e5.7 | 3.8 | 16 | 6.8 | 3.0 | 1.0 | 0.43 | 8.5 | 2.4 |
| 23 | 2.7 | 6.8 | 13 | e5.2 | 3.6 | 11 | 19 | 3.1 | 1.0 | 0.39 | 3.8 | 1.9 |
| 24 | 2.5 | 5.7 | 15 | e5.3 | 3.3 | 9.1 | 17 | 4.2 | 0.84 | 12 | 2.7 | 1.7 |
| 25 | 2.4 | 7.4 | 21 | e5.5 | 3.2 | 9.7 | 9.8 | 4.3 | 0.77 | 8.5 | 2.2 | 1.5 |
| 26 | 2.4 | 6.0 | 16 | e5.8 | 3.1 | 10 | 16 | 3.7 | 1.2 | 2.7 | 1.9 | 1.4 |
| 27 | 12 | 5.2 | 12 | e5.9 | 3.0 | 13 | 27 | 9.4 | 1.3 | 1.7 | 1.7 | 1.2 |
| 28 | 14 | 5.5 | 11 | e6.1 | 3.1 | 11 | 18 | 14 | 0.78 | 3.4 | 1.5 | 14 |
| 29 | 31 | 11 | 9.8 | e5.9 | 3.3 | 8.7 | 10 | 13 | 0.89 | 2.6 | 1.4 | 38 |
| 30 | 26 | 7.6 | 9.7 | e6.1 | --- | 7.4 | 8.3 | 6.3 | 0.72 | 1.8 | 1.3 | 24 |
| 31 | 12 | --- | 9.1 | 6.1 | --- | 14 | --- | 4.4 | --- | 1.4 | 1.9 | --- |
| TOTAL | 183.63 | 196.5 | 659.2 | 229.4 | 171.8 | 238.5 | 734.7 | 205.0 | 95.10 | 59.97 | 139.12 | 172.88 |
| MEAN | 5.92 | 6.55 | 21.3 | 7.40 | 5.92 | 7.69 | 24.5 | 6.61 | 3.17 | 1.93 | 4.49 | 5.76 |
| MAX | 31 | 12 | 74 | 17 | 23 | 16 | 133 | 22 | 11 | 12 | 31 | 38 |
| MIN | 0.67 | 4.0 | 3.6 | 5.2 | 2.7 | 3.9 | 6.6 | 3.0 | 0.72 | 0.39 | 0.54 | 0.82 |
| CFSM | 1.32 | 1.46 | 4.73 | 1.64 | 1.32 | 1.71 | 5.44 | 1.47 | 0.70 | 0.43 | 1.00 | 1.28 |
| IN. | 1.52 | 1.62 | 5.45 | 1.90 | 1.42 | 1.97 | 6.07 | 1.69 | 0.79 | 0.50 | 1.15 | 1.43 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 2004, BY WATER YEAR (WY)

| | 1966 | 1967 | 1968 | 1969 | 1970 | 1971 | 1972 | 1973 | 1974 | 1975 | 1976 | 1977 | 1978 | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 5.04 | 9.46 | 12.6 | 12.0 | 12.6 | 17.4 | 14.0 | 9.39 | 7.11 | 2.81 | 3.07 | 3.30 | 26.0 | 24.7 | 30.9 | 30.8 | 30.4 | 51.5 | 38.7 | 21.6 | 46.2 | 7.78 | 8.99 | 12.9 | (WY) | 1997 | 1992 | 1970 | 1979 | 1998 | 1983 | 1987 | 1967 | 1982 | 1988 | 1990 | 1996 | | |
| MIN | 1.14 | 1.12 | 2.77 | 2.16 | 2.86 | 6.25 | 4.95 | 4.11 | 1.08 | 0.54 | 0.50 | 0.18 | (WY) | 1998 | 2002 | 1981 | 1981 | 1980 | 1985 | 1986 | 1986 | 1999 | 1991 | 1971 | 1980 | | | | | | | | | | | | | | |

SUMMARY STATISTICS

| | FOR 2003 CALENDAR YEAR | FOR 2004 WATER YEAR | WATER YEARS 1966 - 2004 |
|--------------------------|------------------------|---------------------|-------------------------|
| ANNUAL TOTAL | 3894.39 | 3085.80 | |
| ANNUAL MEAN | 10.7 | 8.43 | 9.06 |
| HIGHEST ANNUAL MEAN | | | 14.4 |
| LOWEST ANNUAL MEAN | | | 3.91 |
| HIGHEST DAILY MEAN | 100 | Apr 12 | 361 |
| LOWEST DAILY MEAN | 0.65 | Aug 29 | 0.05 |
| ANNUAL SEVEN-DAY MINIMUM | 0.78 | Sep 26 | 0.06 |
| MAXIMUM PEAK FLOW | | | 590 |
| MAXIMUM PEAK STAGE | | | 5.35 |
| INSTANTANEOUS LOW FLOW | | | 0.05 |
| ANNUAL RUNOFF (CFSM) | 2.37 | | 2.01 |
| ANNUAL RUNOFF (INCHES) | 32.19 | | 27.35 |
| 10 PERCENT EXCEEDS | 23 | | 19 |
| 50 PERCENT EXCEEDS | 6.3 | | 5.4 |
| 90 PERCENT EXCEEDS | 1.3 | | 0.85 |

e Estimated

WEYMOUTH BACK RIVER BASIN

01105606 WHITMANS POND, WHITMANS POND DAM AT EAST WEYMOUTH, MA

LOCATION.--Lat 42° 12' 40", long 70° 55' 47", Norfolk County, Hydrologic Unit 01090001, on Whitmans Pond Dam, approximately 1,000 ft upstream from Iron Hill Dam and flood bypass system, and 1,300 ft upstream from the gage, Whitmans Pond Fish Ladder at East Weymouth, MA.

DRAINAGE AREA.--12.4 mi².

PERIOD OF RECORD.--March 2002 to current year.

GAGE.--Water-stage recorder. Datum of gage is 67.96 ft above National Geodetic Vertical Datum of 1929 (NGVD) (Town of Weymouth Datum). Subtract 5.83 ft from gage height values to adjust to NGVD.

REMARKS.--Records good. Missing record of more than one day not estimated. Satellite gage-height telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 73.23 ft, May 14, 2003; minimum, 70.29, Aug. 28, 2003.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 73.04 ft, Apr. 2, 3; minimum, 71.69, Oct. 11, 12.

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004 DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|-------|-------|-------|--------|--------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 71.79 | 72.28 | 72.31 | 72.44 | e72.40 | 72.55 | 72.85 | 72.83 | 72.63 | 72.08 | 72.21 | 72.51 |
| 2 | 71.77 | 72.26 | 72.30 | 72.43 | e72.39 | 72.54 | 73.01 | 72.81 | 72.62 | 72.09 | 72.21 | 72.50 |
| 3 | 71.75 | 72.25 | 72.30 | 72.44 | 72.40 | 72.54 | 72.98 | 72.81 | 72.61 | 72.09 | 72.22 | 72.49 |
| 4 | 71.74 | 72.23 | 72.30 | 72.45 | 72.44 | 72.54 | 72.89 | 72.85 | 72.60 | 72.09 | 72.22 | 72.49 |
| 5 | 71.75 | 72.23 | 72.29 | 72.48 | 72.46 | 72.54 | 72.86 | 72.84 | 72.56 | 72.10 | 72.22 | 72.48 |
| 6 | 71.74 | 72.26 | 72.32 | 72.50 | 72.49 | 72.55 | 72.82 | 72.82 | 72.53 | 72.13 | 72.22 | 72.47 |
| 7 | 71.74 | 72.26 | 72.38 | 72.50 | 72.57 | 72.56 | 72.79 | 72.81 | 72.51 | 72.13 | 72.22 | 72.47 |
| 8 | 71.74 | 72.25 | 72.37 | 72.49 | 72.60 | 72.57 | 72.78 | 72.78 | 72.49 | 72.12 | 72.22 | 72.48 |
| 9 | 71.74 | 72.25 | 72.36 | 72.47 | 72.58 | 72.58 | 72.77 | 72.78 | 72.47 | 72.12 | 72.21 | 72.51 |
| 10 | 71.72 | 72.25 | 72.37 | 72.45 | 72.57 | 72.57 | 72.76 | 72.78 | 72.49 | 72.11 | 72.21 | 72.53 |
| 11 | 71.70 | 72.24 | 72.40 | 72.44 | 72.55 | 72.56 | 72.75 | 72.77 | 72.48 | 72.10 | 72.20 | 72.53 |
| 12 | 71.71 | 72.24 | 72.52 | 72.43 | 72.54 | 72.56 | 72.75 | 72.76 | 72.46 | 72.09 | 72.20 | 72.54 |
| 13 | 71.77 | 72.27 | 72.53 | e72.43 | 72.54 | 72.55 | 72.79 | 72.75 | 72.44 | 72.08 | 72.24 | 72.53 |
| 14 | 71.77 | 72.27 | 72.49 | e72.43 | 72.53 | 72.53 | 72.97 | 72.74 | 72.41 | 72.10 | 72.31 | 72.53 |
| 15 | 71.86 | 72.26 | 72.56 | 72.43 | 72.53 | 72.53 | 72.98 | 72.73 | 72.39 | 72.11 | 72.42 | 72.53 |
| 16 | 71.95 | 72.26 | 72.58 | 72.42 | 72.53 | 72.52 | 72.91 | 72.72 | 72.36 | 72.11 | 72.55 | 72.53 |
| 17 | 71.99 | 72.26 | 72.54 | 72.42 | 72.52 | 72.52 | 72.86 | 72.72 | 72.33 | 72.10 | 72.55 | 72.53 |
| 18 | 72.00 | 72.25 | 72.60 | 72.42 | 72.52 | 72.52 | 72.83 | 72.71 | 72.31 | 72.10 | 72.53 | 72.66 |
| 19 | 72.01 | 72.25 | 72.58 | 72.43 | 72.52 | 72.51 | 72.82 | 72.72 | 72.28 | 72.09 | 72.52 | 72.82 |
| 20 | 72.00 | 72.28 | 72.53 | 72.43 | 72.52 | 72.50 | 72.80 | 72.72 | 72.25 | 72.09 | 72.51 | 72.84 |
| 21 | 72.00 | 72.30 | 72.49 | 72.43 | 72.52 | 72.53 | 72.80 | 72.70 | 72.22 | 72.08 | 72.52 | 72.82 |
| 22 | 71.99 | 72.30 | 72.47 | 72.42 | 72.52 | 72.60 | 72.80 | 72.69 | 72.19 | 72.07 | 72.57 | 72.80 |
| 23 | 71.99 | 72.31 | 72.45 | 72.42 | 72.53 | 72.64 | 72.83 | 72.70 | 72.16 | 72.06 | 72.56 | 72.79 |
| 24 | 71.98 | 72.30 | 72.46 | 72.43 | 72.54 | 72.64 | 72.85 | 72.69 | 72.13 | 72.08 | 72.55 | 72.78 |
| 25 | 71.97 | 72.30 | 72.49 | 72.42 | 72.54 | 72.65 | 72.84 | 72.69 | 72.10 | 72.15 | 72.54 | 72.78 |
| 26 | 71.96 | 72.30 | 72.49 | 72.41 | 72.53 | 72.66 | 72.85 | 72.67 | 72.09 | 72.16 | 72.53 | 72.77 |
| 27 | 72.00 | 72.30 | 72.48 | 72.41 | 72.54 | 72.67 | 72.89 | 72.67 | 72.10 | 72.17 | 72.53 | 72.76 |
| 28 | 72.06 | 72.30 | 72.46 | 72.41 | 72.54 | 72.67 | 72.89 | 72.68 | 72.09 | 72.18 | 72.52 | 72.80 |
| 29 | 72.18 | 72.32 | 72.45 | 72.41 | 72.54 | 72.67 | 72.87 | 72.70 | 72.09 | 72.20 | 72.52 | 72.93 |
| 30 | 72.30 | 72.32 | 72.45 | 72.40 | --- | 72.66 | 72.84 | 72.67 | 72.09 | 72.21 | 72.51 | 72.95 |
| 31 | 72.31 | --- | 72.45 | 72.40 | --- | 72.66 | --- | 72.65 | --- | 72.21 | 72.51 | --- |
| MEAN | 71.90 | 72.27 | 72.44 | 72.44 | 72.52 | 72.58 | 72.85 | 72.74 | 72.35 | 72.12 | 72.39 | 72.64 |
| MAX | 72.31 | 72.32 | 72.60 | 72.50 | 72.60 | 72.67 | 73.01 | 72.85 | 72.63 | 72.21 | 72.57 | 72.95 |
| MIN | 71.70 | 72.23 | 72.29 | 72.40 | 72.39 | 72.50 | 72.75 | 72.65 | 72.09 | 72.06 | 72.20 | 72.47 |

e Estimated

WEYMOUTH BACK RIVER BASIN

01105607 WHITMANS POND FLOOD BY-PASS AT EAST WEYMOUTH, MA

LOCATION.--Lat 42° 12' 40", long 70° 55' 47", Norfolk County, Hydrologic Unit 01090001, on Whitmans Pond Dam, approximately 1,000 ft upstream from Iron Hill Dam and flood bypass system, and 1,300 ft upstream from the gage, Whitmans Pond Fish Ladder at East Weymouth, MA.

DRAINAGE AREA.--12.4 mi².

PERIOD OF RECORD.--January 2002 to current year.

GAGE.--Water-stage recorder. Datum of gage is 55.29 ft above National Geodetic Vertical Datum of 1929 (NGVD) (Town of Weymouth Datum). Subtract 5.83 ft from gage height values to adjust to NGVD.

REMARKS.--Records good except those for discharges greater than 100 ft³/s, and those for estimated daily discharges, which are poor. Flow occurs only when gage height in Iron Hill Pond exceeds 65.25 ft. No flow on many days during the year. Daily mean discharges are added to those for the downstream gage, Whitmans Pond Fish Ladder at East Weymouth (01105608), to obtain total discharge from Whitmans Pond, published in the station, Whitmans Pond Combined By-Pass and Fish Ladder Flow (011056081). Satellite gage-height telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 410 ft³/s, Apr. 1, 2004, gage height, 66.80 ft, minimum discharge, no flow, many days during each water year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 410 ft³/s, Apr. 1, gage height, 66.80 ft; minimum discharge, no flow, many days during the year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|--------|-------|--------|--------|-------|--------|-------|-------|------|--------|--------|
| 1 | 0.00 | 12 | 4.4 | 9.6 | 0.06 | 3.6 | e70 | 15 | 9.6 | 0.00 | 0.55 | 2.3 |
| 2 | 0.00 | 8.4 | 3.3 | 9.1 | 0.00 | 3.0 | e200 | 14 | 9.4 | 0.00 | 0.07 | 1.7 |
| 3 | 0.00 | 3.4 | 2.3 | 9.3 | 0.09 | 2.9 | 68 | 14 | 10 | 0.00 | 0.00 | 1.2 |
| 4 | 0.00 | 0.58 | 1.5 | 10 | 1.6 | 2.8 | 46 | 20 | 9.9 | 0.00 | 0.00 | 0.47 |
| 5 | 0.00 | 1.6 | 1.0 | 13 | 2.2 | 2.7 | 30 | 21 | 5.5 | 0.00 | 0.00 | 0.00 |
| 6 | 0.00 | 6.1 | 4.4 | 16 | 3.7 | 3.0 | 22 | 17 | 2.5 | 0.00 | 0.00 | 0.00 |
| 7 | 0.00 | 6.1 | 11 | 14 | 13 | 2.2 | 16 | 15 | 1.5 | 0.00 | 0.00 | 0.00 |
| 8 | 0.00 | 5.0 | 10 | 9.0 | 18 | 0.28 | 13 | 13 | 0.00 | 0.00 | 0.00 | 0.00 |
| 9 | 0.00 | 3.7 | 9.2 | 10 | 14 | 0.32 | 11 | 12 | 0.00 | 0.00 | 0.00 | 0.00 |
| 10 | 0.00 | 3.1 | 8.6 | 7.6 | 11 | 0.00 | 9.7 | 13 | 0.00 | 0.00 | 0.00 | 0.00 |
| 11 | 0.00 | 1.4 | 14 | 5.8 | 9.6 | 0.00 | 7.2 | 12 | 0.00 | 0.00 | 0.00 | 0.00 |
| 12 | 0.00 | 0.66 | 45 | 5.6 | 8.5 | 0.00 | 5.8 | 11 | 0.00 | 0.00 | 0.00 | 0.00 |
| 13 | 0.00 | 4.6 | 48 | 5.3 | 7.6 | 0.00 | 11 | 10 | 0.00 | 0.00 | 0.00 | 0.00 |
| 14 | 0.00 | 5.8 | 29 | 4.7 | 6.9 | 0.01 | 98 | 9.5 | 0.00 | 0.00 | 0.14 | 0.00 |
| 15 | 0.00 | 5.1 | 63 | 4.0 | 6.1 | 0.00 | 96 | 8.6 | 0.00 | 0.00 | 4.9 | 0.00 |
| 16 | 0.00 | 4.7 | 75 | 3.4 | 5.5 | 0.00 | 41 | 7.9 | 0.00 | 0.00 | 14 | 0.00 |
| 17 | 0.00 | 2.2 | 47 | 2.8 | 4.7 | 0.00 | 24 | 7.2 | 0.00 | 0.00 | 14 | 0.00 |
| 18 | 0.00 | 0.00 | 90 | 2.8 | 4.4 | 0.00 | 23 | 6.1 | 0.00 | 0.00 | 11 | 2.8 |
| 19 | 0.00 | 0.00 | 71 | 2.9 | 4.0 | 0.00 | 20 | 8.0 | 0.00 | 0.00 | 9.0 | 14 |
| 20 | 0.00 | 2.2 | 36 | 2.6 | 3.6 | 0.00 | 17 | 6.7 | 0.00 | 0.00 | 7.4 | 15 |
| 21 | 0.00 | 6.2 | 23 | 2.3 | 3.5 | 0.04 | 15 | 5.8 | 0.00 | 0.00 | 8.1 | 12 |
| 22 | 0.00 | 6.5 | 18 | 2.2 | 3.7 | 1.4 | 13 | 4.8 | 0.00 | 0.00 | 11 | 9.3 |
| 23 | 0.00 | 5.2 | 15 | 2.0 | 3.8 | 4.5 | 17 | 5.2 | 0.00 | 0.00 | 10 | 7.3 |
| 24 | 0.00 | 4.1 | 15 | 1.7 | 4.0 | 5.8 | 22 | 5.6 | 0.00 | 0.00 | 8.2 | 5.7 |
| 25 | 0.00 | 4.3 | 19 | 1.5 | 3.8 | 6.5 | 20 | 6.5 | 0.00 | 0.00 | 6.4 | 4.5 |
| 26 | 0.00 | 3.7 | 19 | 1.3 | 3.7 | 7.1 | 21 | 5.6 | 0.00 | 0.00 | 5.0 | 3.5 |
| 27 | 0.00 | 2.9 | 16 | 1.1 | 3.6 | 8.7 | 32 | 7.5 | 0.00 | 0.00 | 4.1 | 3.0 |
| 28 | 0.00 | 3.0 | 14 | 1.0 | 3.5 | 5.8 | 32 | 10 | 0.00 | 0.00 | 3.7 | 5.1 |
| 29 | 4.3 | 7.1 | 12 | 0.88 | 3.6 | 2.4 | 23 | 13 | 0.00 | 0.30 | 3.4 | 19 |
| 30 | 14 | 4.8 | 11 | 0.63 | --- | 1.1 | 18 | 12 | 0.00 | 1.3 | 3.0 | 28 |
| 31 | 15 | --- | 10 | 0.44 | --- | 1.9 | --- | 10 | --- | 1.1 | 2.8 | --- |
| TOTAL | 33.30 | 124.44 | 745.7 | 162.55 | 157.75 | 66.05 | 1041.7 | 327.0 | 48.40 | 2.70 | 126.76 | 134.87 |
| MEAN | 1.07 | 4.15 | 24.1 | 5.24 | 5.44 | 2.13 | 34.7 | 10.5 | 1.61 | 0.09 | 4.09 | 4.50 |
| MAX | 15 | 12 | 90 | 16 | 18 | 8.7 | 200 | 21 | 10 | 1.3 | 14 | 28 |
| MIN | 0.00 | 0.00 | 1.0 | 0.44 | 0.00 | 0.00 | 5.8 | 4.8 | 0.00 | 0.00 | 0.00 | 0.00 |
| CFSM | 0.09 | 0.33 | 1.94 | 0.42 | 0.44 | 0.17 | 2.80 | 0.85 | 0.13 | 0.01 | 0.33 | 0.36 |
| IN. | 0.10 | 0.37 | 2.24 | 0.49 | 0.47 | 0.20 | 3.13 | 0.98 | 0.15 | 0.01 | 0.38 | 0.40 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2002 - 2004, BY WATER YEAR (WY)

| | 2002 | 2003 | 2004 | 2002 | 2003 | 2004 | 2002 | 2003 | 2004 | 2002 | 2003 | 2004 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 0.56 | 8.39 | 23.1 | 10.6 | 5.47 | 10.1 | 25.6 | 12.2 | 8.41 | 0.63 | 3.07 | 1.50 |
| MAX | 1.07 | 12.6 | 24.1 | 16.0 | 10.4 | 24.0 | 35.4 | 14.7 | 14.2 | 1.77 | 5.12 | 4.50 |
| (WY) | 2004 | 2003 | 2004 | 2003 | 2003 | 2003 | 2003 | 2002 | 2003 | 2003 | 2003 | 2004 |
| MIN | 0.04 | 4.15 | 22.2 | 5.24 | 0.54 | 2.13 | 6.50 | 10.5 | 1.61 | 0.02 | 0.00 | 0.00 |
| (WY) | 2003 | 2004 | 2003 | 2004 | 2002 | 2004 | 2002 | 2004 | 2004 | 2002 | 2002 | 2002 |

SUMMARY STATISTICS

| | FOR 2003 CALENDAR YEAR | FOR 2004 WATER YEAR | WATER YEARS 2002 - 2004 |
|--------------------------|------------------------|---------------------|-------------------------|
| ANNUAL TOTAL | 4490.00 | 2971.22 | |
| ANNUAL MEAN | 12.3 | 8.12 | 10.4 |
| HIGHEST ANNUAL MEAN | | | 12.8 |
| LOWEST ANNUAL MEAN | | | 8.12 |
| HIGHEST DAILY MEAN | 206 | Apr 13 | 200 |
| LOWEST DAILY MEAN | 0.00 | Jul 8 | 0.00 |
| ANNUAL SEVEN-DAY MINIMUM | 0.00 | Jul 8 | 0.00 |
| MAXIMUM PEAK FLOW | | | 410 |
| MAXIMUM PEAK STAGE | | | 66.80 |
| ANNUAL RUNOFF (CFSM) | 0.992 | | 0.655 |
| ANNUAL RUNOFF (INCHES) | 13.47 | | 8.91 |
| 10 PERCENT EXCEEDS | 26 | | 18 |
| 50 PERCENT EXCEEDS | 7.3 | | 3.5 |
| 90 PERCENT EXCEEDS | 0.00 | | 0.00 |

e Estimated

WEYMOUTH BACK RIVER BASIN

01105608 WHITMANS POND FISH LADDER AT EAST WEYMOUTH, MA

LOCATION.--Lat 42° 12'47", long 70° 55'35", Norfolk County, Hydrologic Unit 01090001, on left bank at base of fish ladder, 100 ft downstream from Iron Hill Street, 300 ft downstream from Iron Hill Dam, at East Weymouth, MA.

DRAINAGE AREA.--12.5 mi².

PERIOD OF RECORD.--December 2001 to current year.

GAGE.--Water-stage recorder. Datum of gage is 25.00 ft above National Geodetic Vertical Datum of 1929 (NGVD) (Town of Weymouth Datum). Subtract 5.83 ft from gage height values to adjust to NGVD.

REMARKS.--Records good except those for discharges less than 0.1 ft³/s, which are fair. Discharge includes flow through fish-ladder system. When present, daily mean discharge for Whitmans Pond Flood By-Pass at East Weymouth (01105607) are added to daily mean discharges for this station to obtain total daily mean discharge from Whitmans Pond. The combined data are published in the station, Whitmans Pond Combined By-Pass and Fish Ladder Flow (011056081). Satellite gage-height telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 47 ft³/s, Apr. 12, 2003, gage height, 32.36 ft, minimum discharge, less than 0.01 ft³/s, Aug. 21, 2002.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 54 ft³/s, Apr. 2, gage height, 32.47 ft, minimum discharge, 0.03 ft³/s, Oct. 1-15.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|
| 1 | 0.03 | 8.4 | 8.6 | 8.3 | 4.3 | 4.9 | 27 | 6.4 | 6.4 | 0.65 | 3.6 | 4.3 |
| 2 | 0.03 | 9.5 | 7.6 | 8.0 | 4.3 | 4.8 | 37 | 6.0 | 6.1 | 0.76 | 2.2 | 4.1 |
| 3 | 0.04 | 12 | 6.8 | 7.9 | 4.3 | 4.7 | 34 | 6.5 | 6.2 | 0.82 | 0.60 | 4.0 |
| 4 | 0.04 | 9.9 | 6.3 | 8.4 | 4.8 | 4.7 | 36 | 8.6 | 6.1 | 0.82 | 3.2 | 3.9 |
| 5 | 0.03 | 8.0 | 6.0 | 10 | 5.0 | 4.7 | 28 | 8.7 | 5.8 | 1.0 | 3.2 | 3.6 |
| 6 | 0.03 | 8.8 | 7.6 | 11 | 5.5 | 4.8 | 23 | 7.4 | 4.8 | 1.4 | 3.1 | 3.3 |
| 7 | 0.03 | 8.7 | 11 | 11 | 9.3 | 5.5 | 20 | 6.6 | 4.5 | 1.5 | 2.9 | 3.1 |
| 8 | 0.03 | 8.0 | 10 | 7.9 | 12 | 6.1 | 18 | 5.7 | 4.1 | 1.6 | 2.7 | 3.2 |
| 9 | 0.03 | 7.3 | 9.9 | 8.7 | 10 | 6.1 | 16 | 5.6 | 3.7 | 1.6 | 2.3 | 2.2 |
| 10 | 0.03 | 6.8 | 9.4 | 7.6 | 8.6 | 5.6 | 15 | 5.7 | 4.0 | 1.5 | 2.2 | 0.66 |
| 11 | 0.03 | 7.2 | 12 | 6.8 | 7.9 | 5.3 | 16 | 5.6 | 4.0 | 1.4 | 2.0 | 1.7 |
| 12 | 0.08 | 7.8 | 25 | 6.4 | 7.2 | 5.2 | 14 | 5.2 | 3.7 | 1.3 | 1.9 | 3.4 |
| 13 | 0.03 | 8.1 | 24 | 6.2 | 6.7 | 4.9 | 18 | 4.8 | 3.3 | 1.2 | 2.4 | 3.2 |
| 14 | 0.03 | 7.3 | 19 | 6.0 | 6.3 | 4.6 | 36 | 5.0 | 3.0 | 1.5 | 3.5 | 3.0 |
| 15 | 0.32 | 6.5 | 27 | 5.8 | 6.1 | 4.4 | 37 | 5.6 | 2.5 | 1.6 | 5.0 | 2.7 |
| 16 | 1.6 | 6.0 | 29 | 5.5 | 5.8 | 4.1 | 30 | 5.4 | 2.1 | 1.4 | 9.3 | 2.6 |
| 17 | 3.0 | 7.1 | 24 | 5.3 | 5.5 | 4.1 | 22 | 5.6 | 1.8 | 0.89 | 9.0 | 2.5 |
| 18 | 2.3 | 7.5 | 31 | 5.2 | 5.3 | 4.0 | 8.5 | 6.1 | 1.6 | 0.85 | 7.1 | 4.5 |
| 19 | 2.2 | 7.1 | 29 | 5.3 | 5.2 | 3.8 | 6.4 | 6.6 | 1.1 | 1.6 | 6.1 | 9.6 |
| 20 | 2.2 | 7.6 | 21 | 5.1 | 5.1 | 3.5 | 5.5 | 7.3 | 0.94 | 1.6 | 5.5 | 9.9 |
| 21 | 2.0 | 9.2 | 17 | 5.0 | 5.0 | 3.9 | 5.6 | 6.9 | 0.67 | 1.6 | 6.1 | 7.8 |
| 22 | 1.7 | 10 | 13 | 5.0 | 5.1 | 4.4 | 5.9 | 6.5 | 0.61 | 1.6 | 7.2 | 6.5 |
| 23 | 2.9 | 11 | 12 | 4.9 | 5.1 | 5.4 | 9.0 | 6.6 | 1.1 | 1.5 | 6.7 | 5.6 |
| 24 | 2.8 | 9.8 | 12 | 4.8 | 5.1 | 5.8 | 10 | 6.8 | 0.77 | 2.1 | 5.9 | 5.3 |
| 25 | 2.4 | 9.6 | 14 | 4.8 | 5.1 | 6.0 | 7.9 | 6.8 | 0.51 | 3.1 | 5.4 | 5.0 |
| 26 | 2.2 | 9.0 | 14 | 4.6 | 5.0 | 6.2 | 8.0 | 6.7 | 0.47 | 3.4 | 5.0 | 4.6 |
| 27 | 2.9 | 8.5 | 12 | 4.5 | 4.9 | 6.9 | 11 | 7.2 | 0.53 | 3.3 | 4.6 | 4.5 |
| 28 | 3.9 | 8.0 | 11 | 4.5 | 4.9 | 11 | 11 | 8.3 | 0.51 | 3.3 | 4.5 | 5.3 |
| 29 | 5.2 | 8.7 | 10 | 4.5 | 5.0 | 12 | 8.4 | 9.7 | 0.54 | 3.4 | 4.4 | 13 |
| 30 | 11 | 9.3 | 9.5 | 4.4 | --- | 10 | 6.9 | 7.9 | 0.55 | 3.7 | 4.3 | 19 |
| 31 | 11 | --- | 8.8 | 4.3 | --- | 10 | --- | 6.6 | --- | 3.7 | 4.3 | --- |
| TOTAL | 60.11 | 252.7 | 457.5 | 197.7 | 174.4 | 177.4 | 531.1 | 204.4 | 82.00 | 55.69 | 136.20 | 152.06 |
| MEAN | 1.94 | 8.42 | 14.8 | 6.38 | 6.01 | 5.72 | 17.7 | 6.59 | 2.73 | 1.80 | 4.39 | 5.07 |
| MAX | 11 | 12 | 31 | 11 | 12 | 12 | 37 | 9.7 | 6.4 | 3.7 | 9.3 | 19 |
| MIN | 0.03 | 6.0 | 6.0 | 4.3 | 4.3 | 3.5 | 5.5 | 4.8 | 0.47 | 0.65 | 0.60 | 0.66 |
| MED | 1.6 | 8.2 | 12 | 5.5 | 5.1 | 4.9 | 15 | 6.6 | 2.3 | 1.5 | 4.3 | 4.1 |
| AC-FT | 119 | 501 | 907 | 392 | 346 | 352 | 1050 | 405 | 163 | 110 | 270 | 302 |
| CFSM | 0.16 | 0.67 | 1.18 | 0.51 | 0.48 | 0.46 | 1.42 | 0.53 | 0.22 | 0.14 | 0.35 | 0.41 |
| IN. | 0.18 | 0.75 | 1.36 | 0.59 | 0.52 | 0.53 | 1.58 | 0.61 | 0.24 | 0.17 | 0.41 | 0.45 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2002 - 2004, BY WATER YEAR (WY)

| | 2002 | 2003 | 2004 | 2002 | 2003 | 2004 | 2002 | 2003 | 2004 | 2002 | 2003 | 2004 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 1.55 | 7.87 | 13.5 | 5.52 | 5.97 | 9.51 | 13.2 | 8.71 | 6.58 | 2.84 | 3.63 | 2.22 |
| MAX | 1.94 | 8.42 | 14.8 | 9.39 | 7.00 | 13.3 | 17.7 | 10.7 | 9.23 | 4.34 | 6.35 | 5.07 |
| (WY) | 2004 | 2004 | 2004 | 2003 | 2003 | 2003 | 2004 | 2002 | 2003 | 2003 | 2003 | 2004 |
| MIN | 1.16 | 7.32 | 12.3 | 0.80 | 4.90 | 5.72 | 7.07 | 6.59 | 2.73 | 1.80 | 0.16 | 0.15 |
| (WY) | 2003 | 2003 | 2003 | 2002 | 2002 | 2004 | 2002 | 2004 | 2004 | 2004 | 2002 | 2002 |

SUMMARY STATISTICS

| | FOR 2003 CALENDAR YEAR | | | FOR 2004 WATER YEAR | | | WATER YEARS 2002 - 2004 | | |
|--------------------------|------------------------|--|--|---------------------|--|--|-------------------------|--|--|
| ANNUAL TOTAL | 3042.19 | | | 2481.26 | | | | | |
| ANNUAL MEAN | 8.33 | | | 6.78 | | | 7.37 | | |
| HIGHEST ANNUAL MEAN | | | | | | | 7.97 | | |
| LOWEST ANNUAL MEAN | | | | | | | 6.78 | | |
| HIGHEST DAILY MEAN | 41 | | | Apr 13 | | | 37 | | |
| LOWEST DAILY MEAN | 0.03 | | | Sep 30 | | | 0.03 | | |
| ANNUAL SEVEN-DAY MINIMUM | 0.03 | | | Oct 5 | | | 0.03 | | |
| MAXIMUM PEAK FLOW | | | | | | | 54 | | |
| MAXIMUM PEAK STAGE | | | | | | | 32.47 | | |
| ANNUAL RUNOFF (AC-FT) | 6030 | | | 4920 | | | 5340 | | |
| ANNUAL RUNOFF (CFSM) | 0.667 | | | | | | 0.542 | | |
| ANNUAL RUNOFF (INCHES) | 9.05 | | | | | | 7.38 | | |
| 10 PERCENT EXCEEDS | 16 | | | | | | 12 | | |
| 50 PERCENT EXCEEDS | 7.1 | | | | | | 5.4 | | |
| 90 PERCENT EXCEEDS | 1.8 | | | | | | 1.2 | | |

WEYMOUTH BACK RIVER BASIN

011056081 WHITMANS POND COMBINED BY-PASS AND FISH LADDER FLOW AT EAST WEYMOUTH, MA

LOCATION.--Lat 42° 12'47", long 70° 55'35", Norfolk County, Hydrologic Unit 01090001, on left bank at base of fish ladder, 100 ft downstream from Iron Hill Street, 300 ft downstream from Iron Hill Dam, at East Weymouth, MA.

DRAINAGE AREA.--12.5 mi².

PERIOD OF RECORD.--December 2001 to current year.

GAGE.--This station includes no instrumentation and contains only combined daily mean discharges from stations 01105607 and 01105608.

REMARKS.--Records good except those for estimated daily discharge and discharges less than 0.1 ft³/s, which are fair. Records poor for discharges greater than 100 ft³/s. Daily mean discharge values for Whitmans Pond Flood By-pass at East Weymouth (01105607) are added to daily mean discharge values for Whitmans Pond Fish Ladder at East Weymouth (01105608) to obtain total daily mean discharge from Whitmans Pond.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 464 ft³/s (410 ft³/s from station 01105607 plus 54 ft³/s from station 01105608), Apr. 2, 2004, gage height not applicable, minimum discharge, less than 0.01 ft³/s, Aug. 21, 2002.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 464 ft³/s (410 ft³/s from station 01105607 plus 54 ft³/s from station 01105608), Apr. 2, gage height not applicable, minimum discharge, 0.03 ft³/s, Oct. 1-15.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|--------|-------|-------|-------|------|------|--------|-------|--------|--------|
| 1 | 0.03 | 20 | 13 | 18 | 4.4 | 8.5 | e97 | 21 | 16 | 0.65 | 4.2 | 6.6 |
| 2 | 0.03 | 18 | 11 | 17 | 4.3 | 7.8 | e237 | 20 | 16 | 0.76 | 2.3 | 5.8 |
| 3 | 0.04 | 15 | 9.1 | 17 | 4.4 | 7.6 | 102 | 20 | 16 | 0.82 | 0.60 | 5.2 |
| 4 | 0.04 | 10 | 7.8 | 18 | 6.4 | 7.5 | 82 | 29 | 16 | 0.82 | 3.2 | 4.4 |
| 5 | 0.03 | 9.6 | 7.0 | 23 | 7.2 | 7.4 | 58 | 30 | 11 | 1.0 | 3.2 | 3.6 |
| 6 | 0.03 | 15 | 12 | 27 | 9.2 | 7.8 | 45 | 24 | 7.3 | 1.4 | 3.1 | 3.3 |
| 7 | 0.03 | 15 | 22 | 25 | 22 | 7.7 | 36 | 22 | 6.0 | 1.5 | 2.9 | 3.1 |
| 8 | 0.03 | 13 | 20 | 17 | 30 | 6.4 | 31 | 19 | 4.1 | 1.6 | 2.7 | 3.2 |
| 9 | 0.03 | 11 | 19 | 19 | 24 | 6.4 | 27 | 18 | 3.7 | 1.6 | 2.3 | 2.2 |
| 10 | 0.03 | 9.9 | 18 | 15 | 20 | 5.6 | 25 | 19 | 4.0 | 1.5 | 2.2 | 0.66 |
| 11 | 0.03 | 8.6 | 26 | 13 | 18 | 5.3 | 23 | 18 | 4.0 | 1.4 | 2.0 | 1.7 |
| 12 | 0.08 | 8.5 | 70 | 12 | 16 | 5.2 | 20 | 16 | 3.7 | 1.3 | 1.9 | 3.4 |
| 13 | 0.03 | 13 | 72 | 12 | 14 | 4.9 | 29 | 15 | 3.3 | 1.2 | 2.4 | 3.2 |
| 14 | 0.03 | 13 | 48 | 11 | 13 | 4.6 | 134 | 14 | 3.0 | 1.5 | 3.6 | 3.0 |
| 15 | 0.32 | 12 | 90 | 9.8 | 12 | 4.4 | 133 | 14 | 2.5 | 1.6 | 9.9 | 2.7 |
| 16 | 1.6 | 11 | 104 | 8.9 | 11 | 4.1 | 71 | 13 | 2.1 | 1.4 | 23 | 2.6 |
| 17 | 3.0 | 9.3 | 71 | 8.1 | 10 | 4.1 | 46 | 13 | 1.8 | 0.89 | 23 | 2.5 |
| 18 | 2.3 | 7.5 | 121 | 8.0 | 9.7 | 4.0 | 32 | 12 | 1.6 | 0.85 | 18 | 7.3 |
| 19 | 2.2 | 7.1 | 100 | 8.2 | 9.2 | 3.8 | 26 | 15 | 1.1 | 1.6 | 15 | 24 |
| 20 | 2.2 | 9.8 | 57 | 7.7 | 8.7 | 3.5 | 22 | 14 | 0.94 | 1.6 | 13 | 25 |
| 21 | 2.0 | 15 | 40 | 7.3 | 8.5 | 3.9 | 21 | 13 | 0.67 | 1.6 | 14 | 20 |
| 22 | 1.7 | 16 | 31 | 7.2 | 8.8 | 5.8 | 19 | 11 | 0.61 | 1.6 | 18 | 16 |
| 23 | 2.9 | 16 | 27 | 6.9 | 8.9 | 9.9 | 26 | 12 | 1.1 | 1.5 | 17 | 13 |
| 24 | 2.8 | 14 | 27 | 6.5 | 9.1 | 12 | 32 | 12 | 0.77 | 2.1 | 14 | 11 |
| 25 | 2.4 | 14 | 33 | 6.3 | 8.9 | 12 | 28 | 13 | 0.51 | 3.1 | 12 | 9.5 |
| 26 | 2.2 | 13 | 33 | 5.9 | 8.7 | 13 | 29 | 12 | 0.47 | 3.4 | 10 | 8.1 |
| 27 | 2.9 | 11 | 28 | 5.6 | 8.5 | 16 | 43 | 15 | 0.53 | 3.3 | 8.7 | 7.5 |
| 28 | 3.9 | 11 | 25 | 5.5 | 8.4 | 17 | 43 | 18 | 0.51 | 3.3 | 8.2 | 10 |
| 29 | 9.5 | 16 | 22 | 5.4 | 8.6 | 14 | 31 | 23 | 0.54 | 3.7 | 7.8 | 32 |
| 30 | 25 | 14 | 20 | 5.0 | --- | 11 | 25 | 20 | 0.55 | 5.0 | 7.3 | 47 |
| 31 | 26 | --- | 19 | 4.7 | --- | 12 | --- | 17 | --- | 4.8 | 7.1 | --- |
| TOTAL | 93.41 | 376.3 | 1202.9 | 361.0 | 331.9 | 243.2 | 1573 | 532 | 130.40 | 58.39 | 262.60 | 287.56 |
| MEAN | 3.01 | 12.5 | 38.8 | 11.6 | 11.4 | 7.85 | 52.4 | 17.2 | 4.35 | 1.88 | 8.47 | 9.59 |
| MAX | 26 | 20 | 121 | 27 | 30 | 17 | 237 | 30 | 16 | 5.0 | 23 | 47 |
| MIN | 0.03 | 7.1 | 7.0 | 4.7 | 4.3 | 3.5 | 19 | 11 | 0.47 | 0.65 | 0.60 | 0.66 |
| MED | 1.6 | 13 | 27 | 8.9 | 9.1 | 7.4 | 32 | 16 | 2.3 | 1.5 | 7.3 | 5.5 |
| AC-FT | 185 | 746 | 2390 | 716 | 658 | 482 | 3120 | 1060 | 259 | 116 | 521 | 570 |
| CFSM | 0.24 | 1.00 | 3.10 | 0.93 | 0.92 | 0.63 | 4.19 | 1.37 | 0.35 | 0.15 | 0.68 | 0.77 |
| IN. | 0.28 | 1.12 | 3.58 | 1.07 | 0.99 | 0.72 | 4.68 | 1.58 | 0.39 | 0.17 | 0.78 | 0.86 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2002 - 2004, BY WATER YEAR (WY)

| | 2002 | 2003 | 2004 | 2002 | 2003 | 2004 | 2002 | 2003 | 2004 | 2002 | 2003 | 2004 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 2.10 | 16.3 | 36.7 | 12.6 | 11.4 | 19.6 | 38.8 | 20.8 | 15.0 | 3.47 | 6.69 | 3.72 |
| MAX | 3.01 | 20.0 | 38.8 | 25.4 | 17.4 | 37.3 | 52.4 | 25.4 | 23.5 | 6.13 | 11.4 | 9.59 |
| (WY) | 2004 | 2003 | 2004 | 2003 | 2003 | 2003 | 2004 | 2002 | 2003 | 2003 | 2003 | 2004 |
| MIN | 1.19 | 12.5 | 34.5 | 0.80 | 5.44 | 7.85 | 13.6 | 17.2 | 4.35 | 1.88 | 0.16 | 0.15 |
| (WY) | 2003 | 2004 | 2003 | 2002 | 2002 | 2004 | 2002 | 2004 | 2004 | 2004 | 2002 | 2002 |

SUMMARY STATISTICS

| | FOR 2003 CALENDAR YEAR | FOR 2004 WATER YEAR | WATER YEARS 2002 - 2004 |
|--------------------------|------------------------|---------------------|-------------------------|
| ANNUAL TOTAL | 7526.09 | 5452.66 | |
| ANNUAL MEAN | 20.6 | 14.9 | 17.8 |
| HIGHEST ANNUAL MEAN | | | 20.7 |
| LOWEST ANNUAL MEAN | | | 14.9 |
| HIGHEST DAILY MEAN | 247 | Apr 13 | 247 |
| LOWEST DAILY MEAN | 0.03 | Sep 30 | 0.01 |
| ANNUAL SEVEN-DAY MINIMUM | 0.03 | Oct 5 | 0.02 |
| MAXIMUM PEAK FLOW | | 464 | Apr 2 |
| INSTANTANEOUS LOW FLOW | | 0.03 | 0.01 |
| ANNUAL RUNOFF (AC-FT) | 14930 | 10820 | 12900 |
| ANNUAL RUNOFF (CFSM) | 1.65 | 1.19 | 1.42 |
| ANNUAL RUNOFF (INCHES) | 22.40 | 16.23 | 19.35 |
| 10 PERCENT EXCEEDS | 41 | 29 | 37 |
| 50 PERCENT EXCEEDS | 14 | 9.1 | 12 |
| 90 PERCENT EXCEEDS | 1.8 | 1.2 | 1.3 |

e Estimated

QUASHNET RIVER BASIN

011058837 QUASHNET RIVER AT WAQUOIT VILLAGE, MA

LOCATION.--Lat 41° 35' 32", long 70° 30' 30", Barnstable County, Hydrologic Unit 01090002, on right bank 15 ft upstream from bridge on Martins Road, 0.5 mi northeast of Waquoit Village, and 1.4 mi upstream from mouth.

DRAINAGE AREA.--Surface drainage, from topography, about 2.58 mi², excludes area drained by Johns Pond. This stream drains from a ground-water basin which is larger than, and not coincident with, the surface-water basin.

PERIOD OF RECORD.--October 1988 to current year.

REVISED RECORDS.--WDR MA-RI-92-1: 1990 (M), 1991.

GAGE.--Water-stage recorder. Elevation of gage is 0.86 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for estimated daily discharge, which are fair. Flow at times includes overflow and leakage from Johns Pond. Occasional regulation by cranberry bog upstream. Occasional backwater from tidal surge.

AVERAGE DISCHARGE.--16 years (water years 1989–2004), 15.5 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 42 ft³/s, July 1, 1998, gage height, 3.09 ft; maximum gage height, 4.55 ft, Aug. 19, 1991 (tidal surge); minimum discharge, 5.7 ft³/s, Oct. 24, 1995.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 40 ft³/s, Dec. 7, gage height, 2.91 ft; minimum discharge 10 ft³/s, July 16.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004 DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1 | 15 | 15 | 15 | 17 | 15 | 16 | 21 | 19 | 21 | 15 | 13 | 18 |
| 2 | 16 | 14 | 14 | 17 | 17 | 17 | 22 | 19 | 20 | 17 | 13 | 15 |
| 3 | 15 | 14 | 14 | 17 | 33 | 17 | 20 | 19 | 19 | 16 | 13 | 14 |
| 4 | 15 | 14 | 14 | 18 | 23 | 17 | 20 | 22 | 19 | 16 | 13 | 13 |
| 5 | 15 | 15 | 14 | 19 | 19 | 17 | 23 | 20 | 18 | 16 | 13 | 13 |
| 6 | 14 | 16 | 22 | 13 | 19 | 18 | 20 | 20 | 19 | 17 | 13 | 13 |
| 7 | 14 | 15 | 32 | 12 | 25 | 17 | 20 | 20 | 19 | 16 | 13 | 13 |
| 8 | 14 | 15 | 25 | 12 | 18 | 17 | 20 | 20 | 19 | 16 | 13 | 13 |
| 9 | 14 | 14 | 21 | 12 | 17 | 16 | 20 | 20 | 18 | 16 | 13 | 13 |
| 10 | 13 | 14 | 20 | 12 | 17 | 16 | 20 | 20 | 18 | 15 | 12 | 13 |
| 11 | 14 | 14 | 24 | 12 | 17 | 17 | 20 | 20 | 18 | 15 | 13 | 13 |
| 12 | 15 | 15 | 22 | 12 | 17 | 17 | 20 | 19 | 18 | 15 | 14 | 13 |
| 13 | 16 | 15 | 19 | 12 | 17 | 17 | 21 | 19 | 18 | 15 | 13 | 13 |
| 14 | 14 | 14 | 18 | 12 | 17 | 16 | 22 | 20 | 18 | 15 | 14 | 14 |
| 15 | 18 | 14 | 28 | 14 | 17 | 16 | 21 | 19 | 19 | 15 | 18 | 13 |
| 16 | 17 | 14 | 22 | 14 | 16 | 16 | 20 | 19 | 17 | 13 | 17 | 14 |
| 17 | 15 | 14 | 20 | 14 | 16 | 17 | 20 | 19 | 17 | 11 | 15 | 14 |
| 18 | 15 | 14 | 19 | 16 | 17 | 16 | 19 | 19 | 17 | 12 | 14 | 16 |
| 19 | 15 | 14 | 17 | 15 | 16 | 16 | 19 | 19 | 17 | 13 | 14 | 16 |
| 20 | 16 | 15 | 17 | 15 | 16 | 17 | 19 | 19 | 17 | 13 | 14 | 14 |
| 21 | 15 | 17 | 17 | 15 | 17 | 20 | 19 | 19 | 16 | 13 | 14 | 13 |
| 22 | 15 | 18 | 17 | 15 | 18 | 18 | 19 | 19 | 16 | 13 | 14 | e13 |
| 23 | 15 | 19 | 17 | 15 | 17 | 18 | 19 | 19 | 16 | 13 | 13 | 13 |
| 24 | 14 | 19 | 17 | 14 | 16 | 17 | 20 | 20 | 16 | 13 | 13 | 13 |
| 25 | 14 | 19 | 18 | 14 | 16 | 18 | 19 | 20 | 16 | 13 | 13 | 13 |
| 26 | 14 | 18 | 17 | 14 | 16 | 19 | 20 | 19 | 16 | 13 | 13 | 13 |
| 27 | 15 | 17 | 17 | 15 | 16 | 19 | 21 | 19 | 16 | 13 | 13 | 13 |
| 28 | 16 | 18 | 17 | 15 | 16 | 18 | 20 | 21 | 15 | 14 | 13 | 14 |
| 29 | 20 | 19 | 17 | 15 | 16 | 18 | 20 | 21 | 15 | 14 | 13 | 24 |
| 30 | 17 | 16 | 17 | 15 | --- | 18 | 19 | 19 | 15 | 13 | 13 | 21 |
| 31 | 15 | --- | 17 | 15 | --- | 18 | --- | 19 | --- | 13 | 18 | --- |
| TOTAL | 470 | 469 | 585 | 447 | 517 | 534 | 603 | 606 | 523 | 442 | 425 | 428 |
| MEAN | 15.2 | 15.6 | 18.9 | 14.4 | 17.8 | 17.2 | 20.1 | 19.5 | 17.4 | 14.3 | 13.7 | 14.3 |
| MAX | 20 | 19 | 32 | 19 | 33 | 20 | 23 | 22 | 21 | 17 | 18 | 24 |
| MIN | 13 | 14 | 14 | 12 | 15 | 16 | 19 | 19 | 15 | 11 | 12 | 13 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 2004, BY WATER YEAR (WY)

| | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 13.3 | 14.2 | 13.4 | 13.4 | 14.3 | 16.6 | 20.1 | 19.5 | 17.6 | 15.0 | 14.6 | 14.3 | | | | |
| MAX | 23.9 | 22.9 | 20.3 | 18.5 | 23.6 | 28.4 | 30.0 | 27.4 | 24.3 | 21.0 | 21.1 | 20.7 | | | | |
| (WY) | 1997 | 1997 | 1997 | 1993 | 1998 | 1998 | 1998 | 1997 | 1998 | 1997 | 1997 | 1996 | | | | |
| MIN | 10.2 | 11.2 | 9.56 | 9.02 | 8.50 | 9.20 | 12.9 | 11.7 | 12.2 | 10.5 | 9.50 | 10.7 | | | | |
| (WY) | 1996 | 2002 | 1996 | 2002 | 2002 | 2002 | 1992 | 1995 | 1995 | 2002 | 2002 | 1995 | | | | |

SUMMARY STATISTICS

| | FOR 2003 CALENDAR YEAR | | FOR 2004 WATER YEAR | | WATER YEARS 1989 - 2004 | |
|--------------------------|------------------------|--|---------------------|--|-------------------------|--|
| ANNUAL TOTAL | 6584 | | 6049 | | | |
| ANNUAL MEAN | 18.0 | | 16.5 | | 15.5 | |
| HIGHEST ANNUAL MEAN | | | | | 21.8 | |
| LOWEST ANNUAL MEAN | | | | | 11.0 | |
| HIGHEST DAILY MEAN | 32 | | Dec 7 | | 41 | |
| LOWEST DAILY MEAN | 10 | | Jan 7 | | 5.9 | |
| ANNUAL SEVEN-DAY MINIMUM | 10 | | Jan 7 | | 6.8 | |
| MAXIMUM PEAK FLOW | | | 40 | | Dec 7 | |
| MAXIMUM PEAK STAGE | | | 2.91 | | Dec 7 | |
| INSTANTANEOUS LOW FLOW | | | 10 | | Jul 16 | |
| 10 PERCENT EXCEEDS | 24 | | 20 | | 22 | |
| 50 PERCENT EXCEEDS | 17 | | 16 | | 14 | |
| 90 PERCENT EXCEEDS | 13 | | 13 | | 11 | |

e Estimated

SLOCUMS RIVER BASIN

01105933 PASKAMANSET RIVER NEAR SOUTH DARTMOUTH, MA

LOCATION.--Lat 41°35'07", long 70°59'27", Bristol County, Hydrologic Unit 01090002, at bridge on Russells Mills Road, 3.0 mi west of South Dartmouth.

DRAINAGE AREA.--26.2 mi².

PERIOD OF RECORD.--October 1995 to current year. Discharge measurements made in water years 1972-74, 1991-92.

REVISED RECORDS.--WDR MA-RI-03-1 (monthly mean discharge).

GAGE.--Water-stage recorder. Elevation of gage is 10 ft above National Geodetic Vertical Datum of 1929, from topographic map. Telephone and satellite gage-height telemeter at station.

REMARKS.--Records good except those for estimate daily discharge, which are poor.

AVERAGE DISCHARGE.--9 years (water years 1996-2004), 50.2 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 772 ft³/s, Mar. 31, 2001, gage height, 14.33 ft; minimum discharge, 0.09 ft³/s, Aug. 22, 2002.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 288 ft³/s, Dec. 16, gage height, 12.15 ft; minimum discharge, 0.58 ft³/s, July 27.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|------|------|------|------|------|------|------|-------|-------|--------|-------|
| 1 | 4.3 | 92 | 73 | 50 | e11 | 30 | 95 | 45 | 40 | 2.7 | 1.3 | 42 |
| 2 | 3.8 | 74 | 63 | 46 | 11 | 33 | 219 | 41 | 50 | 2.7 | 1.2 | 25 |
| 3 | 3.7 | 62 | 50 | 46 | 12 | 37 | 221 | 44 | 39 | 2.9 | 1.1 | 17 |
| 4 | 5.4 | 54 | 41 | 48 | e41 | 40 | 182 | 59 | 31 | 2.5 | 1.0 | 13 |
| 5 | 9.0 | 50 | 38 | 66 | 41 | 42 | 165 | 60 | 27 | 2.9 | 5.4 | 11 |
| 6 | 6.5 | 58 | 41 | 89 | 43 | 54 | 153 | 50 | 24 | 5.4 | 3.8 | 8.7 |
| 7 | 5.5 | 63 | 64 | 86 | 165 | 68 | 129 | 42 | 23 | 4.0 | 3.2 | 7.1 |
| 8 | 4.9 | 61 | 74 | e72 | 204 | 67 | 103 | 37 | 21 | 3.8 | 2.4 | 6.3 |
| 9 | 4.3 | 53 | 75 | e55 | 148 | 62 | 85 | 34 | 19 | 3.3 | 1.8 | 5.9 |
| 10 | 3.9 | 43 | 78 | e41 | 91 | 54 | 73 | 33 | 17 | 2.7 | 1.3 | 5.6 |
| 11 | 4.2 | 37 | 90 | e31 | 77 | 50 | 64 | 32 | 16 | 2.2 | 1.0 | 5.1 |
| 12 | 6.5 | e37 | 184 | e29 | 65 | 48 | 55 | 29 | 14 | 1.9 | 0.87 | 4.4 |
| 13 | 11 | e41 | 208 | e26 | e62 | 44 | 63 | 27 | 13 | 2.9 | 1.8 | 3.9 |
| 14 | 10 | e33 | 181 | e24 | e53 | 39 | 104 | 25 | 13 | 4.7 | 23 | 3.5 |
| 15 | 29 | 29 | 230 | e22 | e43 | 36 | 161 | 24 | 15 | 3.9 | 42 | 3.0 |
| 16 | 48 | 27 | 277 | e19 | e37 | 35 | 148 | 22 | 13 | 3.4 | 81 | 5.1 |
| 17 | 38 | 25 | 247 | e19 | e30 | 35 | 115 | 21 | 11 | 2.9 | 66 | 5.8 |
| 18 | 30 | 24 | 233 | e18 | 27 | 33 | 92 | 21 | 9.8 | 2.3 | 27 | 19 |
| 19 | 25 | 23 | 215 | e18 | 25 | 32 | 81 | 21 | 10 | 2.2 | 14 | 66 |
| 20 | 25 | 27 | 188 | e17 | 24 | 32 | 72 | 20 | 9.1 | 2.1 | 12 | 62 |
| 21 | 23 | e42 | 158 | e17 | 27 | 58 | 64 | 19 | 7.9 | 1.8 | 12 | 36 |
| 22 | 22 | e56 | 131 | e15 | 47 | 86 | 55 | 17 | 7.3 | 1.5 | 23 | 20 |
| 23 | 21 | e52 | 108 | e14 | 45 | 83 | 49 | 17 | 6.9 | 1.1 | 20 | 17 |
| 24 | 19 | e48 | 92 | e13 | 38 | 70 | 55 | 16 | 5.7 | 0.97 | 16 | 16 |
| 25 | 18 | 43 | 89 | e12 | 33 | 62 | 55 | 15 | 5.0 | 0.95 | 13 | 15 |
| 26 | 17 | 39 | 86 | e11 | 30 | 59 | 55 | 15 | 4.6 | 0.77 | 11 | 15 |
| 27 | 19 | 36 | 79 | e10 | 28 | 60 | 68 | 22 | 4.3 | 0.63 | 10 | 14 |
| 28 | 47 | 35 | 70 | e10 | 27 | 63 | 69 | 34 | 3.7 | 2.3 | 9.2 | 14 |
| 29 | 69 | 61 | 64 | e10 | 28 | 60 | 62 | 76 | 3.5 | 3.1 | 8.5 | 85 |
| 30 | 108 | 78 | 59 | e11 | --- | 54 | 51 | 76 | 3.2 | 2.2 | 7.8 | 180 |
| 31 | 110 | --- | 55 | e12 | --- | 50 | --- | 47 | --- | 1.7 | 27 | --- |
| TOTAL | 751.0 | 1403 | 3641 | 957 | 1513 | 1576 | 2963 | 1041 | 467.0 | 78.42 | 448.67 | 731.4 |
| MEAN | 24.2 | 46.8 | 117 | 30.9 | 52.2 | 50.8 | 98.8 | 33.6 | 15.6 | 2.53 | 14.5 | 24.4 |
| MAX | 110 | 92 | 277 | 89 | 204 | 86 | 221 | 76 | 50 | 5.4 | 81 | 180 |
| MIN | 3.7 | 23 | 38 | 10 | 11 | 30 | 49 | 15 | 3.2 | 0.63 | 0.87 | 3.0 |
| CFSM | 0.92 | 1.78 | 4.48 | 1.18 | 1.99 | 1.94 | 3.77 | 1.28 | 0.59 | 0.10 | 0.55 | 0.93 |
| IN. | 1.07 | 1.99 | 5.17 | 1.36 | 2.15 | 2.24 | 4.21 | 1.48 | 0.66 | 0.11 | 0.64 | 1.04 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2004, BY WATER YEAR (WY)

| | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 |
|------|------|------|------|------|------|------|------|------|------|
| MEAN | 27.9 | 37.5 | 62.4 | 60.9 | 68.2 | 101 | 103 | 52.3 | 48.8 |
| MAX | 105 | 69.2 | 150 | 120 | 145 | 186 | 149 | 87.9 | 115 |
| (WY) | 1997 | 1996 | 1997 | 1998 | 1998 | 2001 | 2003 | 1998 | 1998 |
| MIN | 3.97 | 5.25 | 15.1 | 30.9 | 23.0 | 50.8 | 32.0 | 28.2 | 5.67 |
| (WY) | 1998 | 2002 | 2002 | 2004 | 2002 | 2004 | 1999 | 1999 | 1999 |

SUMMARY STATISTICS

| | FOR 2003 CALENDAR YEAR | FOR 2004 WATER YEAR | WATER YEARS 1996 - 2004 |
|--------------------------|------------------------|---------------------|-------------------------|
| ANNUAL TOTAL | 22950.0 | 15570.49 | |
| ANNUAL MEAN | 62.9 | 42.5 | 50.2 |
| HIGHEST ANNUAL MEAN | | | 70.3 |
| LOWEST ANNUAL MEAN | | | 29.1 |
| HIGHEST DAILY MEAN | 320 | Apr 13 | 741 |
| LOWEST DAILY MEAN | 3.4 | Sep 1 | 0.12 |
| ANNUAL SEVEN-DAY MINIMUM | 4.7 | Sep 27 | 0.17 |
| MAXIMUM PEAK FLOW | | | 772 |
| MAXIMUM PEAK STAGE | | | 14.33 |
| INSTANTANEOUS LOW FLOW | | | 0.09 |
| ANNUAL RUNOFF (CFSM) | 2.40 | | 1.92 |
| ANNUAL RUNOFF (INCHES) | 32.59 | | 26.04 |
| 10 PERCENT EXCEEDS | 147 | | 120 |
| 50 PERCENT EXCEEDS | 40 | | 31 |
| 90 PERCENT EXCEEDS | 7.0 | | 3.8 |

e Estimated

TAUNTON RIVER BASIN

01108000 TAUNTON RIVER NEAR BRIDGEWATER, MA

LOCATION.--Lat 41°56'02", long 70°57'25", Plymouth County, Hydrologic Unit 01090004, on right bank at bridge on Titicut Road, 1 mi upstream from Sawmill Brook, 3.5 mi northwest of Middleboro, and 4.0 mi southeast of Bridgewater.

DRAINAGE AREA.--261 mi².

PERIOD OF RECORD.--Discharge: October 1929 to April 1976, April 1985 to May 1988, October 1996 to current year. Published as "at State Farm" October 1929 to September 1969, and as "at State Farm near Bridgewater" October 1969 to April 1976.
Water-quality: Water years 1953, 1967-74, 1997-2002.

REVISED RECORDS.--WSP 781: 1934. WSP 1051: 1933. WSP 1201: 1931. WSP 1301: 1930(M), 1933(M), 1935(M). WDR MA-RI-84-1, WDR MA-RI-03-1: Drainage area.

GAGE.--Water stage recorder. Datum of gage is 9.61 ft above National Geodetic Vertical Datum of 1929. Prior to October 1996, at sites 40 ft apart about 600 ft upstream: October 1929 to Sept. 30, 1931, inverted nonrecording gage with zero of gage at 10.02 ft; Oct. 1, 1931, to June 8, 1934, nonrecording gage, and June 9, 1934, to April 1976, April 1985 to May 1988, water-stage recorders, at present datum.

REMARKS.--Records good. Flow affected by diversions to and from basin for municipal supplies. Flow regulated by reservoirs and, prior to about 1975, by powerplants upstream. Satellite gage-height telemeter at station.

AVERAGE DISCHARGE.--56 years (water years 1930-75, 1986-87, 1997-2004), 476 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,980 ft³/s, Mar. 20, 1968, gage height, 14.48 ft; minimum discharge, 8.0 ft³/s, Sept. 10, 1944; minimum daily discharge, 9.0 ft³/s, Sept. 9-12, 1944.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,150 ft³/s, Apr. 3, gage height, 8.26 ft; minimum discharge, 64 ft³/s, Aug. 12.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004 DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|
| 1 | 119 | 827 | 544 | 858 | 358 | 490 | 1040 | 866 | 451 | 92 | 88 | 121 |
| 2 | 122 | 717 | 501 | 809 | 352 | 529 | 1780 | 806 | 456 | 130 | 84 | 99 |
| 3 | 117 | 631 | 442 | 782 | 354 | 583 | 2110 | 799 | 551 | 156 | 78 | 87 |
| 4 | 112 | 567 | 392 | 806 | 552 | 611 | 2020 | 957 | 572 | 120 | 75 | 83 |
| 5 | 135 | 516 | 367 | 932 | 547 | 615 | 1790 | 1000 | 535 | 120 | 89 | 79 |
| 6 | 123 | 528 | 374 | 1060 | 532 | 683 | 1570 | 899 | 475 | 218 | 107 | 75 |
| 7 | 116 | 511 | 493 | 977 | 979 | 803 | 1370 | 817 | 451 | 167 | 87 | 73 |
| 8 | 105 | 458 | 651 | 827 | 1080 | 762 | 1190 | 730 | 400 | 143 | 81 | 171 |
| 9 | 102 | 416 | 711 | 753 | 836 | 725 | 1060 | 682 | 356 | 133 | 76 | 207 |
| 10 | 100 | 388 | 759 | 688 | 750 | 670 | 957 | 702 | 323 | 119 | 72 | 154 |
| 11 | 99 | 379 | 947 | 627 | 710 | 643 | 882 | 662 | 290 | 108 | 68 | 108 |
| 12 | 110 | 387 | 1640 | 577 | 643 | 624 | 816 | 623 | 255 | 97 | 65 | 91 |
| 13 | 225 | 460 | 1810 | 562 | 601 | 598 | 881 | 583 | 228 | 97 | 134 | 83 |
| 14 | 213 | 507 | 1610 | 528 | 583 | 564 | 1420 | 544 | 208 | 130 | 291 | 77 |
| 15 | 385 | 448 | 1650 | 517 | 564 | 540 | 1830 | 515 | 202 | 135 | 503 | 72 |
| 16 | 629 | 405 | 1870 | 478 | 518 | 528 | 1810 | 481 | 191 | 122 | 828 | 74 |
| 17 | 503 | 381 | 1820 | 476 | 481 | 518 | 1620 | 455 | 173 | 113 | 646 | 77 |
| 18 | 480 | 358 | 1930 | 474 | 455 | 503 | 1430 | 434 | 160 | 114 | 546 | 281 |
| 19 | 434 | 337 | 2060 | 489 | 447 | 496 | 1250 | 446 | 164 | 119 | 441 | 761 |
| 20 | 388 | 373 | 1930 | 485 | 435 | 483 | 1110 | 417 | 164 | 127 | 330 | 581 |
| 21 | 338 | 488 | 1690 | 492 | 434 | 712 | 991 | 355 | 143 | 115 | 262 | 457 |
| 22 | 314 | 515 | 1480 | 504 | 491 | 920 | 897 | 309 | 132 | 101 | 282 | 342 |
| 23 | 290 | 481 | 1310 | 496 | 514 | 837 | 868 | 281 | 128 | 92 | 233 | 271 |
| 24 | 257 | 455 | 1200 | 449 | 510 | 762 | 927 | 280 | 119 | 94 | 188 | 219 |
| 25 | 230 | 455 | 1220 | 405 | 492 | 722 | 889 | 309 | 111 | 152 | 162 | 179 |
| 26 | 220 | 446 | 1240 | 386 | 479 | 692 | 883 | 318 | 103 | 98 | 143 | 153 |
| 27 | 243 | 423 | 1160 | 374 | 468 | 702 | 1070 | 406 | 109 | 84 | 125 | 130 |
| 28 | 452 | 409 | 1080 | 374 | 459 | 707 | 1120 | 480 | 100 | 87 | 112 | 140 |
| 29 | 681 | 528 | 1000 | 373 | 469 | 660 | 1020 | 647 | 99 | 121 | 100 | 677 |
| 30 | 1050 | 569 | 946 | 367 | --- | 625 | 936 | 566 | 99 | 101 | 92 | 950 |
| 31 | 963 | --- | 905 | 366 | --- | 599 | --- | 499 | --- | 92 | 102 | --- |
| TOTAL | 9655 | 14363 | 35732 | 18291 | 16093 | 19906 | 37537 | 17868 | 7748 | 3697 | 6490 | 6872 |
| MEAN | 311 | 479 | 1153 | 590 | 555 | 642 | 1251 | 576 | 258 | 119 | 209 | 229 |
| MAX | 1050 | 827 | 2060 | 1060 | 1080 | 920 | 2110 | 1000 | 572 | 218 | 828 | 950 |
| MIN | 99 | 337 | 367 | 366 | 352 | 483 | 816 | 280 | 99 | 84 | 65 | 72 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1930 - 2004, BY WATER YEAR (WY)

| | | | | | | | | | | | | |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 226 | 400 | 563 | 616 | 701 | 959 | 879 | 543 | 340 | 189 | 162 | 176 |
| MAX | 1214 | 1309 | 1614 | 1346 | 1404 | 1714 | 1895 | 1378 | 1106 | 1021 | 1049 | 840 |
| (WY) | 1997 | 1956 | 1946 | 1976 | 1998 | 1968 | 1987 | 1954 | 1998 | 1938 | 1955 | 1933 |
| MIN | 36.9 | 56.6 | 82.7 | 122 | 204 | 495 | 192 | 196 | 93.8 | 36.4 | 28.0 | 32.9 |
| (WY) | 1942 | 1966 | 1966 | 1966 | 1944 | 1944 | 1966 | 1965 | 1965 | 1957 | 1934 | 1957 |

| SUMMARY STATISTICS | FOR 2003 CALENDAR YEAR | FOR 2004 WATER YEAR | WATER YEARS 1930 - 2004 | |
|--------------------------|------------------------|---------------------|-------------------------|--------|
| ANNUAL TOTAL | 272570 | 194252 | | |
| ANNUAL MEAN | 747 | 531 | 476 | |
| HIGHEST ANNUAL MEAN | | | 761 1998 | |
| LOWEST ANNUAL MEAN | | | 171 1966 | |
| HIGHEST DAILY MEAN | 2540 | Apr 13 | 2110 | Apr 3 |
| LOWEST DAILY MEAN | 99 | Oct 11 | 65 | Aug 12 |
| ANNUAL SEVEN-DAY MINIMUM | 108 | Oct 6 | 79 | Aug 6 |
| MAXIMUM PEAK FLOW | | | 2150 | Apr 3 |
| MAXIMUM PEAK STAGE | | | 8.26 | Apr 3 |
| INSTANTANEOUS LOW FLOW | | | 64 | Aug 12 |
| 10 PERCENT EXCEEDS | 1430 | | 1050 | 1060 |
| 50 PERCENT EXCEEDS | 595 | | 464 | 346 |
| 90 PERCENT EXCEEDS | 205 | | 100 | 69 |

^a Years of operation not continuous; see Period of Record for actual years of operation.

TAUNTON RIVER BASIN

01109000 WADING RIVER NEAR NORTON, MA

LOCATION.--Lat 41° 56' 51", long 71° 10' 38", Bristol County, Hydrologic Unit 01090004, on left bank 200 ft downstream from bridge on State Highway 140, 0.9 mi upstream from confluence with Rumford River, and 1.5 mi southeast of Norton.

DRAINAGE AREA.--43.3 mi².

PERIOD OF RECORD.--Discharge: June 1925 to current year.

Water-quality records: Water year 1967–68, 1999–2001.

REVISED RECORDS.--WSP 871: 1938. WSP 1301: 1929–33(M). WSP 1621: 1925–58 (monthly runoff). WDR MA-RI-84-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 55.14 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1930, nonrecording gage at same site at datum 0.62 ft higher and Oct. 1, 1930, to May 5, 1933, at same site at present datum.

REMARKS.--Records good except those for estimated daily discharge, which are poor. Flow regulated to some extent by Lake Mirimichi and other lakes and reservoirs upstream. Diversion upstream for municipal supply of Attleboro and small diversions to and from basin for other municipal supplies. Satellite gage-height telemeter at station.

AVERAGE DISCHARGE.--79 years (water years 1926–2004), 73.3 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,460 ft³/s, Mar. 19, 1968; maximum gage height, 11.47 ft, Mar. 19, 1968, June 14, 1998; minimum discharge, 0.3 ft³/s, Sept. 10, 1926.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 549 ft³/s, Apr. 14, gage height, 9.06 ft; minimum discharge, 6.2 ft³/s, Aug. 12, Sept. 8–9, 11–18.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|--------|------|------|------|------|------|------|------|------|-------|-------|-------|
| 1 | 11 | 128 | 64 | 107 | 28 | 38 | 183 | 144 | 63 | 9.4 | 10 | 10 |
| 2 | 9.6 | 109 | 57 | 102 | 28 | 44 | 349 | 131 | 66 | 11 | 9.5 | 9.0 |
| 3 | 9.1 | 92 | 47 | 103 | 29 | 54 | 305 | 125 | 73 | 15 | 8.4 | 7.6 |
| 4 | 8.8 | 79 | 40 | 107 | 43 | 60 | 266 | 148 | 68 | 13 | 7.4 | 7.0 |
| 5 | 8.8 | 70 | 38 | 130 | e55 | 62 | 274 | 153 | 59 | 16 | 10 | 6.8 |
| 6 | 9.1 | 68 | 38 | 154 | e70 | 74 | 235 | 136 | 53 | 24 | 17 | 6.5 |
| 7 | 8.3 | 65 | 38 | 137 | e93 | 91 | 194 | 122 | 54 | 23 | 15 | 6.5 |
| 8 | 7.7 | 58 | 36 | e111 | e121 | 87 | 168 | 109 | 51 | 20 | 12 | 6.3 |
| 9 | 7.4 | 50 | 45 | e98 | e102 | 80 | 150 | 101 | 44 | 16 | 9.6 | 6.5 |
| 10 | 7.2 | 45 | 49 | e81 | e87 | 76 | 133 | 106 | 39 | 13 | 7.9 | 6.5 |
| 11 | 7.1 | 43 | 78 | e64 | 83 | 72 | 117 | 100 | 37 | 12 | 6.8 | 6.4 |
| 12 | 7.9 | 44 | 218 | e58 | 73 | 67 | 106 | 93 | 32 | 11 | 6.5 | 6.2 |
| 13 | 11 | 49 | 253 | e57 | 65 | 61 | 132 | 84 | 28 | 11 | 8.4 | 6.2 |
| 14 | 12 | 51 | 207 | e57 | 61 | 56 | 427 | 76 | 25 | 12 | 19 | 6.2 |
| 15 | 33 | 47 | 274 | e52 | e55 | 53 | 476 | 71 | 23 | 13 | 52 | 6.2 |
| 16 | 59 | 43 | 325 | e46 | e49 | 51 | 376 | 67 | 21 | 12 | 102 | 6.2 |
| 17 | 53 | 40 | 271 | 42 | 43 | 50 | 319 | 62 | 20 | 11 | 77 | 6.2 |
| 18 | 46 | 39 | 375 | 42 | 40 | 49 | 254 | 58 | 16 | 10 | 58 | 32 |
| 19 | 43 | 38 | 353 | 44 | 38 | 48 | 215 | 58 | 17 | 11 | 46 | 103 |
| 20 | 40 | 41 | 290 | e43 | 37 | 47 | 186 | 58 | 20 | 21 | 37 | 75 |
| 21 | 36 | 58 | 251 | e40 | 37 | 71 | 164 | 56 | 20 | 15 | 31 | 54 |
| 22 | 33 | 76 | 217 | e37 | 40 | 98 | 146 | 52 | 19 | 10 | 35 | 42 |
| 23 | 31 | 71 | 188 | e36 | 42 | 90 | 142 | 52 | 19 | 8.4 | 35 | 33 |
| 24 | 28 | 63 | 156 | e33 | 41 | 80 | 162 | 51 | 17 | 7.7 | 28 | 27 |
| 25 | 25 | 60 | 188 | e31 | 35 | 75 | 151 | 52 | 15 | 11 | 24 | 23 |
| 26 | 24 | 59 | 196 | 30 | 38 | 72 | 145 | 53 | 12 | 13 | 21 | 20 |
| 27 | 33 | 54 | 185 | 28 | 38 | 74 | 203 | 65 | 12 | 11 | 18 | 17 |
| 28 | 71 | 50 | 160 | 28 | 37 | 76 | 208 | 80 | 12 | 13 | 15 | 16 |
| 29 | 128 | 57 | 135 | 28 | 35 | 73 | 179 | 94 | 11 | 21 | 13 | 57 |
| 30 | 197 | 64 | 126 | 30 | --- | 67 | 159 | 81 | 10 | 17 | 11 | 106 |
| 31 | 158 | --- | 115 | 29 | --- | 68 | --- | 68 | --- | 12 | 10 | --- |
| TOTAL | 1163.0 | 1811 | 5013 | 1985 | 1543 | 2064 | 6524 | 2706 | 956 | 423.5 | 760.5 | 721.3 |
| MEAN | 37.5 | 60.4 | 162 | 64.0 | 53.2 | 66.6 | 217 | 87.3 | 31.9 | 13.7 | 24.5 | 24.0 |
| MAX | 197 | 128 | 375 | 154 | 121 | 98 | 476 | 153 | 73 | 24 | 102 | 106 |
| MIN | 7.1 | 38 | 36 | 28 | 28 | 38 | 106 | 51 | 10 | 7.7 | 6.5 | 6.2 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1925 - 2004, BY WATER YEAR (WY)

| | | | | | | | | | | | | |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 30.1 | 59.4 | 91.1 | 99.2 | 105 | 154 | 137 | 82.9 | 54.2 | 24.7 | 21.8 | 20.7 |
| MAX | 143 | 210 | 257 | 353 | 232 | 354 | 323 | 227 | 284 | 225 | 175 | 106 |
| (WY) | 1956 | 1956 | 1946 | 1979 | 1970 | 1936 | 1987 | 1954 | 1998 | 1938 | 1955 | 1954 |
| MIN | 3.11 | 5.21 | 10.4 | 13.7 | 26.1 | 65.6 | 35.0 | 28.6 | 9.79 | 2.98 | 1.91 | 1.76 |
| (WY) | 1958 | 1958 | 1966 | 1981 | 1980 | 1985 | 1985 | 1965 | 1957 | 1999 | 1993 | 1930 |

SUMMARY STATISTICS

| | FOR 2003 CALENDAR YEAR | | | | FOR 2004 WATER YEAR | | | | WATER YEARS 1925 - 2004 | | | |
|--------------------------|------------------------|--|--|--|---------------------|--|--|--|-------------------------|--|--|--|
| ANNUAL TOTAL | 33276.1 | | | | 25670.3 | | | | | | | |
| ANNUAL MEAN | 91.2 | | | | 70.1 | | | | 73.3 | | | |
| HIGHEST ANNUAL MEAN | | | | | | | | | 123 | | | |
| LOWEST ANNUAL MEAN | | | | | | | | | 28.8 | | | |
| HIGHEST DAILY MEAN | 375 | | | | Dec 18 | | | | 476 | | | |
| LOWEST DAILY MEAN | 7.1 | | | | Oct 11 | | | | 6.2 | | | |
| ANNUAL SEVEN-DAY MINIMUM | 7.8 | | | | Oct 6 | | | | 6.2 | | | |
| MAXIMUM PEAK FLOW | | | | | | | | | 549 | | | |
| MAXIMUM PEAK STAGE | | | | | | | | | 9.06 | | | |
| INSTANTANEOUS LOW FLOW | | | | | | | | | 6.2 | | | |
| 10 PERCENT EXCEEDS | 194 | | | | | | | | 161 | | | |
| 50 PERCENT EXCEEDS | 64 | | | | | | | | 48 | | | |
| 90 PERCENT EXCEEDS | 19 | | | | | | | | 9.6 | | | |

e Estimated

TAUNTON RIVER BASIN

01109060 THREEMILE RIVER AT NORTH DIGHTON, MA

LOCATION.--Lat 41° 51' 58", long 71° 07' 24", Bristol County, Hydrologic Unit 01090004, on right bank 800 ft downstream from Warner Boulevard at North Dighton and 1.4 mi upstream from mouth.

DRAINAGE AREA.--84.3 mi².

REVISED RECORDS.--WDR MA-RI-84-1: Drainage area.

PERIOD OF RECORD.--Discharge: July 1966 to current year.

Water-quality records: Water years 1967-68.

GAGE.--Water-stage recorder. Datum of gage is 11.38 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for estimated daily discharge, which are poor. Flow regulated by Lake Mirimichi and other lakes and reservoirs upstream. Diversions to and from basin upstream for municipal supplies may be compensating.

AVERAGE DISCHARGE.--38 years (water years 1967-2004), 166 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,870 ft³/s, June 16, 1998, gage height, 8.89 ft; minimum discharge, 1.9 ft³/s, Sept. 12, 1995, but was less during period of unusual regulation on Aug. 4, 5, 1997 (gage height below minimum recordable at this station.)

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,140 ft³/s, Apr. 15, gage height, 5.93 ft; minimum, discharge 17 ft³/s, Sept. 14-16.

**DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES**

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|-------|------|------|------|-------|------|------|------|------|------|
| 1 | 33 | 343 | 131 | 255 | 65 | 88 | 299 | 324 | 137 | 23 | 30 | 33 |
| 2 | 31 | 278 | 124 | 235 | 64 | 98 | 625 | 289 | 135 | 37 | 27 | 29 |
| 3 | 30 | 227 | 109 | 225 | 67 | 111 | 812 | 278 | 146 | 39 | 25 | 25 |
| 4 | 30 | 187 | 95 | 233 | 98 | 122 | 694 | 310 | 147 | 34 | 22 | 23 |
| 5 | 29 | 160 | 88 | 273 | 111 | 128 | 651 | 321 | 126 | 39 | 34 | 21 |
| 6 | 29 | 152 | 95 | 317 | 121 | 151 | 601 | 309 | 110 | 54 | 37 | 19 |
| 7 | 28 | 143 | 101 | 337 | 213 | 178 | 493 | 273 | 111 | 51 | 35 | 19 |
| 8 | 27 | 131 | 112 | e284 | 239 | 181 | 408 | 239 | 107 | 46 | 30 | 24 |
| 9 | 27 | 116 | 119 | e197 | 250 | 168 | 351 | 215 | 97 | 40 | 26 | 24 |
| 10 | 26 | 104 | 118 | e159 | 216 | 153 | 305 | 209 | 88 | 35 | 22 | 24 |
| 11 | 25 | 99 | 184 | e152 | 186 | 145 | 267 | 208 | 81 | 33 | 20 | 22 |
| 12 | 26 | 101 | 330 | e137 | 163 | 136 | 236 | 194 | 71 | 29 | 19 | 20 |
| 13 | 29 | 114 | e426 | e131 | 143 | 129 | 288 | 177 | 63 | 32 | 40 | 19 |
| 14 | 31 | 121 | e518 | e117 | 132 | 118 | 612 | 158 | 58 | 39 | 51 | 18 |
| 15 | 96 | 113 | 604 | e112 | 124 | 111 | 1070 | 145 | 54 | 36 | 132 | 18 |
| 16 | 135 | 101 | 704 | e108 | 111 | 108 | 1010 | 135 | 50 | 33 | 179 | 19 |
| 17 | 127 | 93 | 715 | e102 | 102 | 107 | 817 | 126 | 46 | 30 | 183 | 20 |
| 18 | 113 | 89 | 770 | e100 | 95 | 105 | 664 | 118 | 44 | 27 | 147 | 59 |
| 19 | 102 | 86 | 863 | e99 | 91 | 104 | 529 | 116 | 43 | 29 | 113 | 147 |
| 20 | 95 | 95 | 760 | e96 | 88 | 102 | 440 | 115 | 42 | 35 | 93 | 175 |
| 21 | 86 | 133 | 623 | e91 | 87 | 150 | 376 | 111 | 41 | 38 | 81 | 147 |
| 22 | 79 | 157 | 525 | e89 | 92 | 187 | 327 | 107 | 40 | 30 | 81 | 110 |
| 23 | 72 | 158 | 451 | e86 | 96 | 192 | 309 | 106 | 39 | 24 | 76 | 89 |
| 24 | 66 | 144 | 405 | e81 | 95 | 177 | 317 | 105 | 36 | 22 | 68 | 72 |
| 25 | 60 | 136 | 409 | e75 | 91 | 158 | 327 | 103 | 34 | 23 | 57 | 61 |
| 26 | 55 | 129 | 442 | e72 | 85 | 149 | 337 | 102 | 32 | 25 | 51 | 52 |
| 27 | 72 | 122 | 434 | e66 | 88 | 152 | 387 | 128 | 29 | 25 | 47 | 45 |
| 28 | 137 | 113 | 397 | 66 | 86 | 153 | 460 | 160 | 28 | 27 | 42 | 52 |
| 29 | 224 | 122 | 350 | 67 | 86 | 146 | 434 | 201 | 28 | 38 | 37 | 166 |
| 30 | 296 | 133 | 305 | 68 | --- | 137 | 371 | 183 | 25 | 40 | 33 | 207 |
| 31 | 390 | --- | 277 | 68 | --- | 137 | --- | 150 | --- | 34 | 35 | --- |
| TOTAL | 2606 | 4200 | 11584 | 4498 | 3485 | 4281 | 14817 | 5715 | 2088 | 1047 | 1873 | 1759 |
| MEAN | 84.1 | 140 | 374 | 145 | 120 | 138 | 494 | 184 | 69.6 | 33.8 | 60.4 | 58.6 |
| MAX | 390 | 343 | 863 | 337 | 250 | 192 | 1070 | 324 | 147 | 54 | 183 | 207 |
| MIN | 25 | 86 | 88 | 66 | 64 | 88 | 236 | 102 | 25 | 22 | 19 | 18 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 2004, BY WATER YEAR (WY)

| | 1966 | 1967 | 1968 | 1969 | 1970 | 1971 | 1972 | 1973 | 1974 | 1975 | 1976 | 1977 | 1978 | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 74.5 | 134 | 215 | 221 | 236 | 320 | 308 | 187 | 140 | 55.3 | 54.7 | 47.7 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MAX | 298 | 407 | 534 | 683 | 466 | 580 | 701 | 408 | 614 | 280 | 170 | 128 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| (WY) | 1990 | 1990 | 1973 | 1979 | 1970 | 1983 | 1987 | 1998 | 1998 | 1998 | 1986 | 1989 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MIN | 10.9 | 26.1 | 40.1 | 29.8 | 55.7 | 136 | 84.5 | 83.4 | 25.6 | 12.1 | 8.62 | 10.9 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| (WY) | 1998 | 2002 | 1981 | 1981 | 1980 | 1985 | 1985 | 1981 | 1991 | 1991 | 1999 | 1993 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| SUMMARY STATISTICS | FOR 2003 CALENDAR YEAR | | | FOR 2004 WATER YEAR | | | WATER YEARS 1966 - 2004 | | | | | |
|--------------------------|------------------------|--------|--|---------------------|--------|--------|-------------------------|--------|------|--|--|--|
| ANNUAL TOTAL | 76506 | | | 57953 | | | | | | | | |
| ANNUAL MEAN | 210 | | | 158 | | | | | | | | |
| HIGHEST ANNUAL MEAN | | | | | | | 166 | | | | | |
| LOWEST ANNUAL MEAN | | | | | | | 255 | 1984 | | | | |
| HIGHEST DAILY MEAN | 863 | Dec 19 | | 1070 | Apr 15 | 2680 | Jun 16 | 1998 | | | | |
| LOWEST DAILY MEAN | 25 | Oct 11 | | 18 | Sep 14 | 1.3 | Aug 5 | 1997 | | | | |
| ANNUAL SEVEN-DAY MINIMUM | 27 | Oct 6 | | 19 | Sep 11 | 2.9 | Sep 7 | 1995 | | | | |
| MAXIMUM PEAK FLOW | | | | 1140 | Apr 15 | 2870 | Jun 16 | 1998 | | | | |
| MAXIMUM PEAK STAGE | | | | | 5.93 | Apr 15 | 8.89 | Jun 16 | 1998 | | | |
| INSTANTANEOUS LOW FLOW | | | | 17 | Sep 14 | | | | | | | |
| 10 PERCENT EXCEEDS | 445 | | | | | | | 379 | | | | |
| 50 PERCENT EXCEEDS | 137 | | | | | | | 112 | | | | |
| 90 PERCENT EXCEEDS | 48 | | | | | | | 22 | | | | |

e Estimated

TAUNTON RIVER BASIN

01109070 SEGREGANSET RIVER NEAR DIGHTON, MA

LOCATION.--Lat 41° 50' 25", long 71° 08' 36", Bristol County, Hydrologic Unit 01090004, on left bank 50 ft upstream from twin culverts on Center Street and 1.8 mi northwest of Dighton.

DRAINAGE AREA.--10.6 mi².

PERIOD OF RECORD.--Discharge: July 1966 to February 1992, July 1992 to current year.

Water-quality records: Water years 1967-68.

GAGE.--Water-stage recorder. Elevation of gage is 30 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records fair except those for estimated daily discharge, which are poor. Occasional regulation by ponds upstream. Diversion upstream for Dighton Water District.

AVERAGE DISCHARGE.--37 years (water years 1967-91, 1993-2004), 22.2 ft³/s, 28.48 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 867 ft³/s, Mar. 18, 1968, gage height, 7.51 ft; no flow at times in several water years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 282 ft³/s, Apr. 14, gage height, 4.67 ft; minimum discharge, 0.31 ft³/s, July 2.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004 DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|--------|-------|-------|------|------|-------|--------|-------|--------|--------|
| 1 | 2.2 | 37 | 16 | 23 | 6.2 | 13 | 132 | 26 | 14 | 0.41 | 0.89 | 2.0 |
| 2 | 2.0 | 24 | 13 | 21 | 6.1 | 16 | 231 | 22 | 18 | 0.48 | 0.67 | 1.2 |
| 3 | 1.9 | 18 | 9.8 | 23 | 5.8 | 20 | 127 | 28 | 18 | 1.9 | 0.55 | 1.0 |
| 4 | 1.9 | 14 | 8.2 | 29 | 12 | 22 | 75 | 63 | 18 | 1.6 | 0.43 | 0.97 |
| 5 | 2.2 | 12 | 7.5 | 50 | 14 | 22 | 97 | 59 | 14 | 1.8 | 2.0 | 0.84 |
| 6 | 2.0 | 15 | 7.8 | 66 | 14 | 35 | 82 | 38 | 10 | 5.9 | 4.9 | 0.69 |
| 7 | 1.7 | 17 | 10 | 47 | 65 | 50 | 54 | 27 | 10 | 3.6 | 2.2 | 0.58 |
| 8 | 1.7 | 14 | 17 | 32 | 57 | 40 | 39 | 21 | 9.1 | 2.2 | 1.3 | 0.87 |
| 9 | 1.5 | 12 | 19 | 20 | 32 | 29 | 32 | 17 | 7.1 | 1.6 | 1.1 | 1.7 |
| 10 | 1.5 | 9.8 | 19 | 13 | 23 | 23 | 26 | 19 | 5.5 | 1.1 | 0.87 | 1.5 |
| 11 | 1.6 | 9.3 | 66 | 9.6 | 22 | 21 | 22 | 18 | 4.4 | 0.78 | 0.61 | 1.1 |
| 12 | 1.9 | 11 | 194 | 9.3 | 18 | 19 | 19 | 15 | 3.5 | 0.60 | 0.44 | 0.94 |
| 13 | 2.7 | 18 | 128 | 10 | 16 | 17 | 57 | 12 | 2.9 | 0.76 | 3.7 | 0.75 |
| 14 | 2.5 | 23 | 73 | 10 | 15 | 15 | 244 | 11 | 2.5 | 2.8 | 8.3 | 0.55 |
| 15 | 15 | 18 | 126 | 8.7 | 14 | 14 | 200 | 9.7 | 2.4 | 2.4 | 38 | 0.48 |
| 16 | 22 | 13 | 146 | 8.5 | 11 | 13 | 104 | 8.6 | 2.0 | 1.8 | 50 | 0.59 |
| 17 | 14 | 11 | 97 | 8.4 | 8.8 | 12 | 64 | 8.0 | 1.6 | 1.2 | 28 | 0.62 |
| 18 | 11 | 9.8 | 159 | 8.2 | 8.2 | 12 | 47 | 7.6 | 1.4 | 0.80 | 13 | 6.5 |
| 19 | 10 | 9.2 | 127 | 8.7 | 8.5 | 11 | 37 | 8.1 | 2.1 | 0.71 | 7.7 | 17 |
| 20 | 9.8 | 12 | 77 | 9.0 | 8.5 | 11 | 31 | 7.5 | 2.1 | 0.97 | 5.5 | 8.7 |
| 21 | 8.6 | 30 | 54 | 8.4 | 9.3 | 43 | 25 | 6.6 | 1.3 | 0.91 | 4.7 | 4.5 |
| 22 | 7.8 | 45 | 43 | 8.0 | 12 | 63 | 22 | 6.0 | 1.1 | 0.73 | 7.3 | e3.1 |
| 23 | 7.0 | 31 | 37 | 8.0 | 13 | 41 | 24 | 7.3 | 1.1 | 0.62 | 5.5 | e1.5 |
| 24 | 6.1 | 20 | 37 | 7.4 | 12 | 27 | 35 | 7.5 | 0.87 | 0.47 | 4.0 | 1.3 |
| 25 | 5.4 | 18 | 60 | 7.0 | 11 | 21 | 33 | 6.9 | 0.74 | 0.41 | 2.8 | 1.1 |
| 26 | 5.2 | 16 | 60 | 6.4 | 11 | 19 | 39 | 6.5 | 0.62 | 0.44 | 2.1 | 0.90 |
| 27 | 8.7 | 14 | 45 | 6.1 | 9.9 | 20 | 93 | 15 | 0.60 | 0.42 | 1.7 | 0.79 |
| 28 | 37 | 12 | 35 | 5.7 | 10 | 21 | 78 | 24 | 0.59 | 0.56 | 1.4 | 1.5 |
| 29 | 84 | 16 | 29 | 5.8 | 11 | 18 | 48 | 44 | 0.51 | 1.4 | 1.2 | 63 |
| 30 | 100 | 20 | 27 | 6.0 | --- | 16 | 33 | 31 | 0.47 | 1.4 | 1.0 | 89 |
| 31 | 63 | --- | 25 | 6.1 | --- | 18 | --- | 16 | --- | 1.0 | 1.3 | --- |
| TOTAL | 441.9 | 529.1 | 1772.3 | 489.3 | 464.3 | 722 | 2150 | 596.3 | 156.50 | 41.77 | 203.16 | 215.27 |
| MEAN | 14.3 | 17.6 | 57.2 | 15.8 | 16.0 | 23.3 | 71.7 | 19.2 | 5.22 | 1.35 | 6.55 | 7.18 |
| MAX | 100 | 45 | 194 | 66 | 65 | 63 | 244 | 63 | 18 | 5.9 | 50 | 89 |
| MIN | 1.5 | 9.2 | 7.5 | 5.7 | 5.8 | 11 | 19 | 6.0 | 0.47 | 0.41 | 0.43 | 0.48 |
| CFSM | 1.34 | 1.66 | 5.39 | 1.49 | 1.51 | 2.20 | 6.76 | 1.81 | 0.49 | 0.13 | 0.62 | 0.68 |
| IN. | 1.55 | 1.86 | 6.22 | 1.72 | 1.63 | 2.53 | 7.55 | 2.09 | 0.55 | 0.15 | 0.71 | 0.76 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 2004, BY WATER YEAR (WY)

| | | | | | | | | | | | | |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 8.69 | 19.8 | 31.5 | 32.6 | 34.3 | 46.6 | 39.4 | 23.8 | 16.1 | 4.77 | 5.39 | 4.89 |
| MAX | 42.7 | 58.4 | 74.7 | 110 | 68.6 | 91.4 | 106 | 61.7 | 85.1 | 24.9 | 37.7 | 21.5 |
| (WY) | 1978 | 1973 | 1987 | 1979 | 1998 | 1994 | 1987 | 1967 | 1998 | 1973 | 2003 | 1972 |
| MIN | 0.00 | 1.70 | 3.70 | 3.34 | 7.23 | 20.2 | 9.55 | 7.87 | 1.00 | 0.01 | 0.00 | 0.02 |
| (WY) | 1998 | 2002 | 1981 | 1981 | 1980 | 1981 | 1985 | 1981 | 1999 | 1999 | 1999 | 1980 |

| SUMMARY STATISTICS | FOR 2003 CALENDAR YEAR | FOR 2004 WATER YEAR | aWATER YEARS 1966 - 2004 | |
|--------------------------|------------------------|---------------------|--------------------------|-------------|
| ANNUAL TOTAL | 12167.1 | 7781.90 | | |
| ANNUAL MEAN | 33.3 | 21.3 | 22.2 | |
| HIGHEST ANNUAL MEAN | | | 34.5 | 1998 |
| LOWEST ANNUAL MEAN | | | 7.68 | 1981 |
| HIGHEST DAILY MEAN | 338 | Aug 8 | 670 | Mar 18 1968 |
| LOWEST DAILY MEAN | 1.4 | Sep 1 | 0.41 | Jul 1 |
| ANNUAL SEVEN-DAY MINIMUM | 1.7 | Oct 6 | 0.52 | Jul 22 |
| MAXIMUM PEAK FLOW | | | 282 | Apr 14 |
| MAXIMUM PEAK STAGE | | | 4.67 | Apr 14 |
| INSTANTANEOUS LOW FLOW | | | 0.31 | Jul 2 |
| ANNUAL RUNOFF (CFSM) | 3.14 | | 2.01 | |
| ANNUAL RUNOFF (INCHES) | 42.70 | | 27.31 | |
| 10 PERCENT EXCEEDS | 78 | | 55 | |
| 50 PERCENT EXCEEDS | 18 | | 10 | |
| 90 PERCENT EXCEEDS | 3.1 | | 0.87 | |

^a Years of operation not continuous; see Period of Record for actual years of operation.

e Estimated

TEN MILE RIVER BASIN

01109403 TEN MILE RIVER AT PAWTUCKET AVENUE AT EAST PROVIDENCE, RI

LOCATION.--Lat 41°49'51", long 71°21'06", Providence County, Hydrologic Unit 01090004, on right bank on upstream side of bridge on State Highways 1A and 114, 0.3 mi south of junction with State Highway 114A, and 0.7 mi upstream from mouth.

DRAINAGE AREA.--53.1 mi².

PERIOD OF RECORD.--October 1986 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 5 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good. Flow affected by regulation and diversions from reservoirs upstream.

AVERAGE DISCHARGE.--18 years (water years 1987–2004), 105 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,450 ft³/s, June 15, 1998, gage height, 8.50 ft; minimum discharge, 5.0 ft³/s, Apr. 19, 1991; minimum daily discharge, 6.6 ft³/s, Apr. 19, 1991.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,050 ft³/s, Apr. 15, gage height, 7.35 ft; minimum discharge, 16 ft³/s, Sept. 6.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1 | 32 | 178 | 85 | 140 | 50 | 59 | 296 | 163 | 85 | 24 | 33 | 32 |
| 2 | 32 | 107 | 75 | 134 | 49 | 64 | 471 | 145 | 87 | 40 | 34 | 27 |
| 3 | 30 | 89 | 68 | 132 | 55 | 69 | 383 | 149 | 97 | 49 | 30 | 23 |
| 4 | 31 | 81 | 63 | 141 | 110 | 75 | 262 | 203 | 85 | 40 | 29 | 24 |
| 5 | 35 | 81 | 62 | 190 | 90 | 76 | 321 | 198 | 78 | 45 | 76 | 20 |
| 6 | 34 | 87 | 80 | 222 | 96 | 97 | 290 | 164 | 74 | 60 | 69 | 18 |
| 7 | 33 | 78 | 81 | 190 | 236 | 117 | 227 | 140 | 70 | 47 | 48 | 19 |
| 8 | 32 | 139 | 66 | 151 | 226 | 114 | 192 | 119 | 68 | 38 | 37 | 32 |
| 9 | 33 | 157 | 64 | 127 | 142 | 100 | 172 | 114 | 65 | 34 | 31 | 46 |
| 10 | 32 | 89 | 65 | 104 | 109 | 89 | 154 | 120 | 63 | 27 | 26 | 44 |
| 11 | 31 | 75 | 146 | 91 | 103 | 81 | 141 | 118 | 58 | 24 | 24 | 32 |
| 12 | 33 | 78 | 407 | 87 | 94 | 75 | 132 | 105 | 53 | 20 | 24 | 26 |
| 13 | 36 | 84 | 389 | 87 | 87 | 71 | 211 | 95 | 48 | 31 | 47 | 25 |
| 14 | 34 | 81 | 253 | 83 | 81 | 64 | 741 | 83 | 48 | 34 | 64 | 22 |
| 15 | 113 | 70 | 389 | 80 | 78 | 65 | 944 | 82 | 50 | 30 | 161 | 20 |
| 16 | 112 | 67 | 463 | 72 | 72 | 67 | 602 | 81 | 48 | 28 | 186 | 26 |
| 17 | 70 | 67 | 345 | 68 | 67 | 70 | 392 | 75 | 46 | 25 | 109 | 24 |
| 18 | 66 | 67 | 440 | 70 | 65 | 64 | 300 | 74 | 50 | 23 | 73 | 131 |
| 19 | 60 | 66 | 526 | 71 | 62 | 67 | 250 | 77 | 52 | 40 | 63 | 208 |
| 20 | 56 | 87 | 365 | 68 | 60 | 60 | 222 | 73 | 47 | 51 | 55 | 108 |
| 21 | 51 | 111 | 287 | 65 | 60 | 101 | 188 | 71 | 41 | 37 | 54 | 69 |
| 22 | 52 | 115 | 244 | 63 | 62 | 134 | 169 | 69 | 39 | 28 | 64 | 55 |
| 23 | 47 | 97 | 218 | 61 | 64 | 117 | 183 | 69 | 40 | 24 | 54 | 46 |
| 24 | 44 | 85 | 212 | 57 | 63 | 96 | 208 | 71 | 34 | 28 | 47 | 40 |
| 25 | 41 | 89 | 250 | 54 | 60 | 88 | 183 | 70 | 33 | 27 | 39 | 36 |
| 26 | 41 | 81 | 243 | 52 | 58 | 86 | 196 | 67 | 34 | 25 | 35 | 35 |
| 27 | 80 | 76 | 209 | 51 | 57 | 94 | 285 | 100 | 29 | 23 | 33 | 31 |
| 28 | 147 | 72 | 180 | 54 | 55 | 95 | 297 | 124 | 27 | 41 | 32 | 48 |
| 29 | 238 | 98 | 164 | 53 | 56 | 87 | 221 | 133 | 29 | 67 | 29 | 173 |
| 30 | 316 | 96 | 156 | 51 | --- | 80 | 183 | 98 | 30 | 46 | 27 | 172 |
| 31 | 269 | --- | 149 | 51 | --- | 105 | --- | 80 | --- | 36 | 40 | --- |
| TOTAL | 2261 | 2748 | 6744 | 2920 | 2467 | 2627 | 8816 | 3330 | 1608 | 1092 | 1673 | 1612 |
| MEAN | 72.9 | 91.6 | 218 | 94.2 | 85.1 | 84.7 | 294 | 107 | 53.6 | 35.2 | 54.0 | 53.7 |
| MAX | 316 | 178 | 526 | 222 | 236 | 134 | 944 | 203 | 97 | 67 | 186 | 208 |
| MIN | 30 | 66 | 62 | 51 | 49 | 59 | 132 | 67 | 27 | 20 | 24 | 18 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 2004, BY WATER YEAR (WY)

| | | | | | | | | | | | | |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 59.4 | 89.8 | 133 | 130 | 135 | 179 | 191 | 112 | 84.8 | 47.3 | 49.4 | 47.5 |
| MAX | 171 | 223 | 304 | 206 | 261 | 348 | 407 | 206 | 317 | 181 | 119 | 94.4 |
| (WY) | 1990 | 1990 | 1993 | 1999 | 1988 | 1994 | 1987 | 1998 | 1998 | 1998 | 1989 | 1987 |
| MIN | 23.1 | 28.8 | 42.7 | 41.4 | 52.8 | 84.7 | 78.0 | 60.4 | 32.1 | 19.7 | 16.6 | 22.3 |
| (WY) | 1994 | 2002 | 2002 | 1989 | 2002 | 2004 | 1995 | 1992 | 1991 | 1999 | 1993 | 1993 |

SUMMARY STATISTICS FOR 2003 CALENDAR YEAR FOR 2004 WATER YEAR WATER YEARS 1987 - 2004

| | | | | | | | | | | | | |
|--------------------------|-------|-------|-----|--------|--|------|--------|------|------|-----|-------------|--|
| ANNUAL TOTAL | 49114 | 37898 | | | | | | | | | | |
| ANNUAL MEAN | 135 | 104 | | | | | | | 105 | | | |
| HIGHEST ANNUAL MEAN | | | | | | | | | 154 | | 1998 | |
| LOWEST ANNUAL MEAN | | | | | | | | | 54.8 | | 2002 | |
| HIGHEST DAILY MEAN | | | 614 | Mar 31 | | 944 | Apr 15 | 1380 | | 6.6 | Jun 15 1998 | |
| LOWEST DAILY MEAN | | | 28 | Aug 31 | | 18 | Sep 6 | | | | Apr 19 1991 | |
| ANNUAL SEVEN-DAY MINIMUM | | | 32 | Sep 30 | | 23 | Sep 1 | | | 12 | Aug 31 1993 | |
| MAXIMUM PEAK FLOW | | | | | | 1050 | Apr 15 | | 1450 | | Jun 15 1998 | |
| MAXIMUM PEAK STAGE | | | | | | 7.35 | Apr 15 | | 8.50 | | Jun 15 1998 | |
| INSTANTANEOUS LOW FLOW | | | | | | 16 | Sep 6 | | 5.0 | | Apr 19 1991 | |
| 10 PERCENT EXCEEDS | | | 269 | | | 219 | | | 219 | | | |
| 50 PERCENT EXCEEDS | | | 94 | | | 70 | | | 74 | | | |
| 90 PERCENT EXCEEDS | | | 40 | | | 30 | | | 25 | | | |

BLACKSTONE RIVER BASIN

01109439 KETTLE BROOK AT ROCKLAND ST NEAR AUBURN, MA

LOCATION.--Lat 42° 12'55", long 71° 50'21", Worcester County, Hydrologic Unit 01090003, on right bank, at upstream side of Rockland Street bridge at Auburn.

DRAINAGE AREA.--18.2 mi².

PERIOD OF RECORD.--October 2003 to September 2004.

GAGE.--Water-stage recorder. Elevation of gage is 150 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are poor.

EXTREMES FOR OCTOBER 2003 TO SEPTEMBER 2004.--Maximum discharge, 437 ft³/s, Dec. 18, gage height, 4.56 ft, minimum discharge, 2.0 ft³/s, Aug. 13, 14, Sept. 6.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004 DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|-------|------|-------|-------|------|------|------|-------|-------|-------|-------|
| 1 | e12 | e23 | 12 | 39 | 7.5 | 14 | 186 | 46 | 16 | 3.7 | 7.0 | 5.4 |
| 2 | e13 | e18 | 18 | 36 | 7.4 | 20 | 283 | 41 | 19 | 8.4 | 6.1 | 4.3 |
| 3 | 13 | e19 | 19 | 38 | 7.6 | 28 | 141 | 48 | 20 | 6.4 | 5.2 | 3.8 |
| 4 | 15 | e18 | 18 | 45 | 11 | 28 | 92 | 96 | 17 | 4.5 | 4.4 | 3.4 |
| 5 | 21 | e19 | 21 | 65 | 9.4 | 29 | 79 | 80 | 14 | 4.9 | 9.2 | 2.6 |
| 6 | 20 | e19 | 24 | 58 | 12 | 35 | 58 | 56 | 12 | 6.1 | 6.6 | 2.4 |
| 7 | e17 | e19 | 27 | 42 | 22 | 35 | 46 | 41 | 13 | 4.7 | 4.8 | 2.6 |
| 8 | e17 | 26 | 28 | 32 | 15 | 31 | 40 | 27 | 13 | 5.2 | 3.8 | 4.0 |
| 9 | e16 | 25 | 27 | 25 | 13 | 27 | 34 | 24 | 14 | 7.8 | 3.0 | 28 |
| 10 | e16 | 26 | 26 | 21 | 12 | 24 | 28 | 26 | 16 | 5.4 | 2.5 | 20 |
| 11 | e16 | 24 | 56 | 19 | 11 | 23 | 22 | 22 | 16 | 5.8 | 2.4 | 15 |
| 12 | e16 | 23 | 114 | 20 | 10 | 24 | 20 | 19 | 14 | 4.8 | 2.4 | 11 |
| 13 | e17 | 23 | 79 | 20 | 9.8 | 24 | 74 | 17 | 12 | 4.8 | 2.2 | 9.4 |
| 14 | e24 | 20 | 52 | 16 | 9.4 | 24 | 292 | 16 | 11 | 6.8 | 2.2 | 9.8 |
| 15 | e22 | 16 | 82 | 13 | 8.9 | 24 | 186 | 15 | 11 | 6.2 | 8.6 | 9.9 |
| 16 | e17 | 12 | 66 | e12 | 8.2 | 27 | 131 | 14 | 10 | 5.4 | 9.0 | 9.9 |
| 17 | e17 | 11 | 98 | 11 | 7.8 | 29 | 98 | 13 | 9.9 | 4.3 | 10 | 9.8 |
| 18 | e16 | 11 | 332 | 12 | 7.6 | 29 | 80 | 13 | 9.8 | 3.7 | 8.3 | 88 |
| 19 | e18 | 12 | 143 | 12 | 7.6 | 29 | 70 | 17 | 10 | 4.8 | 7.1 | 81 |
| 20 | e15 | 22 | 81 | 10 | 7.5 | 29 | 62 | 14 | 8.4 | 4.6 | 7.3 | 31 |
| 21 | e16 | 32 | 54 | 9.8 | 7.5 | 44 | 51 | 12 | 6.6 | 3.7 | 14 | 21 |
| 22 | e18 | 26 | 41 | 9.6 | 7.8 | 45 | 47 | 11 | 6.0 | 3.3 | 17 | 16 |
| 23 | e16 | 23 | 36 | 9.3 | 7.8 | 38 | 73 | 14 | 6.4 | 2.7 | 13 | 14 |
| 24 | e16 | 20 | 72 | 8.8 | 7.8 | 35 | 85 | 16 | 5.4 | 57 | 11 | 12 |
| 25 | e16 | 13 | 181 | e8.3 | 7.9 | 34 | 62 | 26 | 4.9 | 25 | 8.8 | 11 |
| 26 | e19 | 11 | 121 | 7.7 | 8.5 | 34 | 84 | 19 | 6.2 | 15 | 7.3 | 11 |
| 27 | e26 | 9.9 | 82 | 7.7 | 9.0 | 39 | 129 | 25 | 5.6 | 11 | 6.5 | 13 |
| 28 | e67 | 10 | 62 | 8.5 | 10 | 40 | 96 | 29 | 4.8 | 16 | 6.5 | 38 |
| 29 | e92 | 14 | 54 | 8.7 | 11 | 36 | 63 | 25 | 4.8 | 12 | 6.0 | 78 |
| 30 | e49 | 14 | 50 | 8.3 | --- | 30 | 51 | 19 | 4.1 | 9.9 | 6.3 | 53 |
| 31 | e30 | --- | 44 | 7.9 | --- | 55 | --- | 15 | --- | 8.2 | 7.2 | --- |
| TOTAL | 703 | 558.9 | 2120 | 640.6 | 282.0 | 963 | 2763 | 856 | 320.9 | 272.1 | 215.7 | 618.3 |
| MEAN | 22.7 | 18.6 | 68.4 | 20.7 | 9.72 | 31.1 | 92.1 | 27.6 | 10.7 | 8.78 | 6.96 | 20.6 |
| MAX | 92 | 32 | 332 | 65 | 22 | 55 | 292 | 96 | 20 | 57 | 17 | 88 |
| MIN | 12 | 9.9 | 12 | 7.7 | 7.4 | 14 | 20 | 11 | 4.1 | 2.7 | 2.2 | 2.4 |
| MED | 17 | 19 | 54 | 12 | 8.9 | 29 | 73 | 19 | 11 | 5.4 | 6.6 | 11 |
| AC-FT | 1390 | 1110 | 4210 | 1270 | 559 | 1910 | 5480 | 1700 | 637 | 540 | 428 | 1230 |
| CFSM | 1.25 | 1.02 | 3.76 | 1.14 | 0.53 | 1.71 | 5.06 | 1.52 | 0.59 | 0.48 | 0.38 | 1.13 |
| IN. | 1.44 | 1.14 | 4.33 | 1.31 | 0.58 | 1.97 | 5.65 | 1.75 | 0.66 | 0.56 | 0.44 | 1.26 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2004 - 2004, BY WATER YEAR (WY)

| | 2004 | 2004 | 2004 | 2004 | 2004 | 2004 | 2004 | 2004 | 2004 | 2004 | 2004 | 2004 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 22.7 | 18.6 | 68.4 | 20.7 | 9.72 | 31.1 | 92.1 | 27.6 | 10.7 | 8.78 | 6.96 | 20.6 |
| MAX | 22.7 | 18.6 | 68.4 | 20.7 | 9.72 | 31.1 | 92.1 | 27.6 | 10.7 | 8.78 | 6.96 | 20.6 |
| (WY) | 2004 | 2004 | 2004 | 2004 | 2004 | 2004 | 2004 | 2004 | 2004 | 2004 | 2004 | 2004 |
| MIN | 22.7 | 18.6 | 68.4 | 20.7 | 9.72 | 31.1 | 92.1 | 27.6 | 10.7 | 8.78 | 6.96 | 20.6 |
| (WY) | 2004 | 2004 | 2004 | 2004 | 2004 | 2004 | 2004 | 2004 | 2004 | 2004 | 2004 | 2004 |

SUMMARY STATISTICS

FOR 2004 WATER YEAR

| | | |
|--------------------------|---------|--------|
| ANNUAL TOTAL | 10313.5 | |
| ANNUAL MEAN | 28.2 | |
| HIGHEST DAILY MEAN | 332 | Dec 18 |
| LOWEST DAILY MEAN | 2.2 | Aug 13 |
| ANNUAL SEVEN-DAY MINIMUM | 2.6 | Aug 8 |
| MAXIMUM PEAK FLOW | 437 | Dec 18 |
| MAXIMUM PEAK STAGE | 4.56 | Dec 18 |
| INSTANTANEOUS LOW FLOW | 2.0 | Aug 13 |
| ANNUAL RUNOFF (AC-FT) | 20460 | |
| ANNUAL RUNOFF (CFSM) | 1.55 | |
| ANNUAL RUNOFF (INCHES) | 21.08 | |
| 10 PERCENT EXCEEDS | 65 | |
| 50 PERCENT EXCEEDS | 16 | |
| 90 PERCENT EXCEEDS | 5.4 | |

e Estimated

BLACKSTONE RIVER BASIN

01109730 BLACKSTONE RIVER, W. MAIN ST., AT MILLBURY, MA

LOCATION.--Lat 42° 11' 20", long 71° 45' 56", Worcester County, Hydrologic Unit 01090003, on right bank, 20 ft downstream from West Main Street bridge on Elm Court, 2 mi downstream from Kettle Brook, and 2.5 mi downstream from effluent discharge channel of Upper Blackstone Water Pollution Abatement District waste-water treatment plant, Millbury, MA.

DRAINAGE AREA.--71.4 mi².

PERIOD OF RECORD.--July 2002 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 380 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good except those for estimated daily discharge, which are fair. Twice daily fluctuations from treatment plant, 2.5 mi upstream. Satellite gage-height telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,450 ft³/s, Apr. 14, 2004, gage height, 7.26 ft, minimum discharge, 28 ft³/s, Aug. 15, 2002, Oct. 2, 2003.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,450 ft³/s, Apr. 14, gage height, 7.26 ft, minimum discharge, 28 ft³/s, Oct. 2.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004 DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|------|------|------|------|-------|------|------|------|------|------|
| 1 | 65 | 204 | 115 | 204 | 92 | 101 | 1180 | 226 | 126 | 52 | 71 | 68 |
| 2 | 54 | 178 | 107 | 199 | 89 | 130 | 1250 | 219 | 140 | 110 | 70 | 59 |
| 3 | 67 | 162 | 97 | 210 | 91 | 163 | 554 | 253 | 140 | 60 | 66 | 55 |
| 4 | 64 | 151 | 97 | 228 | 149 | 160 | 404 | 417 | 131 | 51 | 60 | 52 |
| 5 | 65 | 216 | 94 | 287 | 109 | 151 | 352 | 315 | 102 | 65 | 140 | 47 |
| 6 | e54 | 231 | 95 | 249 | 148 | 179 | 294 | 257 | 93 | 60 | 86 | 47 |
| 7 | e69 | 194 | 107 | 216 | 264 | 168 | 254 | 220 | 89 | 55 | 66 | 49 |
| 8 | e76 | 170 | 103 | 186 | 165 | 159 | 227 | 186 | 86 | 71 | 58 | 64 |
| 9 | 71 | 163 | 101 | 168 | 130 | 141 | 208 | 201 | 85 | 76 | 56 | 349 |
| 10 | 71 | 157 | 101 | 150 | 129 | 127 | 192 | 191 | 118 | 60 | 54 | 172 |
| 11 | 68 | 169 | 439 | 142 | 118 | 120 | 174 | 174 | 87 | 60 | 54 | 112 |
| 12 | 93 | 162 | 375 | 144 | 109 | 119 | 160 | 155 | 76 | 53 | 58 | 89 |
| 13 | 84 | 168 | 265 | 146 | 106 | 113 | 673 | 137 | 70 | 74 | 58 | 79 |
| 14 | 76 | 142 | 199 | 137 | 111 | 106 | 1470 | 126 | 71 | 75 | 51 | 70 |
| 15 | 387 | 131 | 302 | 128 | 97 | 106 | 760 | 119 | 71 | 66 | 147 | 68 |
| 16 | 159 | 120 | 245 | 118 | 91 | 104 | 506 | 115 | 67 | 58 | 112 | 70 |
| 17 | 106 | 114 | 537 | 115 | 82 | 113 | 385 | 110 | 64 | 54 | 118 | 66 |
| 18 | 88 | 110 | 1140 | 123 | 84 | 111 | 320 | 104 | 66 | 50 | 81 | 878 |
| 19 | 82 | 107 | 475 | 124 | 83 | 109 | 287 | 176 | 88 | 63 | 71 | 390 |
| 20 | 78 | 193 | 330 | 114 | 83 | 112 | 254 | 121 | 62 | 56 | 77 | 220 |
| 21 | 77 | 160 | 272 | 109 | 82 | 214 | 222 | 108 | 60 | 57 | 258 | 152 |
| 22 | 72 | 148 | 239 | 106 | 91 | 180 | 200 | 100 | 58 | 51 | 180 | 125 |
| 23 | 79 | 133 | 222 | 106 | 93 | 151 | 338 | 107 | 58 | 47 | 122 | 106 |
| 24 | 72 | 129 | 439 | 101 | 87 | 133 | 310 | 125 | 54 | 719 | 91 | 95 |
| 25 | 66 | 136 | 554 | 97 | 83 | 128 | 255 | 206 | 55 | 211 | 80 | 88 |
| 26 | 70 | 117 | 395 | 96 | 82 | 132 | 383 | 146 | 66 | 131 | 72 | 87 |
| 27 | 233 | 108 | 314 | 97 | 81 | 159 | 482 | 200 | 56 | 97 | 65 | 79 |
| 28 | 255 | 120 | 266 | 99 | 83 | 147 | 371 | 211 | 54 | 183 | 62 | 393 |
| 29 | 807 | 153 | 246 | 99 | 90 | 137 | 295 | 167 | 57 | 110 | 59 | 511 |
| 30 | 403 | 122 | 237 | 96 | --- | 126 | 249 | 137 | 53 | 90 | 100 | 308 |
| 31 | 262 | --- | 221 | 95 | --- | 392 | --- | 115 | --- | 79 | 88 | --- |
| TOTAL | 4273 | 4568 | 8729 | 4489 | 3102 | 4491 | 13009 | 5444 | 2403 | 3044 | 2731 | 4948 |
| MEAN | 138 | 152 | 282 | 145 | 107 | 145 | 434 | 176 | 80.1 | 98.2 | 88.1 | 165 |
| MAX | 807 | 231 | 1140 | 287 | 264 | 392 | 1470 | 417 | 140 | 719 | 258 | 878 |
| MIN | 54 | 107 | 94 | 95 | 81 | 101 | 160 | 100 | 53 | 47 | 51 | 47 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2002 - 2004, BY WATER YEAR (WY)

| | 2002 | 2003 | 2004 | 2003 | 2004 | 2003 | 2004 | 2003 | 2004 | 2003 | 2004 | 2003 | 2004 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 117 | 156 | 246 | 146 | 127 | 245 | 360 | 173 | 191 | 97.2 | 89.4 | 112 | 165 |
| MAX | 138 | 160 | 282 | 148 | 147 | 345 | 434 | 176 | 303 | 98.2 | 125 | 165 | 878 |
| (WY) | 2004 | 2003 | 2004 | 2003 | 2003 | 2003 | 2004 | 2004 | 2003 | 2004 | 2003 | 2004 | 2004 |
| MIN | 97.0 | 152 | 210 | 145 | 107 | 145 | 286 | 171 | 80.1 | 96.2 | 55.6 | 72.2 | 47 |
| (WY) | 2003 | 2004 | 2003 | 2004 | 2004 | 2004 | 2003 | 2003 | 2004 | 2003 | 2002 | 2002 | 2002 |

SUMMARY STATISTICS FOR 2003 CALENDAR YEAR FOR 2004 WATER YEAR WATER YEARS 2002 - 2004

| | | | | |
|--------------------------|-------|--------|------|-------------|
| ANNUAL TOTAL | 69786 | 61231 | 175 | |
| ANNUAL MEAN | 191 | 167 | 182 | 2003 |
| HIGHEST ANNUAL MEAN | | | 167 | 2004 |
| LOWEST ANNUAL MEAN | | | | |
| HIGHEST DAILY MEAN | 1140 | Dec 18 | 1470 | Apr 14 2004 |
| LOWEST DAILY MEAN | 49 | Sep 13 | 47 | Jul 23 2002 |
| ANNUAL SEVEN-DAY MINIMUM | 55 | Aug 26 | 53 | Sep 2 2002 |
| MAXIMUM PEAK FLOW | | | 3450 | Apr 14 2004 |
| MAXIMUM PEAK STAGE | | | 7.26 | Apr 14 2004 |
| INSTANTANEOUS LOW FLOW | | | 28 | Oct 2 2003 |
| 10 PERCENT EXCEEDS | 363 | | 314 | |
| 50 PERCENT EXCEEDS | 147 | | 115 | |
| 90 PERCENT EXCEEDS | 71 | | 60 | |

e Estimated

BLACKSTONE RIVER BASIN

01110000 QUINSIGAMOND RIVER AT NORTH GRAFTON, MA

LOCATION.--Lat 42° 13' 49", long 71° 42' 41", Worcester County, Hydrologic Unit 01090003, on right bank 800 ft downstream from dam at outlet of Hovey Pond at North Grafton and 0.3 mi upstream from Bummett Brook.

DRAINAGE AREA.--25.6 mi².

PERIOD OF RECORD.--Discharge: October 1939 to current year.

Water-quality records: Water years, 2000.

REVISED RECORDS.--WDR MA-RI-84-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 335 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Dec. 7, 1939, staff gage at same site and datum.

REMARKS.--Records good except those for estimated daily discharge, which are poor. Some regulation by Lake Quinsigamond 2.3 mi upstream and by ponds upstream. Satellite gage-height telemeter at station.

AVERAGE DISCHARGE.--65 years (water years 1940–2004), 40.8 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 820 ft³/s, Aug. 20, 1955, gage height, 5.15 ft; no flow Aug. 6–9, 22, 1966 (caused by unusual regulation), Sept. 13–17, 1980.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 256 ft³/s, Apr. 2, gage height, 2.98 ft; minimum discharge, 2.2 ft³/s, Sept. 7, 8.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|------|--------|------|------|------|------|------|-------|-------|-------|-------|
| 1 | 19 | 77 | 57 | 49 | e36 | 21 | 149 | 71 | 38 | 5.9 | 19 | 9.9 |
| 2 | 18 | 64 | 52 | 47 | e36 | 24 | 246 | 66 | 37 | 12 | 17 | 7.6 |
| 3 | 15 | 56 | 29 | 48 | e37 | 30 | 227 | 68 | 40 | 14 | 14 | 5.9 |
| 4 | 13 | 49 | 4.0 | 51 | e43 | 31 | 188 | 92 | 42 | 11 | 12 | 4.8 |
| 5 | 14 | 48 | 2.6 | 59 | e31 | 32 | 159 | 83 | 37 | 11 | 16 | 3.7 |
| 6 | 13 | 59 | 6.3 | e44 | e38 | 37 | 131 | 76 | 33 | 12 | 16 | 2.8 |
| 7 | 11 | 53 | 11 | e28 | 45 | 39 | 107 | 70 | 30 | 9.8 | 13 | 2.3 |
| 8 | 10 | 49 | 12 | e32 | 53 | 36 | 96 | 61 | 28 | 8.4 | 11 | 2.9 |
| 9 | 9.9 | 40 | 13 | e25 | 52 | 36 | 85 | 57 | 26 | 12 | 8.9 | 17 |
| 10 | 9.6 | 34 | 14 | e25 | e37 | 34 | 76 | 59 | 27 | 10 | 7.0 | 26 |
| 11 | 9.0 | 32 | 26 | e22 | e33 | 33 | 69 | 56 | 26 | 8.1 | 5.7 | 22 |
| 12 | 11 | 42 | 48 | e26 | 36 | 33 | 63 | 53 | 22 | 6.4 | 4.9 | 17 |
| 13 | 15 | 56 | 42 | e22 | e31 | 33 | 80 | 48 | 19 | 6.2 | 4.7 | 14 |
| 14 | 12 | 54 | 39 | e25 | 30 | 26 | 208 | 43 | 17 | 8.7 | 4.6 | 12 |
| 15 | 35 | 41 | 55 | e25 | e28 | 27 | 211 | 39 | 17 | 8.0 | 10 | 9.3 |
| 16 | 43 | 34 | 60 | e24 | e24 | 25 | 178 | 38 | 16 | 7.3 | 14 | 8.3 |
| 17 | 35 | 31 | 65 | e30 | e21 | 28 | 143 | 36 | 14 | 6.5 | 17 | 8.2 |
| 18 | 30 | 29 | 123 | e36 | e23 | 28 | 120 | 33 | 14 | 5.5 | 15 | 58 |
| 19 | 26 | 37 | 127 | e40 | e23 | 27 | 104 | 42 | 16 | 5.4 | 13 | 105 |
| 20 | 23 | 62 | 114 | e39 | 23 | 26 | 94 | 40 | 15 | 5.4 | 12 | 79 |
| 21 | 20 | 58 | 102 | e37 | 20 | 39 | 80 | 36 | 12 | 4.5 | 18 | 61 |
| 22 | 19 | 51 | 89 | e36 | 20 | 42 | 74 | 34 | 10 | 3.7 | 30 | 48 |
| 23 | 19 | 45 | 82 | e34 | 20 | 35 | 84 | 33 | 10 | 2.8 | 26 | 38 |
| 24 | 17 | 65 | 49 | e34 | 20 | 33 | 94 | 33 | 8.4 | 50 | 22 | 31 |
| 25 | 14 | 84 | 39 | e31 | 20 | 32 | 81 | 47 | 7.7 | 67 | 17 | 25 |
| 26 | 13 | 80 | 50 | e32 | 19 | 32 | 85 | 44 | 8.9 | 52 | 14 | 22 |
| 27 | 23 | 77 | 53 | e32 | 19 | 34 | 109 | 51 | 9.9 | 39 | 12 | 18 |
| 28 | 41 | 68 | 53 | e33 | 19 | 35 | 104 | 54 | 8.3 | 41 | 10 | 33 |
| 29 | 84 | 68 | 53 | e34 | 19 | 33 | 87 | 58 | 8.0 | 37 | 8.7 | 85 |
| 30 | 118 | 61 | 54 | e35 | -- | 31 | 77 | 48 | 7.2 | 29 | 7.6 | 83 |
| 31 | 95 | --- | 50 | e35 | --- | 47 | --- | 40 | --- | 23 | 11 | --- |
| TOTAL | 834.5 | 1604 | 1573.9 | 1070 | 856 | 999 | 3609 | 1609 | 604.4 | 522.6 | 411.1 | 859.7 |
| MEAN | 26.9 | 53.5 | 50.8 | 34.5 | 29.5 | 32.2 | 120 | 51.9 | 20.1 | 16.9 | 13.3 | 28.7 |
| MAX | 118 | 84 | 127 | 59 | 53 | 47 | 246 | 92 | 42 | 67 | 30 | 105 |
| MIN | 9.0 | 29 | 2.6 | 22 | 19 | 21 | 63 | 33 | 7.2 | 2.8 | 4.6 | 2.3 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2004, BY WATER YEAR (WY)

| | | | | | | | | | | | | |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 20.2 | 32.1 | 43.0 | 46.6 | 52.2 | 77.1 | 77.6 | 51.5 | 38.4 | 19.4 | 16.9 | 15.2 |
| MAX | 94.3 | 149 | 109 | 159 | 141 | 154 | 202 | 92.3 | 143 | 64.2 | 169 | 130 |
| (WY) | 1956 | 1956 | 1997 | 1979 | 1970 | 1972 | 1987 | 1954 | 1982 | 1959 | 1955 | 1954 |
| MIN | 1.22 | 1.80 | 3.07 | 7.85 | 11.0 | 29.1 | 22.5 | 18.7 | 2.81 | 2.67 | 0.05 | 0.70 |
| (WY) | 1943 | 1942 | 1942 | 1981 | 1977 | 2002 | 1966 | 1999 | 1999 | 1965 | 1999 | 1995 |

SUMMARY STATISTICS

| | FOR 2003 CALENDAR YEAR | | | | | | FOR 2004 WATER YEAR | | | WATER YEARS 1940 - 2004 | | |
|--------------------------|------------------------|--|--------|--|------|--|---------------------|------|--|-------------------------|--|--|
| ANNUAL TOTAL | 17922.8 | | | | | | 14553.2 | | | | | |
| ANNUAL MEAN | 49.1 | | | | | | 39.8 | | | 40.8 | | |
| HIGHEST ANNUAL MEAN | | | | | | | | | | 68.4 | | |
| LOWEST ANNUAL MEAN | | | | | | | | | | 16.5 | | |
| HIGHEST DAILY MEAN | 243 | | Jun 23 | | 246 | | Apr 2 | 790 | | Aug 20 1955 | | |
| LOWEST DAILY MEAN | 2.6 | | Dec 5 | | 2.3 | | Sep 7 | 0.00 | | Aug 6 1966 | | |
| ANNUAL SEVEN-DAY MINIMUM | 7.3 | | Sep 9 | | 4.3 | | Sep 2 | 0.01 | | Sep 11 1980 | | |
| MAXIMUM PEAK FLOW | 256 | | Apr 2 | | 256 | | Apr 2 | 820 | | Aug 20 1955 | | |
| MAXIMUM PEAK STAGE | 2.98 | | Apr 2 | | 2.98 | | Apr 2 | 5.15 | | Aug 20 1955 | | |
| INSTANTANEOUS LOW FLOW | 2.2 | | Sep 7 | | 2.2 | | Sep 7 | 0.00 | | Aug 6 1966 | | |
| 10 PERCENT EXCEEDS | 101 | | | | | | 82 | | | 86 | | |
| 50 PERCENT EXCEEDS | 41 | | | | | | 32 | | | 30 | | |
| 90 PERCENT EXCEEDS | 11 | | | | | | 8.4 | | | 5.4 | | |

e Estimated

BLACKSTONE RIVER BASIN

01110500 BLACKSTONE RIVER AT NORTHBRIDGE, MA

LOCATION.--Lat 42° 09' 13", long 71° 39' 09", Worcester County, Hydrologic Unit 01090003, on left bank at Northbridge, 100 ft downstream from Sutton Street Bridge, and 3.0 mi downstream from Quinsigamond River.

DRAINAGE AREA.--139 mi².

PERIOD OF RECORD.--Discharge: October 1939 to September 1977. October 1995 to September 2003 (discharge record discontinued). October and November 1939 monthly discharge only, published in WSP 1301.

Gage height records: October 2003 to current year.

Water-quality records: Water years, 1955, 1958, 1971.

REVISED RECORDS.--WSP 1301: 1940 (M).

GAGE.--Water-stage recorder. Telephone and satellite gage-height telemeter at station. Datum of gage is 255.00 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Periods of missing gage height record are not estimated. Gage height affected by three upstream waste-water treatment plants and upstream and downstream reservoirs.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,900 ft³/s, Aug. 20, 1955, gage height, 16.74 ft, from rating curve extended above 3,800 ft³/s on basis of computation of flow over dam at gage height 13.7 ft and slope-area measurement at gage height 16.74 ft; maximum gage height, 17.53 ft, Aug. 20, 1955, backwater from debris; minimum daily discharge, 2.0 ft³/s, Aug. 29, 1941, Sept. 5, 1942, Aug. 28, 1957.

EXTREMES OUTSIDE PERIOD OF RECORD.--Stage and discharge of flood of Aug. 20, 1955, are the greatest since at least 1900. Flood of Mar. 19, 1936, reached a stage of 13.7 ft from floodmarks, discharge, 7,510 ft³/s by computation of flow over dam 800 ft upstream.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 8.50 ft, Apr. 14; minimum, 3.06 ft, Sept. 6.

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY | OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | | |
|-------|---------|------|------|----------|------|------|----------|------|------|---------|------|------|
| | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
| 1 | 3.46 | 3.23 | 3.30 | 4.50 | 4.36 | 4.43 | 3.70 | 3.66 | 3.67 | 4.19 | 4.09 | 4.13 |
| 2 | 3.41 | 3.21 | 3.29 | 4.36 | 4.21 | 4.26 | 3.66 | 3.56 | 3.60 | 4.09 | 4.03 | 4.05 |
| 3 | 3.52 | 3.21 | 3.34 | 4.21 | 4.02 | 4.09 | 3.58 | 3.46 | 3.51 | 4.13 | 4.03 | 4.06 |
| 4 | 3.30 | 3.21 | 3.26 | 4.04 | 3.91 | 3.97 | 3.48 | 3.36 | 3.42 | 4.21 | 4.13 | 4.14 |
| 5 | 3.55 | 3.25 | 3.40 | 4.14 | 3.87 | 3.94 | 3.50 | 3.30 | 3.36 | 4.44 | 4.21 | 4.36 |
| 6 | 3.37 | 3.21 | 3.25 | 4.38 | 4.14 | 4.34 | 3.56 | 3.28 | 3.37 | 4.45 | 4.38 | 4.42 |
| 7 | 3.31 | 3.19 | 3.25 | 4.36 | 4.16 | 4.25 | 3.57 | 3.33 | 3.38 | 4.38 | 4.22 | 4.30 |
| 8 | 3.31 | 3.21 | 3.27 | 4.16 | 3.98 | 4.05 | 3.46 | 3.32 | 3.38 | 4.22 | 4.05 | 4.12 |
| 9 | 3.31 | 3.22 | 3.27 | 4.00 | 3.92 | 3.95 | 3.54 | 3.34 | 3.39 | 4.05 | 3.93 | 3.97 |
| 10 | 3.30 | 3.22 | 3.26 | 3.92 | 3.78 | 3.83 | 3.39 | 3.32 | 3.36 | 4.06 | 3.84 | 3.93 |
| 11 | 3.29 | 3.21 | 3.26 | 3.85 | 3.75 | 3.78 | 5.50 | 3.38 | 3.91 | 3.93 | 3.72 | 3.81 |
| 12 | 3.45 | 3.24 | 3.29 | 3.88 | 3.80 | 3.83 | 5.43 | 4.69 | 4.96 | 3.76 | 3.69 | 3.73 |
| 13 | 3.47 | 3.33 | 3.39 | 4.12 | 3.79 | 3.89 | 4.69 | 4.28 | 4.43 | 3.74 | 3.68 | 3.72 |
| 14 | 3.44 | 3.29 | 3.34 | 3.93 | 3.80 | 3.86 | 4.28 | 4.04 | 4.14 | 3.74 | 3.63 | 3.69 |
| 15 | 4.48 | 3.33 | 3.97 | 3.84 | 3.81 | 3.82 | 4.58 | 4.05 | 4.30 | --- | --- | --- |
| 16 | 4.33 | 3.89 | 4.11 | 3.83 | 3.76 | 3.79 | 4.54 | 4.30 | 4.37 | --- | --- | --- |
| 17 | 3.89 | 3.57 | 3.70 | 3.76 | 3.63 | 3.67 | 6.58 | 4.22 | 4.51 | --- | --- | --- |
| 18 | 3.57 | 3.45 | 3.50 | 3.67 | 3.57 | 3.61 | 7.61 | 6.35 | 7.05 | --- | --- | --- |
| 19 | 3.50 | 3.40 | 3.45 | 3.59 | 3.52 | 3.56 | 6.35 | 5.18 | 5.65 | 3.61 | 3.55 | 3.58 |
| 20 | 3.53 | 3.37 | 3.44 | 4.01 | 3.55 | 3.80 | 5.18 | 4.83 | 4.96 | 3.59 | 3.48 | 3.53 |
| 21 | 3.41 | 3.35 | 3.39 | 3.99 | 3.92 | 3.94 | 4.83 | 4.54 | 4.66 | 3.54 | 3.44 | 3.49 |
| 22 | 3.40 | 3.32 | 3.36 | 3.93 | 3.81 | 3.86 | 4.54 | 4.42 | 4.46 | 3.50 | 3.42 | 3.47 |
| 23 | 3.46 | 3.36 | 3.40 | 3.81 | 3.71 | 3.74 | 4.42 | 4.36 | 4.39 | 3.48 | 3.41 | 3.46 |
| 24 | 3.44 | 3.37 | 3.41 | 3.72 | 3.67 | 3.69 | 5.91 | 4.33 | 4.54 | 3.48 | 3.40 | 3.44 |
| 25 | 3.40 | 3.33 | 3.37 | 3.88 | 3.72 | 3.82 | 5.93 | 5.21 | 5.46 | 3.81 | 3.41 | 3.55 |
| 26 | 3.44 | 3.34 | 3.37 | 3.86 | 3.76 | 3.80 | 5.21 | 4.77 | 4.95 | 3.82 | 3.26 | 3.43 |
| 27 | 4.08 | 3.44 | 3.72 | 3.78 | 3.74 | 3.76 | 4.77 | 4.54 | 4.62 | 3.49 | 3.34 | 3.38 |
| 28 | 4.36 | 4.08 | 4.27 | 3.85 | 3.68 | 3.73 | 4.54 | 4.35 | 4.45 | 3.42 | 3.32 | 3.37 |
| 29 | 6.87 | 4.22 | 5.40 | 4.05 | 3.85 | 3.91 | 4.35 | 4.27 | 4.31 | 3.42 | 3.34 | 3.38 |
| 30 | 6.01 | 5.00 | 5.42 | 3.86 | 3.70 | 3.75 | 4.31 | 4.25 | 4.27 | 3.44 | 3.32 | 3.37 |
| 31 | 5.00 | 4.50 | 4.70 | --- | --- | --- | 4.26 | 4.19 | 4.21 | 3.57 | 3.32 | 3.37 |
| MONTH | 6.87 | 3.19 | 3.62 | 4.50 | 3.52 | 3.89 | 7.61 | 3.28 | 4.29 | --- | --- | --- |

BLACKSTONE RIVER BASIN
01110500 BLACKSTONE RIVER AT NORTHBRIDGE, MA--Continued

| DAY | MAX | FEBRUARY | | | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|------|----------|------|------|------|------|------|------|------|------|------|------|------|
| | | MIN | MEAN | MAX | | | | | | | | | |
| 1 | 3.69 | 3.28 | 3.51 | 3.44 | 3.30 | 3.37 | 7.93 | 5.51 | 6.60 | 4.54 | 4.43 | 4.48 | |
| 2 | 3.47 | 3.26 | 3.33 | 3.59 | 3.40 | 3.46 | 8.12 | 6.78 | 7.62 | 4.43 | 4.33 | 4.36 | |
| 3 | 3.36 | 3.27 | 3.31 | 3.71 | 3.59 | 3.67 | 6.78 | 5.67 | 6.13 | 4.52 | 4.34 | 4.38 | |
| 4 | 3.62 | 3.35 | 3.46 | 3.71 | 3.67 | 3.69 | 5.67 | 5.29 | 5.45 | 5.58 | 4.52 | 5.19 | |
| 5 | 3.61 | 3.38 | 3.45 | 3.69 | 3.61 | 3.65 | 5.29 | 5.02 | 5.16 | 5.16 | 4.81 | 4.99 | |
| 6 | 3.76 | 3.34 | 3.43 | 3.85 | 3.64 | 3.73 | 5.02 | 4.75 | 4.87 | 4.81 | 4.58 | 4.67 | |
| 7 | 4.27 | 3.76 | 4.09 | 3.85 | 3.77 | 3.80 | 4.75 | 4.57 | 4.65 | 4.58 | 4.41 | 4.50 | |
| 8 | 4.27 | 3.89 | 4.06 | 3.77 | 3.67 | 3.72 | 4.57 | 4.43 | 4.51 | 4.51 | 4.19 | 4.33 | |
| 9 | 3.89 | 3.63 | 3.72 | 3.72 | 3.60 | 3.64 | 4.43 | 4.31 | 4.36 | 4.26 | 4.08 | 4.15 | |
| 10 | 3.63 | 3.53 | 3.58 | 3.60 | 3.50 | 3.54 | 4.31 | 4.18 | 4.23 | 4.27 | 4.23 | 4.25 | |
| 11 | 3.63 | 3.49 | 3.55 | 3.53 | 3.47 | 3.50 | 4.18 | 4.06 | 4.11 | 4.23 | 4.11 | 4.17 | |
| 12 | 3.51 | 3.42 | 3.47 | 3.50 | 3.46 | 3.48 | 4.06 | 4.00 | 4.02 | 4.11 | 3.99 | 4.04 | |
| 13 | 3.46 | 3.40 | 3.43 | 3.50 | 3.43 | 3.47 | 7.01 | 4.01 | 4.46 | 3.99 | 3.86 | 3.92 | |
| 14 | 3.45 | 3.39 | 3.43 | 3.47 | 3.40 | 3.43 | 8.50 | 6.95 | 7.75 | 3.86 | 3.78 | 3.81 | |
| 15 | 3.45 | 3.35 | 3.39 | 3.45 | 3.38 | 3.42 | 6.95 | 6.49 | 6.73 | 3.79 | 3.69 | 3.72 | |
| 16 | 3.39 | 3.30 | 3.36 | 3.43 | 3.38 | 3.41 | 6.49 | 5.70 | 6.06 | 3.71 | 3.64 | 3.67 | |
| 17 | 3.37 | 3.27 | 3.32 | 3.45 | 3.40 | 3.43 | 5.70 | 5.22 | 5.44 | 3.68 | 3.61 | 3.64 | |
| 18 | 3.34 | 3.26 | 3.31 | 3.45 | 3.39 | 3.43 | 5.22 | 4.92 | 5.05 | 3.68 | 3.55 | 3.60 | |
| 19 | 3.36 | 3.26 | 3.31 | 3.45 | 3.39 | 3.43 | 4.92 | 4.76 | 4.83 | 4.07 | 3.68 | 3.94 | |
| 20 | 3.33 | 3.25 | 3.30 | 3.50 | 3.37 | 3.42 | 4.80 | 4.56 | 4.68 | 3.92 | 3.73 | 3.80 | |
| 21 | 3.35 | 3.25 | 3.30 | 3.99 | 3.50 | 3.83 | 4.56 | 4.37 | 4.47 | 3.73 | 3.61 | 3.66 | |
| 22 | 3.52 | 3.25 | 3.32 | 3.99 | 3.89 | 3.93 | 4.37 | 4.28 | 4.30 | 3.63 | 3.50 | 3.56 | |
| 23 | 3.43 | 3.28 | 3.34 | 3.89 | 3.72 | 3.79 | 5.29 | 4.31 | 4.69 | 3.57 | 3.53 | 3.55 | |
| 24 | 3.36 | 3.27 | 3.32 | 3.72 | 3.62 | 3.65 | 5.05 | 4.82 | 4.92 | 3.82 | 3.53 | 3.65 | |
| 25 | 3.33 | 3.26 | 3.30 | 3.62 | 3.56 | 3.59 | 4.82 | 4.60 | 4.66 | 4.06 | 3.70 | 3.95 | |
| 26 | 3.32 | 3.25 | 3.29 | 3.61 | 3.58 | 3.60 | 5.41 | 4.57 | 4.94 | 3.95 | 3.82 | 3.88 | |
| 27 | 3.32 | 3.25 | 3.29 | 3.77 | 3.61 | 3.68 | 5.69 | 5.40 | 5.58 | 4.30 | 3.80 | 4.06 | |
| 28 | 3.43 | 3.25 | 3.30 | 3.77 | 3.67 | 3.71 | 5.46 | 5.02 | 5.23 | 4.41 | 4.25 | 4.30 | |
| 29 | 3.39 | 3.27 | 3.33 | 3.69 | 3.61 | 3.64 | 5.02 | 4.70 | 4.86 | 4.33 | 4.06 | 4.19 | |
| 30 | --- | --- | --- | 3.62 | 3.54 | 3.57 | 4.70 | 4.54 | 4.60 | 4.06 | 3.82 | 3.92 | |
| 31 | --- | --- | --- | 5.51 | 3.51 | 3.90 | --- | --- | --- | 3.82 | 3.65 | 3.71 | |
| MONTH | 4.27 | 3.25 | 3.43 | 5.51 | 3.30 | 3.60 | 8.50 | 4.00 | 5.17 | 5.58 | 3.50 | 4.07 | |

| DAY | MAX | JUNE | | | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | MIN | MEAN | MAX | | | | | | | | | |
| 1 | 3.73 | 3.64 | 3.68 | 3.19 | 3.09 | 3.15 | 3.33 | 3.23 | 3.28 | 3.24 | 3.12 | 3.20 | |
| 2 | 3.79 | 3.62 | 3.67 | 3.49 | 3.15 | 3.32 | 3.47 | 3.24 | 3.30 | 3.22 | 3.10 | 3.17 | |
| 3 | 3.82 | 3.66 | 3.73 | 3.29 | 3.17 | 3.22 | 3.51 | 3.12 | 3.32 | 3.20 | 3.08 | 3.15 | |
| 4 | 3.85 | 3.68 | 3.76 | 3.21 | 3.12 | 3.18 | 3.51 | 3.16 | 3.30 | 3.28 | 3.08 | 3.16 | |
| 5 | 3.68 | 3.55 | 3.59 | 3.36 | 3.14 | 3.21 | 3.67 | 3.18 | 3.41 | 3.15 | 3.08 | 3.12 | |
| 6 | 3.55 | 3.47 | 3.50 | 3.32 | 3.18 | 3.23 | 3.47 | 3.27 | 3.33 | 3.15 | 3.06 | 3.11 | |
| 7 | 3.52 | 3.44 | 3.49 | 3.22 | 3.13 | 3.19 | 3.28 | 3.16 | 3.23 | 3.34 | 3.12 | 3.23 | |
| 8 | 3.52 | 3.44 | 3.48 | 3.32 | 3.13 | 3.19 | 3.23 | 3.13 | 3.19 | 3.36 | 3.08 | 3.21 | |
| 9 | 3.48 | 3.36 | 3.42 | 3.33 | 3.19 | 3.25 | 3.21 | 3.09 | 3.17 | 4.19 | 3.21 | 3.79 | |
| 10 | 3.59 | 3.41 | 3.51 | 3.22 | 3.14 | 3.19 | 3.18 | 3.09 | 3.16 | 4.18 | 3.58 | 3.85 | |
| 11 | 3.58 | 3.42 | 3.48 | 3.20 | 3.14 | 3.18 | 3.42 | 3.10 | 3.22 | 3.58 | 3.37 | 3.43 | |
| 12 | 3.45 | 3.35 | 3.40 | 3.18 | 3.11 | 3.15 | 3.43 | 3.11 | 3.23 | 3.37 | 3.25 | 3.31 | |
| 13 | 3.39 | 3.29 | 3.33 | 3.30 | 3.10 | 3.16 | 3.18 | 3.10 | 3.15 | 3.30 | 3.19 | 3.26 | |
| 14 | 3.33 | 3.15 | 3.29 | 3.36 | 3.18 | 3.25 | 3.16 | 3.08 | 3.13 | 3.25 | 3.17 | 3.22 | |
| 15 | 3.31 | 3.24 | 3.29 | 3.22 | 3.16 | 3.20 | 3.68 | 3.13 | 3.39 | 3.23 | 3.15 | 3.20 | |
| 16 | 3.31 | 3.22 | 3.27 | 3.20 | 3.10 | 3.17 | 3.49 | 3.28 | 3.35 | 3.24 | 3.15 | 3.19 | |
| 17 | 3.27 | 3.20 | 3.24 | 3.18 | 3.10 | 3.15 | 3.52 | 3.34 | 3.41 | 3.23 | 3.15 | 3.19 | |
| 18 | 3.27 | 3.20 | 3.24 | 3.17 | 3.09 | 3.14 | 3.34 | 3.23 | 3.27 | 6.80 | 3.18 | 4.77 | |
| 19 | 3.40 | 3.21 | 3.30 | 3.19 | 3.11 | 3.15 | 3.26 | 3.18 | 3.22 | 6.22 | 4.75 | 5.27 | |
| 20 | 3.30 | 3.18 | 3.24 | 3.18 | 3.10 | 3.15 | 3.23 | 3.16 | 3.20 | 4.75 | 4.31 | 4.51 | |
| 21 | 3.25 | 3.15 | 3.21 | 3.19 | 3.09 | 3.14 | 4.19 | 3.22 | 3.53 | 4.31 | 3.91 | 4.09 | |
| 22 | 3.23 | 3.16 | 3.20 | 3.16 | 3.07 | 3.13 | 4.26 | 3.70 | 4.00 | 3.91 | 3.68 | 3.79 | |
| 23 | 3.25 | 3.14 | 3.20 | 3.14 | 3.08 | 3.12 | 3.70 | 3.44 | 3.53 | 3.68 | 3.51 | 3.57 | |
| 24 | 3.22 | 3.12 | 3.18 | 6.07 | 3.08 | 4.53 | 3.44 | 3.31 | 3.36 | 3.51 | 3.40 | 3.45 | |
| 25 | 3.28 | 3.13 | 3.17 | 4.91 | 4.14 | 4.47 | 3.32 | 3.23 | 3.29 | 3.64 | 3.38 | 3.53 | |
| 26 | 3.25 | 3.15 | 3.21 | 4.14 | 3.66 | 3.88 | 3.27 | 3.17 | 3.24 | 3.63 | 3.54 | 3.58 | |
| 27 | 3.27 | 3.14 | 3.20 | 3.66 | 3.43 | 3.50 | 3.24 | 3.17 | 3.21 | 3.59 | 3.25 | 3.39 | |
| 28 | 3.21 | 3.11 | 3.17 | 3.98 | 3.43 | 3.74 | 3.22 | 3.15 | 3.18 | 5.39 | 3.28 | 3.83 | |
| 29 | 3.22 | 3.12 | 3.18 | 3.68 | 3.47 | 3.54 | 3.21 | 3.13 | 3.17 | 5.78 | 5.03 | 5.41 | |
| 30 | 3.20 | 3.10 | 3.16 | 3.47 | 3.35 | 3.39 | 3.34 | 3.12 | 3.17 | 5.32 | 4.63 | 4.91 | |
| 31 | --- | --- | --- | 3.36 | 3.28 | 3.32 | 3.54 | 3.23 | 3.35 | --- | --- | --- | |
| MONTH | 3.85 | 3.10 | 3.36 | 6.07 | 3.07 | 3.34 | 4.26 | 3.08 | 3.30 | 6.80 | 3.06 | 3.66 | |

BLACKSTONE RIVER BASIN
01111050 MUMFORD RIVER AT UXBRIDGE, MA

LOCATION.--Lat 42° 04'30", long 71° 37'35", Worcester County, Hydrologic Unit 01090003, on right bank at upstream side of Depot Street bridge, 0.25 mi east of Uxbridge, MA.

DRAINAGE AREA.--57.0 mi².

PERIOD OF RECORD.--October 2003 to September 2004.

REMARKS.--Records good except those for estimated daily discharge, which are fair.

EXTREMES FOR OCTOBER 2003 TO SEPTEMBER 2004.--Maximum discharge, 827 ft³/s, Apr. 14, gage height, 7.92 ft; minimum discharge, 19 ft³/s, July 23, Aug. 11, 12, 13, 14, Sept. 5, 6, 7, 8.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
 DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|-------|------|------|------|-------|------|------|------|------|------|
| 1 | e23 | 95 | 48 | 165 | 43 | 48 | 433 | 171 | 141 | 29 | 24 | 22 |
| 2 | e23 | 82 | 43 | 161 | 42 | 56 | 694 | 181 | 121 | 46 | 24 | 22 |
| 3 | 24 | 76 | 38 | 163 | 42 | 69 | 470 | 204 | 104 | 35 | 23 | 21 |
| 4 | 23 | 70 | 37 | 170 | 52 | 73 | 338 | 268 | 84 | 31 | 22 | 20 |
| 5 | 24 | 72 | 36 | 203 | 49 | 72 | 301 | 241 | 69 | 51 | 29 | 19 |
| 6 | 24 | 81 | 42 | 205 | 61 | 83 | 261 | 192 | 62 | 53 | 27 | 19 |
| 7 | 27 | 81 | 48 | 179 | 97 | 90 | 239 | 162 | 60 | 45 | 25 | 19 |
| 8 | 36 | 82 | 44 | 159 | 95 | 83 | 202 | 137 | 57 | 37 | 23 | 23 |
| 9 | 42 | 81 | 41 | e141 | 74 | 74 | 173 | 140 | 54 | 33 | 22 | 35 |
| 10 | 42 | 78 | 39 | e130 | 66 | 66 | 135 | 155 | 51 | 30 | 21 | 36 |
| 11 | 40 | 76 | 86 | 136 | 62 | 63 | 108 | 149 | 47 | 27 | 20 | 28 |
| 12 | 40 | 78 | 215 | 112 | 57 | 63 | 97 | 139 | 42 | 26 | 21 | 25 |
| 13 | 41 | 104 | 156 | 83 | 54 | 61 | 180 | 107 | 39 | 28 | 21 | 22 |
| 14 | 39 | 111 | 112 | e67 | 52 | 56 | 741 | 88 | 37 | 30 | 20 | 21 |
| 15 | 80 | 105 | 168 | 65 | 50 | 54 | 546 | 77 | 36 | 29 | 34 | 20 |
| 16 | 69 | 106 | 161 | e57 | 47 | 54 | 420 | 71 | 35 | 28 | 37 | 20 |
| 17 | 57 | 105 | 178 | e56 | 45 | 58 | 346 | 68 | 33 | 27 | 38 | 20 |
| 18 | 51 | 101 | 543 | 58 | 44 | 54 | 280 | 67 | 33 | 26 | 32 | 111 |
| 19 | 45 | 93 | 424 | 55 | 43 | 52 | 228 | 107 | 32 | 28 | 28 | 199 |
| 20 | 44 | 96 | 270 | 54 | 42 | 52 | 194 | 103 | 29 | 27 | 26 | 92 |
| 21 | 42 | 93 | 224 | 52 | 40 | 76 | 202 | 104 | 27 | 23 | 39 | 71 |
| 22 | 42 | 87 | 201 | 50 | 41 | 98 | 189 | 102 | 26 | 21 | 59 | 58 |
| 23 | 43 | 85 | 188 | 50 | 42 | 84 | 209 | 104 | 25 | 20 | 44 | 48 |
| 24 | 41 | 82 | 198 | 53 | 44 | 72 | 221 | 104 | 24 | 42 | 33 | 44 |
| 25 | 38 | 63 | 312 | 49 | 44 | 67 | 181 | 96 | 31 | 33 | 28 | 43 |
| 26 | 31 | 46 | 270 | 48 | 43 | 65 | 232 | 85 | 59 | 29 | 25 | 39 |
| 27 | 43 | 41 | 222 | 46 | 42 | 67 | 327 | 98 | 49 | 26 | 24 | 38 |
| 28 | 60 | 41 | 198 | 47 | 42 | 69 | 273 | 135 | 39 | 31 | 23 | 135 |
| 29 | 197 | 56 | 188 | 46 | 44 | 64 | 200 | 179 | 36 | 32 | 22 | 323 |
| 30 | 297 | 50 | 182 | 45 | --- | 60 | 174 | 166 | 32 | 28 | 22 | 260 |
| 31 | 144 | --- | 172 | 44 | --- | 88 | --- | 165 | --- | 26 | 24 | --- |
| TOTAL | 1772 | 2417 | 5084 | 2949 | 1499 | 2091 | 8594 | 4165 | 1514 | 977 | 860 | 1853 |
| MEAN | 57.2 | 80.6 | 164 | 95.1 | 51.7 | 67.5 | 286 | 134 | 50.5 | 31.5 | 27.7 | 61.8 |
| MAX | 297 | 111 | 543 | 205 | 97 | 98 | 741 | 268 | 141 | 53 | 59 | 323 |
| MIN | 23 | 41 | 36 | 44 | 40 | 48 | 97 | 67 | 24 | 20 | 20 | 19 |
| MED | 42 | 82 | 172 | 58 | 44 | 66 | 230 | 135 | 39 | 29 | 24 | 31 |
| AC-FT | 3510 | 4790 | 10080 | 5850 | 2970 | 4150 | 17050 | 8260 | 3000 | 1940 | 1710 | 3680 |
| CFSM | 1.00 | 1.41 | 2.88 | 1.67 | 0.91 | 1.18 | 5.03 | 2.36 | 0.89 | 0.55 | 0.49 | 1.08 |
| IN. | 1.16 | 1.58 | 3.32 | 1.92 | 0.98 | 1.36 | 5.61 | 2.72 | 0.99 | 0.64 | 0.56 | 1.21 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2004 - 2004, BY WATER YEAR (WY)

| | 2004 | 2004 | 2004 | 2004 | 2004 | 2004 | 2004 | 2004 | 2004 | 2004 | 2004 | 2004 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 57.2 | 80.6 | 164 | 95.1 | 51.7 | 67.5 | 286 | 134 | 50.5 | 31.5 | 27.7 | 61.8 |
| MAX | 57.2 | 80.6 | 164 | 95.1 | 51.7 | 67.5 | 286 | 134 | 50.5 | 31.5 | 27.7 | 61.8 |
| (WY) | 2004 | 2004 | 2004 | 2004 | 2004 | 2004 | 2004 | 2004 | 2004 | 2004 | 2004 | 2004 |
| MIN | 57.2 | 80.6 | 164 | 95.1 | 51.7 | 67.5 | 286 | 134 | 50.5 | 31.5 | 27.7 | 61.8 |
| (WY) | 2004 | 2004 | 2004 | 2004 | 2004 | 2004 | 2004 | 2004 | 2004 | 2004 | 2004 | 2004 |

SUMMARY STATISTICS

FOR 2004 WATER YEAR

| | | |
|--------------------------|-------|--------|
| ANNUAL TOTAL | 33775 | |
| ANNUAL MEAN | 92.3 | |
| HIGHEST DAILY MEAN | 741 | Apr 14 |
| LOWEST DAILY MEAN | 19 | Sep 5 |
| ANNUAL SEVEN-DAY MINIMUM | 20 | Sep 1 |
| MAXIMUM PEAK FLOW | 827 | Apr 14 |
| MAXIMUM PEAK STAGE | 7.92 | Apr 14 |
| INSTANTANEOUS LOW FLOW | 19 | Jul 23 |
| ANNUAL RUNOFF (AC-FT) | 66990 | |
| ANNUAL RUNOFF (CFSM) | 1.62 | |
| ANNUAL RUNOFF (INCHES) | 22.04 | |
| 10 PERCENT EXCEEDS | 201 | |
| 50 PERCENT EXCEEDS | 56 | |
| 90 PERCENT EXCEEDS | 24 | |

e Estimated

BLACKSTONE RIVER BASIN

0111300 NIPMUC RIVER NEAR HARRISVILLE, RI

LOCATION.--Lat 41°58'52", long 71°41'11", Providence County, Hydrologic Unit 01090003, on left bank 1.0 mi upstream from mouth and 1.2 mi northwest of Harrisville.

DRAINAGE AREA.--16.0 mi².

PERIOD OF RECORD.--Discharge: March 1964 to September 1991, October 1993 to current year.

Water-quality records: Water year 1968.

REVISED RECORDS.--WDR MA-RI-98-1: 1999.

GAGE.--Water-stage recorder. Elevation of gage is 340 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good except those for estimated daily discharge, which are poor

AVERAGE DISCHARGE.--38 years (water years 1965-91, 1994-2004), 30.3 ft³/s, 25.70 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,840 ft³/s, Jan. 25, 1979, gage height, 8.53 ft, from rating curve extended above 530 ft³/s; minimum discharge, no flow, Sept. 5, 6, 1999.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,190 ft³/s, Apr. 14, gage height, 7.41 ft; minimum discharge, 0.80 ft³/s, Sept. 7.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|------|------|------|------|------|------|------|-------|-------|-------|--------|
| 1 | 3.4 | 34 | 19 | 35 | e11 | 21 | 231 | 47 | 21 | 3.8 | 2.9 | 2.4 |
| 2 | 3.2 | 27 | 16 | 34 | e12 | 30 | 211 | 44 | 22 | 7.1 | 2.8 | 2.1 |
| 3 | 3.0 | 23 | 14 | 35 | e13 | 38 | 110 | 49 | 25 | 8.8 | 2.3 | 1.7 |
| 4 | 2.9 | 21 | 13 | 40 | e19 | 34 | 77 | 104 | 21 | 5.8 | 2.0 | 1.4 |
| 5 | 3.0 | 21 | 13 | 60 | e20 | 30 | 63 | 71 | 17 | 16 | 6.3 | 1.2 |
| 6 | 2.8 | 27 | 17 | 56 | e26 | 43 | 51 | 52 | 16 | 30 | 6.9 | 1.0 |
| 7 | 2.7 | 23 | 20 | 42 | e54 | 44 | 46 | 45 | 16 | 16 | 4.8 | 0.90 |
| 8 | 2.7 | 20 | 16 | e35 | e49 | e32 | 41 | 38 | 14 | 10 | 3.6 | 2.7 |
| 9 | 2.7 | 17 | 15 | e30 | e39 | 28 | 38 | 38 | 12 | 7.6 | 2.9 | 10 |
| 10 | 2.7 | 16 | 15 | e25 | e29 | 26 | 35 | 44 | 13 | 5.9 | 2.3 | 12 |
| 11 | 2.8 | 16 | 72 | e21 | e25 | 26 | 33 | 37 | 13 | 4.8 | 1.9 | 6.9 |
| 12 | 3.0 | 18 | 138 | e19 | e22 | 27 | 31 | 32 | 10 | 4.1 | 1.7 | 5.2 |
| 13 | 3.5 | 20 | 63 | e20 | e20 | 26 | 91 | 28 | 8.4 | 4.7 | 1.5 | 5.2 |
| 14 | 3.1 | 18 | e52 | e20 | e18 | 23 | 587 | 27 | 7.6 | 6.2 | 1.5 | 4.0 |
| 15 | 15 | 16 | 102 | e19 | e17 | 23 | 174 | 26 | 7.5 | 6.6 | 6.1 | 3.6 |
| 16 | 17 | 15 | 70 | e18 | e15 | 22 | 124 | 25 | 6.9 | 5.6 | 10 | 3.6 |
| 17 | 11 | 15 | 72 | e16 | e14 | 21 | 89 | 24 | 6.2 | 4.5 | 11 | 6.0 |
| 18 | 7.9 | 15 | 255 | e17 | e14 | 21 | 72 | 22 | 6.4 | 3.8 | 7.3 | 31 |
| 19 | 7.0 | 15 | 108 | e17 | e13 | 20 | 60 | 27 | 11 | 4.4 | 5.0 | 42 |
| 20 | 7.6 | 17 | 73 | e17 | e13 | e19 | 52 | 25 | 8.9 | 4.3 | 4.1 | 20 |
| 21 | 7.8 | 20 | 56 | e15 | e15 | 43 | 47 | 22 | 6.5 | 3.8 | 5.6 | 13 |
| 22 | 6.6 | 18 | 49 | e14 | 16 | 46 | 43 | 19 | 5.5 | 3.3 | 15 | 8.9 |
| 23 | 6.2 | 16 | 46 | e14 | 16 | 33 | 81 | 19 | 5.1 | 2.9 | 9.8 | 6.6 |
| 24 | 5.7 | 15 | 61 | e14 | 15 | 29 | 84 | 35 | 4.5 | 4.4 | 5.9 | 5.3 |
| 25 | 5.2 | 16 | 121 | e14 | 15 | 31 | 57 | 28 | 4.1 | 4.7 | 4.2 | 4.5 |
| 26 | 5.5 | 15 | 75 | e13 | 14 | 31 | 80 | 23 | 7.7 | 3.9 | 3.4 | 4.0 |
| 27 | 20 | 14 | 56 | e13 | 14 | 35 | 132 | 30 | 9.5 | 3.3 | 2.9 | 4.2 |
| 28 | 41 | 14 | 47 | e12 | 15 | 33 | 101 | 37 | 6.0 | 3.5 | 2.7 | 14 |
| 29 | 130 | 24 | 43 | e12 | 17 | 28 | 67 | 44 | 5.2 | 4.1 | 2.2 | 94 |
| 30 | 102 | 22 | 41 | e13 | --- | 26 | 54 | 28 | 4.4 | 3.6 | 1.8 | 51 |
| 31 | 47 | --- | 38 | e12 | --- | 41 | --- | 23 | --- | 3.1 | 2.4 | --- |
| TOTAL | 484.0 | 568 | 1796 | 722 | 580 | 930 | 2962 | 1113 | 321.4 | 200.6 | 142.8 | 368.40 |
| MEAN | 15.6 | 18.9 | 57.9 | 23.3 | 20.0 | 30.0 | 98.7 | 35.9 | 10.7 | 6.47 | 4.61 | 12.3 |
| MAX | 130 | 34 | 255 | 60 | 54 | 46 | 587 | 104 | 25 | 30 | 15 | 94 |
| MIN | 2.7 | 14 | 13 | 12 | 11 | 19 | 31 | 19 | 4.1 | 2.9 | 1.5 | 0.90 |
| CFSM | 0.98 | 1.18 | 3.62 | 1.46 | 1.25 | 1.88 | 6.17 | 2.24 | 0.67 | 0.40 | 0.29 | 0.77 |
| IN. | 1.13 | 1.32 | 4.18 | 1.68 | 1.35 | 2.16 | 6.89 | 2.59 | 0.75 | 0.47 | 0.33 | 0.86 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 2004, BY WATER YEAR (WY)

| | | | | | | | | | | | | |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 13.1 | 24.7 | 38.8 | 41.5 | 43.1 | 63.3 | 58.0 | 35.9 | 23.7 | 8.16 | 7.72 | 5.95 |
| MAX | 59.9 | 81.5 | 113 | 176 | 92.7 | 124 | 156 | 69.0 | 109 | 29.8 | 49.5 | 23.7 |
| (WY) | 1990 | 1973 | 1997 | 1979 | 1970 | 1983 | 1987 | 1967 | 1982 | 1984 | 1990 | 1989 |
| MIN | 1.35 | 2.31 | 5.95 | 7.13 | 7.93 | 29.9 | 19.3 | 12.6 | 3.06 | 1.07 | 0.32 | 0.36 |
| (WY) | 2001 | 2002 | 2002 | 1981 | 1980 | 2002 | 1966 | 1986 | 1999 | 1997 | 1999 | 1983 |

| SUMMARY STATISTICS | FOR 2003 CALENDAR YEAR | FOR 2004 WATER YEAR | ^a WATER YEARS 1965 - 2004 |
|--------------------------|------------------------|---------------------|--------------------------------------|
| ANNUAL TOTAL | 14361.4 | 10188.20 | |
| ANNUAL MEAN | 39.3 | 27.8 | 30.3 |
| HIGHEST ANNUAL MEAN | | | 44.9 |
| LOWEST ANNUAL MEAN | | | 13.5 |
| HIGHEST DAILY MEAN | 255 | Dec 18 | 587 |
| LOWEST DAILY MEAN | 1.6 | Sep 1 | 0.90 |
| ANNUAL SEVEN-DAY MINIMUM | 2.1 | Aug 26 | 1.5 |
| MAXIMUM PEAK FLOW | | | 1190 |
| MAXIMUM PEAK STAGE | | | 7.41 |
| INSTANTANEOUS LOW FLOW | | | 0.80 |
| ANNUAL RUNOFF (CFSM) | 2.46 | | 1.74 |
| ANNUAL RUNOFF (INCHES) | 33.39 | | 23.69 |
| 10 PERCENT EXCEEDS | 92 | | 67 |
| 50 PERCENT EXCEEDS | 26 | | 16 |
| 90 PERCENT EXCEEDS | 5.0 | | 3.2 |

^a Years of operation not continuous; see Period of Record for actual years of operation.

e Estimated

BLACKSTONE RIVER BASIN

0111410 CHEPACHET RIVER WEST OF GAZZA RD AT GAZZAVILLE, RI

LOCATION.--Lat 41° 56' 27", long 71° 38' 55", Providence County, Hydrologic Unit 01090003, on left bank at upstream side of Gazza Road bridge, 1 mi north of Gazzaville.

DRAINAGE AREA.--19.2 mi².

PERIOD OF RECORD.--March 1972 to July 1975, January to September 2004.

REMARKS.--Records fair except those for estimated daily discharge, which are poor.

EXTREMES FOR OCTOBER 2003 TO SEPTEMBER 2004.--Maximum discharge, 631 ft³/s, Apr. 14, gage height, 4.52 ft; minimum discharge, 5.2 ft³/s, July 23, 31, Aug. 1.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004 DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-----|-----|-----|-----|------|------|------|------|-------|-------|-------|-------|
| 1 | --- | --- | --- | --- | 25 | 17 | 186 | 50 | 36 | 5.8 | 7.2 | e7.1 |
| 2 | --- | --- | --- | --- | 27 | 22 | 267 | 42 | 31 | 11 | 8.5 | e6.7 |
| 3 | --- | --- | --- | --- | 27 | 28 | 193 | 45 | 25 | 8.9 | 6.5 | e6.2 |
| 4 | --- | --- | --- | --- | 36 | 28 | 138 | 74 | 21 | 7.1 | 6.0 | e6.0 |
| 5 | --- | --- | --- | --- | 30 | 27 | 101 | 69 | 18 | 16 | 19 | e5.6 |
| 6 | --- | --- | --- | --- | 36 | 45 | 75 | 61 | 18 | 17 | 17 | e5.4 |
| 7 | --- | --- | --- | --- | 71 | 50 | 58 | 46 | 18 | 12 | 14 | e5.3 |
| 8 | --- | --- | --- | --- | 62 | 37 | 47 | 37 | 15 | 10 | 11 | e8.5 |
| 9 | --- | --- | --- | --- | 49 | 30 | 38 | 38 | 13 | 9.3 | 9.2 | e13 |
| 10 | --- | --- | --- | --- | 42 | 24 | 26 | 38 | 14 | 8.2 | 7.5 | e22 |
| 11 | --- | --- | --- | --- | 40 | 21 | 21 | 27 | 14 | 6.7 | 6.8 | e16 |
| 12 | --- | --- | --- | --- | 37 | 20 | 17 | 20 | 12 | 6.5 | 6.5 | e11 |
| 13 | --- | --- | --- | e40 | 33 | 19 | 92 | 16 | 11 | 7.8 | 8.9 | e8.8 |
| 14 | --- | --- | --- | 41 | 32 | 17 | 491 | 12 | 11 | 9.7 | 9.0 | e7.4 |
| 15 | --- | --- | --- | 46 | 31 | 18 | 357 | 11 | 10 | 9.1 | 34 | e6.5 |
| 16 | --- | --- | --- | 52 | 32 | 26 | 223 | 12 | 8.6 | 8.1 | 28 | e5.8 |
| 17 | --- | --- | --- | 46 | 29 | 39 | 143 | 13 | 7.8 | 7.3 | 22 | e8.2 |
| 18 | --- | --- | --- | 42 | 27 | 39 | 92 | 14 | 9.1 | 6.7 | 12 | e18 |
| 19 | --- | --- | --- | 40 | 25 | 40 | 64 | 19 | 11 | 8.3 | 9.1 | e41 |
| 20 | --- | --- | --- | 38 | 24 | 40 | 29 | 16 | 10 | 7.6 | 8.2 | e31 |
| 21 | --- | --- | --- | 36 | 21 | 59 | 29 | 16 | 8.8 | 6.6 | 14 | e25 |
| 22 | --- | --- | --- | 34 | 19 | 64 | 27 | 16 | 8.1 | 6.0 | 25 | e20 |
| 23 | --- | --- | --- | 33 | 18 | 53 | 55 | 17 | 7.6 | 5.6 | 17 | e15 |
| 24 | --- | --- | --- | 33 | 18 | 44 | 67 | 20 | 6.9 | 13 | e14 | e12 |
| 25 | --- | --- | --- | 33 | 17 | 44 | 55 | 21 | 6.7 | 11 | e11 | e11 |
| 26 | --- | --- | --- | 32 | 15 | 41 | 75 | 22 | 6.8 | 8.5 | e9.7 | e10 |
| 27 | --- | --- | --- | 30 | 14 | 42 | 125 | 35 | 6.6 | 7.4 | e9.0 | e12 |
| 28 | --- | --- | --- | 31 | 14 | 36 | 124 | 42 | 6.3 | 7.4 | e8.5 | e18 |
| 29 | --- | --- | --- | 31 | 15 | 25 | 91 | 48 | 6.5 | 7.3 | e6.4 | e27 |
| 30 | --- | --- | --- | 28 | --- | 19 | 65 | 38 | 6.2 | 6.4 | e7.0 | e23 |
| 31 | --- | --- | --- | 26 | --- | 32 | --- | 30 | --- | 5.7 | e7.4 | --- |
| TOTAL | --- | --- | --- | --- | 866 | 1046 | 3371 | 965 | 384.0 | 268.0 | 379.4 | 412.5 |
| MEAN | --- | --- | --- | --- | 29.9 | 33.7 | 112 | 31.1 | 12.8 | 8.65 | 12.2 | 13.8 |
| MAX | --- | --- | --- | --- | 71 | 64 | 491 | 74 | 36 | 17 | 34 | 41 |
| MIN | --- | --- | --- | --- | 14 | 17 | 17 | 11 | 6.2 | 5.6 | 6.0 | 5.3 |
| MED | --- | --- | --- | --- | 27 | 32 | 75 | 27 | 10 | 7.8 | 9.1 | 11 |
| AC-FT | --- | --- | --- | --- | 1720 | 2070 | 6690 | 1910 | 762 | 532 | 753 | 818 |
| CFSM | --- | --- | --- | --- | 1.56 | 1.76 | 5.85 | 1.62 | 0.67 | 0.45 | 0.64 | 0.72 |
| IN. | --- | --- | --- | --- | 1.68 | 2.03 | 6.53 | 1.87 | 0.74 | 0.52 | 0.74 | 0.80 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1973 - 2004, BY WATER YEAR (WY)

| | MEAN | 33.5 | 29.5 | 68.1 | 74.5 | 51.1 | 58.2 | 82.8 | 36.3 | 19.0 | 15.4 | 12.3 | 19.6 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MAX | 41.8 | 32.4 | 81.9 | 79.7 | 67.2 | 77.6 | 112 | 50.5 | 29.2 | 34.2 | 16.4 | 27.3 | |
| (WY) | 1975 | 1975 | 1974 | 1975 | 1974 | 1974 | 2004 | 1973 | 1973 | 1973 | 1973 | 1974 | |
| MIN | 25.1 | 26.7 | 54.3 | 69.2 | 29.9 | 33.7 | 56.0 | 23.1 | 12.8 | 8.65 | 8.39 | 13.8 | |
| (WY) | 1974 | 1974 | 1975 | 1974 | 2004 | 2004 | 1975 | 1975 | 2004 | 2004 | 1974 | 2004 | |

SUMMARY STATISTICS

^aWATER YEARS 1973 - 2004

| | |
|--------------------------|-------|
| ANNUAL MEAN | 44.3 |
| HIGHEST ANNUAL MEAN | 44.3 |
| LOWEST ANNUAL MEAN | 44.3 |
| HIGHEST DAILY MEAN | 491 |
| LOWEST DAILY MEAN | 5.3 |
| ANNUAL SEVEN-DAY MINIMUM | 6.0 |
| MAXIMUM PEAK FLOW | 631 |
| MAXIMUM PEAK STAGE | 4.52 |
| ANNUAL RUNOFF (AC-FT) | 32060 |
| ANNUAL RUNOFF (CFSM) | 2.30 |
| ANNUAL RUNOFF (INCHES) | 31.32 |
| 10 PERCENT EXCEEDS | 99 |
| 50 PERCENT EXCEEDS | 32 |
| 90 PERCENT EXCEEDS | 8.6 |

^a Years of operation not continuous; see Period of Record for actual years of operation.

e Estimated

BLACKSTONE RIVER BASIN

0111500 BRANCH RIVER AT FORESTDALE, RI

LOCATION.--Lat 41° 59' 47", long 71° 33' 47", Providence County, Hydrologic Unit 01090003, on left bank 20 ft upstream from abandoned bridge site, 400 ft downstream from milldam at Forestdale, 1 mi east of Slatersville, and 1.6 mi upstream from mouth.

DRAINAGE AREA.--91.2 mi².

PERIOD OF RECORD.--Discharge: September to December 1909 and January 1912 to July 1913 (gage heights only; published as "at Branch Village"), January 1940 to current year.

Water-quality records: Water years 1954, 1968, 1979–2002.

REVISED RECORDS.--WSP 2101: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 180 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to July 28, 1913, non-recording gage at site 1 mi downstream at different datum.

REMARKS.--Records good. Occasional regulation by pond upstream. Prior to 1957, greater regulation by mills and reservoirs upstream.

AVERAGE DISCHARGE.--64 years (water years 1941–2004), 174 ft³/s, 25.89 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,470 ft³/s, Jan. 25, 1979, gage height, 11.80 ft; maximum gage height, 11.90 ft, Mar. 18, 1968; minimum daily discharge, 5.2 ft³/s, Oct. 7, 1948.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge since at least 1886, about 5,800 ft³/s, Mar. 19, 1936, by computation of flow over dam 1 mi upstream.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,760 ft³/s, Apr. 14, gage height, 8.67 ft; minimum discharge, 18 ft³/s, Sept. 8.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004 DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|-------|------|------|------|-------|------|------|------|------|------|
| 1 | 46 | 324 | 147 | 269 | 89 | 95 | 822 | 350 | 138 | 29 | 31 | 33 |
| 2 | 44 | 283 | 133 | 261 | 87 | 126 | 1270 | 292 | 143 | 42 | 31 | 32 |
| 3 | 39 | 242 | 122 | 267 | 88 | 167 | 785 | 302 | 138 | 48 | 29 | 29 |
| 4 | 37 | 174 | 116 | 285 | 115 | 167 | 520 | 466 | 127 | 40 | 24 | 25 |
| 5 | 37 | 185 | 107 | 366 | 110 | 159 | 399 | 453 | 110 | 68 | 53 | 22 |
| 6 | 35 | 214 | 119 | 381 | 119 | 196 | 323 | 405 | 101 | 110 | 63 | 21 |
| 7 | 33 | 206 | 120 | 316 | 234 | 274 | 279 | 329 | 109 | 89 | 53 | 20 |
| 8 | 32 | 188 | 116 | 261 | 229 | 223 | 253 | 228 | 106 | 64 | 42 | 37 |
| 9 | 31 | 174 | 110 | 226 | 167 | 179 | 231 | 236 | 79 | 52 | 33 | 69 |
| 10 | 31 | 164 | 110 | 199 | 144 | 149 | 232 | 255 | 71 | 44 | 30 | 76 |
| 11 | 29 | 165 | 269 | 163 | 138 | 144 | 211 | 226 | 64 | 39 | 27 | 58 |
| 12 | 31 | 166 | 817 | 162 | 124 | 133 | 178 | 184 | 58 | 34 | 24 | 45 |
| 13 | 33 | 174 | 513 | 168 | 123 | 118 | 344 | 161 | 53 | 35 | 54 | 37 |
| 14 | 35 | 169 | 365 | 155 | 142 | 107 | 2280 | 140 | 47 | 39 | 37 | 31 |
| 15 | 146 | 149 | 499 | 149 | 128 | 104 | 1610 | 133 | 47 | 39 | 84 | 29 |
| 16 | 159 | 139 | 478 | 134 | 109 | 112 | 1120 | 127 | 45 | 38 | 111 | 28 |
| 17 | 131 | 118 | 416 | 138 | 104 | 123 | 761 | 114 | 42 | 35 | 89 | 27 |
| 18 | 139 | 116 | 1320 | 145 | 87 | 118 | 549 | 109 | 44 | 32 | 69 | 115 |
| 19 | 150 | 119 | 897 | 147 | 79 | 119 | 461 | 127 | 59 | 31 | 53 | 266 |
| 20 | 151 | 131 | 613 | 140 | 78 | 117 | 391 | 127 | 54 | 30 | 43 | 152 |
| 21 | 163 | 140 | 445 | 135 | 78 | 201 | 310 | 109 | 47 | 31 | 70 | 104 |
| 22 | 159 | 131 | 340 | 132 | 79 | 282 | 263 | 105 | 42 | 29 | 116 | 82 |
| 23 | 154 | 129 | 328 | 131 | 83 | 219 | 325 | 103 | 38 | 26 | 90 | 66 |
| 24 | 148 | 112 | 355 | 125 | 81 | 187 | 490 | 155 | 36 | 41 | 71 | 53 |
| 25 | 132 | 111 | 637 | 116 | 77 | 183 | 378 | 152 | 32 | 43 | 60 | 47 |
| 26 | 120 | 110 | 539 | 99 | 75 | 183 | 397 | 129 | 33 | 37 | 48 | 46 |
| 27 | 190 | 106 | 436 | 91 | 73 | 196 | 741 | 154 | 33 | 32 | 43 | 46 |
| 28 | 299 | 109 | 380 | 95 | 74 | 200 | 637 | 190 | 33 | 30 | 38 | 61 |
| 29 | 627 | 158 | 316 | 95 | 81 | 162 | 496 | 254 | 33 | 31 | 35 | 329 |
| 30 | 795 | 166 | 300 | 93 | -- | 125 | 416 | 195 | 31 | 29 | 31 | 337 |
| 31 | 421 | --- | 286 | 91 | --- | 143 | --- | 147 | --- | 31 | 33 | --- |
| TOTAL | 4577 | 4872 | 11749 | 5535 | 3195 | 5011 | 17472 | 6457 | 1993 | 1298 | 1615 | 2323 |
| MEAN | 148 | 162 | 379 | 179 | 110 | 162 | 582 | 208 | 66.4 | 41.9 | 52.1 | 77.4 |
| MAX | 795 | 324 | 1320 | 381 | 234 | 282 | 2280 | 466 | 143 | 110 | 116 | 337 |
| MIN | 29 | 106 | 107 | 91 | 73 | 95 | 178 | 103 | 31 | 26 | 24 | 20 |
| CFSM | 1.62 | 1.78 | 4.16 | 1.96 | 1.21 | 1.77 | 6.39 | 2.28 | 0.73 | 0.46 | 0.57 | 0.85 |
| IN. | 1.87 | 1.99 | 4.79 | 2.26 | 1.30 | 2.04 | 7.13 | 2.63 | 0.81 | 0.53 | 0.66 | 0.95 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2004, BY WATER YEAR (WY)

| | | | | | | | | | | | | |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 97.0 | 153 | 213 | 223 | 236 | 339 | 315 | 200 | 135 | 58.9 | 59.0 | 61.2 |
| MAX | 479 | 472 | 565 | 810 | 581 | 723 | 877 | 399 | 710 | 211 | 372 | 397 |
| (WY) | 1956 | 1956 | 1973 | 1979 | 1970 | 1972 | 1987 | 1967 | 1982 | 1998 | 1955 | 1954 |
| MIN | 15.5 | 27.9 | 37.9 | 40.2 | 60.5 | 132 | 89.4 | 77.3 | 37.7 | 18.1 | 8.74 | 16.4 |
| (WY) | 1958 | 2002 | 1966 | 1981 | 1980 | 2002 | 1966 | 1965 | 1964 | 1965 | 1999 | 2002 |

SUMMARY STATISTICS

| | FOR 2003 CALENDAR YEAR | | | | FOR 2004 WATER YEAR | | | | WATER YEARS 1940 - 2004 | | | |
|--------------------------|------------------------|--|--|--|---------------------|--|--|--|-------------------------|--|--|--|
| ANNUAL TOTAL | 80570 | | | | 66097 | | | | | | | |
| ANNUAL MEAN | 221 | | | | 181 | | | | | | | |
| HIGHEST ANNUAL MEAN | | | | | | | | | 174 | | | |
| LOWEST ANNUAL MEAN | | | | | | | | | 261 | | | |
| HIGHEST DAILY MEAN | 1320 | | | | Dec 18 | | | | 2280 | | | |
| LOWEST DAILY MEAN | 21 | | | | Aug 30 | | | | 20 | | | |
| ANNUAL SEVEN-DAY MINIMUM | 24 | | | | Aug 26 | | | | 26 | | | |
| MAXIMUM PEAK FLOW | | | | | | | | | 2760 | | | |
| MAXIMUM PEAK STAGE | | | | | | | | | 8.67 | | | |
| INSTANTANEOUS LOW FLOW | | | | | | | | | 18 | | | |
| ANNUAL RUNOFF (CFSM) | 2.42 | | | | | | | | 1.98 | | | |
| ANNUAL RUNOFF (INCHES) | 32.86 | | | | | | | | 26.96 | | | |
| 10 PERCENT EXCEEDS | 467 | | | | | | | | 384 | | | |
| 50 PERCENT EXCEEDS | 149 | | | | | | | | 120 | | | |
| 90 PERCENT EXCEEDS | 51 | | | | | | | | 32 | | | |

BLACKSTONE RIVER BASIN

01112268 MILL RIVER AT HARRIS PD OUTLET AT WOONSOCKET, RI

LOCATION.--Lat 42° 00'57", long 71° 30'28", Providence County, Hydrologic Unit 01090003, on right bank, about 100 ft downstream from Harris Pond, at Woonsocket.

DRAINAGE AREA.--33.1 mi².

PERIOD OF RECORD.--January to September 2004.

REMARKS.--Records fair except those for estimated daily discharge, which are poor.

EXTREMES FOR JANUARY TO SEPTEMBER 2004.--Maximum discharge, 770 ft³/s, Apr. 14, gage height, 4.34 ft; minimum discharge, 0.50 ft³/s, Aug. 10, 12.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|-----|-----|-----|-----|------|------|-------|------|-------|-------|--------|-------|
| 1 | --- | --- | --- | --- | e25 | e43 | e382 | 93 | 54 | 8.4 | 9.8 | e4.1 |
| 2 | --- | --- | --- | --- | e26 | e52 | e580 | 81 | 53 | 20 | 6.8 | e3.1 |
| 3 | --- | --- | --- | --- | e35 | e59 | e356 | 80 | 73 | 24 | 4.2 | e2.5 |
| 4 | --- | --- | --- | --- | e37 | e62 | e228 | 119 | 56 | 10 | 3.0 | e2.0 |
| 5 | --- | --- | --- | --- | e41 | e66 | e159 | 132 | 46 | 29 | 13 | e1.8 |
| 6 | --- | --- | --- | --- | e42 | e84 | e123 | 108 | 41 | 49 | 11 | e1.9 |
| 7 | --- | --- | --- | --- | e100 | e98 | e98 | 89 | 41 | 25 | 5.3 | e2.3 |
| 8 | --- | --- | --- | --- | e85 | e78 | e83 | 73 | 35 | 19 | 3.0 | e3.5 |
| 9 | --- | --- | --- | --- | e67 | e66 | 76 | 72 | 29 | 16 | 2.0 | e9.8 |
| 10 | --- | --- | --- | --- | e66 | e60 | 67 | 74 | 34 | 12 | 0.93 | e5.9 |
| 11 | --- | --- | --- | --- | e61 | e58 | 60 | 63 | 32 | 8.7 | 0.72 | e4.1 |
| 12 | --- | --- | --- | --- | e55 | e58 | 54 | 56 | 24 | 6.5 | 2.9 | e3.5 |
| 13 | --- | --- | --- | e53 | e53 | e54 | 111 | 49 | 20 | 10 | 22 | e2.9 |
| 14 | --- | --- | --- | 51 | e48 | e51 | 572 | 44 | 18 | 15 | 12 | e2.4 |
| 15 | --- | --- | --- | 45 | e48 | e50 | 430 | 41 | 13 | 15 | 34 | e2.2 |
| 16 | --- | --- | --- | e41 | e42 | e52 | 266 | 37 | 9.9 | 12 | 41 | e2.0 |
| 17 | --- | --- | --- | e36 | e36 | e59 | 180 | 39 | 9.3 | 8.3 | e23 | e2.6 |
| 18 | --- | --- | --- | e43 | e33 | e51 | 141 | 37 | 9.5 | 6.1 | e14 | e8.7 |
| 19 | --- | --- | --- | e47 | e31 | e48 | 115 | 53 | 15 | 6.3 | e8.7 | e23 |
| 20 | --- | --- | --- | e48 | e31 | e51 | 96 | 50 | 10 | 4.9 | e4.6 | e9.4 |
| 21 | --- | --- | --- | e43 | e34 | e79 | 83 | 41 | 7.6 | 3.4 | e9.1 | e5.5 |
| 22 | --- | --- | --- | e42 | e38 | e105 | 74 | 39 | 8.0 | 2.3 | e19 | e4.5 |
| 23 | --- | --- | --- | e41 | e41 | e87 | 96 | 37 | 12 | 1.9 | e14 | e3.7 |
| 24 | --- | --- | --- | e38 | e43 | e69 | 129 | 46 | 11 | 11 | e8.4 | e3.2 |
| 25 | --- | --- | --- | e34 | e40 | e63 | 110 | 48 | 10 | 13 | e6.7 | e2.7 |
| 26 | --- | --- | --- | e30 | e36 | e58 | 118 | 45 | 34 | 6.2 | e5.9 | e2.2 |
| 27 | --- | --- | --- | e28 | e33 | e55 | 196 | 56 | 29 | 4.3 | e4.7 | e2.3 |
| 28 | --- | --- | --- | e30 | e32 | e54 | 187 | 67 | 17 | 6.8 | e4.7 | e7.2 |
| 29 | --- | --- | --- | e36 | e37 | e50 | 138 | 95 | 13 | 12 | e3.8 | e19 |
| 30 | --- | --- | --- | e35 | --- | e45 | 110 | 72 | 11 | 11 | e3.8 | e16 |
| 31 | --- | --- | --- | e32 | --- | e74 | --- | 58 | --- | 8.3 | e4.6 | --- |
| TOTAL | --- | --- | --- | --- | 1296 | 1939 | 5418 | 1994 | 775.3 | 385.4 | 306.65 | 164.0 |
| MEAN | --- | --- | --- | --- | 44.7 | 62.5 | 181 | 64.3 | 25.8 | 12.4 | 9.89 | 5.47 |
| MAX | --- | --- | --- | --- | 100 | 105 | 580 | 132 | 73 | 49 | 41 | 23 |
| MIN | --- | --- | --- | --- | 25 | 43 | 54 | 37 | 7.6 | 1.9 | 0.72 | 1.8 |
| MED | --- | --- | --- | --- | 40 | 58 | 121 | 56 | 19 | 10 | 6.7 | 3.3 |
| AC-FT | --- | --- | --- | --- | 2570 | 3850 | 10750 | 3960 | 1540 | 764 | 608 | 325 |
| CFSM | --- | --- | --- | --- | 1.35 | 1.89 | 5.46 | 1.94 | 0.78 | 0.38 | 0.30 | 0.17 |
| IN. | --- | --- | --- | --- | 1.46 | 2.18 | 6.09 | 2.24 | 0.87 | 0.43 | 0.34 | 0.18 |
| STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2004 - 2004, BY WATER YEAR (WY) | | | | | | | | | | | | |
| MEAN | --- | --- | --- | --- | 44.7 | 62.5 | 181 | 64.3 | 25.8 | 12.4 | 9.89 | 5.47 |
| MAX | --- | --- | --- | --- | 44.7 | 62.5 | 181 | 64.3 | 25.8 | 12.4 | 9.89 | 5.47 |
| (WY) | --- | --- | --- | --- | 2004 | 2004 | 2004 | 2004 | 2004 | 2004 | 2004 | 2004 |
| MIN | --- | --- | --- | --- | 44.7 | 62.5 | 181 | 64.3 | 25.8 | 12.4 | 9.89 | 5.47 |
| (WY) | --- | --- | --- | --- | 2004 | 2004 | 2004 | 2004 | 2004 | 2004 | 2004 | 2004 |

e Estimated

BLACKSTONE RIVER BASIN

01112382 PETERS RIVER AT RT 114 BRIDGE AT WOONSOCKET, RI

LOCATION.--Lat 42° 00'55", long 71° 29'36", Providence County, Hydrologic Unit 01090003, on left bank, upstream side of bridge, at Woonsocket.

DRAINAGE AREA.--12.6 mi².

PERIOD OF RECORD.--January to September 2004.

GAGE.--Water-stage recorder.

REMARKS.--Records fair except those for estimated daily discharge, which are poor.

EXTREMES FOR JANUARY TO SEPTEMBER 2004.--Maximum discharge, 203 ft³/s, Apr. 14, gage height, 6.98 ft; minimum discharge, 2.3 ft³/s, Sept. 8.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004 DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-----|-----|-----|-----|-------|------|------|------|-------|-------|-------|-------|
| 1 | --- | --- | --- | --- | 8.1 | 11 | 132 | 23 | 19 | 7.7 | 9.3 | 7.5 |
| 2 | --- | --- | --- | --- | 7.6 | 14 | 183 | 20 | 18 | 13 | 10 | 5.3 |
| 3 | --- | --- | --- | --- | 8.5 | 17 | 122 | 25 | 18 | 12 | 7.8 | 4.3 |
| 4 | --- | --- | --- | --- | 21 | 18 | 75 | 56 | 17 | 9.9 | 6.5 | 3.5 |
| 5 | --- | --- | --- | --- | 18 | 18 | 58 | 47 | 14 | 32 | 18 | 3.1 |
| 6 | --- | --- | --- | --- | 20 | 27 | 44 | 32 | 14 | 30 | 13 | 3.2 |
| 7 | --- | --- | --- | --- | 75 | 28 | 34 | 22 | 15 | 20 | 11 | 3.0 |
| 8 | --- | --- | --- | --- | 52 | 22 | 28 | 19 | 13 | 18 | 8.6 | 4.3 |
| 9 | --- | --- | --- | --- | 23 | 20 | 23 | 24 | 11 | 16 | 6.8 | 16 |
| 10 | --- | --- | --- | --- | 18 | 18 | 21 | 26 | 13 | 15 | 5.3 | 10 |
| 11 | --- | --- | --- | --- | 18 | 17 | 19 | 19 | 13 | 14 | 4.4 | 7.4 |
| 12 | --- | --- | --- | --- | 15 | 16 | 16 | 15 | 12 | 14 | 7.7 | 6.6 |
| 13 | --- | --- | --- | e15 | 14 | 16 | 57 | 14 | 10 | 17 | 63 | 5.0 |
| 14 | --- | --- | --- | 14 | 13 | 15 | 192 | 13 | 10 | 20 | 31 | 3.9 |
| 15 | --- | --- | --- | 12 | 13 | 13 | 156 | 12 | 9.8 | 19 | 54 | 3.4 |
| 16 | --- | --- | --- | 9.7 | 10 | 14 | 105 | 11 | 7.4 | 17 | 44 | 3.9 |
| 17 | --- | --- | --- | 8.9 | 9.1 | 16 | 65 | 12 | 5.4 | 16 | 27 | 3.7 |
| 18 | --- | --- | --- | 10 | 8.9 | 15 | 43 | 11 | 8.8 | 16 | 20 | 45 |
| 19 | --- | --- | --- | 12 | 8.1 | 14 | 33 | 18 | 18 | 14 | 16 | 51 |
| 20 | --- | --- | --- | 11 | 7.8 | 14 | 25 | 16 | 12 | 14 | 14 | 23 |
| 21 | --- | --- | --- | 10 | 7.8 | 29 | 23 | 13 | 9.9 | 12 | 39 | 16 |
| 22 | --- | --- | --- | 11 | 9.3 | 33 | 19 | 13 | 7.9 | 11 | 46 | 12 |
| 23 | --- | --- | --- | 11 | 11 | 23 | 42 | 14 | 7.1 | 9.8 | 24 | 8.6 |
| 24 | --- | --- | --- | 9.6 | 10 | 19 | 50 | 16 | 6.8 | 19 | 18 | 6.6 |
| 25 | --- | --- | --- | 8.0 | 9.3 | 18 | 35 | 17 | 7.1 | 16 | 16 | 5.2 |
| 26 | --- | --- | --- | 7.1 | 8.9 | 17 | 47 | 16 | 8.1 | 14 | 14 | 3.9 |
| 27 | --- | --- | --- | 7.1 | 8.5 | 18 | 76 | 23 | 8.3 | 12 | 12 | 3.4 |
| 28 | --- | --- | --- | 7.7 | 8.5 | 19 | 67 | 25 | 8.1 | 12 | 9.6 | 19 |
| 29 | --- | --- | --- | 8.9 | 9.7 | 17 | 44 | 27 | 9.5 | 12 | 8.7 | 81 |
| 30 | --- | --- | --- | 9.1 | --- | 15 | 29 | 20 | 8.5 | 9.6 | 6.1 | 65 |
| 31 | --- | --- | --- | 8.7 | --- | 27 | --- | 16 | --- | 8.0 | 7.7 | --- |
| TOTAL | --- | --- | --- | --- | 451.1 | 578 | 1863 | 635 | 339.7 | 470.0 | 578.5 | 433.8 |
| MEAN | --- | --- | --- | --- | 15.6 | 18.6 | 62.1 | 20.5 | 11.3 | 15.2 | 18.7 | 14.5 |
| MAX | --- | --- | --- | --- | 75 | 33 | 192 | 56 | 19 | 32 | 63 | 81 |
| MIN | --- | --- | --- | --- | 7.6 | 11 | 16 | 11 | 5.4 | 7.7 | 4.4 | 3.0 |
| MED | --- | --- | --- | --- | 10 | 17 | 44 | 18 | 10 | 14 | 13 | 5.9 |
| AC-FT | --- | --- | --- | --- | 895 | 1150 | 3700 | 1260 | 674 | 932 | 1150 | 860 |
| CFSM | --- | --- | --- | --- | 1.23 | 1.48 | 4.93 | 1.63 | 0.90 | 1.20 | 1.48 | 1.15 |
| IN. | --- | --- | --- | --- | 1.33 | 1.71 | 5.50 | 1.87 | 1.00 | 1.39 | 1.71 | 1.28 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2004 - 2004, BY WATER YEAR (WY)

| | --- | --- | --- | --- | 15.6 | 18.6 | 62.1 | 20.5 | 11.3 | 15.2 | 18.7 | 14.5 |
|------|-----|-----|-----|-----|------|------|------|------|------|------|------|------|
| MEAN | --- | --- | --- | --- | 15.6 | 18.6 | 62.1 | 20.5 | 11.3 | 15.2 | 18.7 | 14.5 |
| MAX | --- | --- | --- | --- | 15.6 | 18.6 | 62.1 | 20.5 | 11.3 | 15.2 | 18.7 | 14.5 |
| (WY) | --- | --- | --- | --- | 2004 | 2004 | 2004 | 2004 | 2004 | 2004 | 2004 | 2004 |
| MIN | --- | --- | --- | --- | 15.6 | 18.6 | 62.1 | 20.5 | 11.3 | 15.2 | 18.7 | 14.5 |
| (WY) | --- | --- | --- | --- | 2004 | 2004 | 2004 | 2004 | 2004 | 2004 | 2004 | 2004 |

e Estimated

BLACKSTONE RIVER BASIN

01112500 BLACKSTONE RIVER AT WOONSOCKET, RI

LOCATION.--Lat 42° 00' 22", long 71° 30' 13", Providence County, Hydrologic Unit 01090003, on right bank 50 ft upstream from Peters River pressure conduit at Woonsocket. Records include flow of Peters River.

DRAINAGE AREA.--416 mi².

PERIOD OF RECORD.--Discharge: February 1929 to current year.

Water-quality records: Water years 1952-53, 1957-58, 1962-67.

REVISED RECORDS.--WSP 756: Drainage area. WSP 781: 1931(M). WSP 871: 1938. WSP 1051: 1931.

GAGE.--Water-stage recorder. Datum of gage is 107.42 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Flow regulated by powerplants, by West Hill Reservoir since May 1961, and by other reservoirs upstream. Extremes and figures of daily discharge include flow diverted from Nashua River basin and, at times since January 1966, from Quabbin Reservoir for supply of Worcester, MA, and, prior to July 1964, flow diverted around station in Hamlet Trench. Telephone and satellite gage-height telemeters at station.

AVERAGE DISCHARGE.--75 years (water years 1930-2004), 775 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 32,900 ft³/s, Aug. 19, 1955, gage height, 21.80 ft, from floodmarks, from rating curve extended above 15,000 ft³/s on basis of slope-area measurement of peak flow (affected by failure of Horseshoe Dam on Mill River); minimum daily discharge, 21 ft³/s, Aug. 11, 1934 (flow diverted around station in Hamlet Trench not included).

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge since at least 1645, that of Aug. 19, 1955.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,930 ft³/s, Apr. 14, gage height, 9.25 ft; minimum discharge, 78 ft³/s, Sept. 6.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|-------|
| 1 | 225 | 1410 | 612 | 1190 | 443 | 468 | 2870 | 1510 | 778 | 171 | 219 | 184 |
| 2 | 215 | 1150 | 555 | 1130 | 422 | 582 | 4820 | 1360 | 756 | 239 | 196 | 160 |
| 3 | 197 | 988 | 497 | 1140 | 418 | 739 | 4050 | 1380 | 802 | 276 | 185 | 147 |
| 4 | 206 | 817 | 439 | 1200 | 563 | 801 | 2880 | 1920 | 713 | 210 | 162 | 138 |
| 5 | 197 | 751 | 400 | 1480 | 564 | 779 | 2380 | 2010 | 587 | 360 | 253 | 130 |
| 6 | 198 | 879 | 426 | 1580 | 589 | 874 | 1930 | 1700 | 539 | 458 | 300 | 112 |
| 7 | 192 | 925 | 434 | 1390 | 1060 | 1030 | 1610 | 1450 | 551 | 339 | 229 | 125 |
| 8 | 201 | 839 | 416 | 1180 | 1080 | 930 | 1430 | 1200 | 503 | 261 | 189 | 154 |
| 9 | 204 | 757 | 428 | 1040 | 839 | 806 | 1290 | 1160 | 434 | 249 | 164 | 294 |
| 10 | 207 | 714 | 416 | 972 | 705 | 707 | 1190 | 1200 | 459 | 212 | 150 | 518 |
| 11 | 201 | 684 | 898 | 907 | 665 | 671 | 1070 | 1130 | 437 | 192 | 143 | 363 |
| 12 | 207 | 716 | 2420 | 793 | 603 | 645 | 969 | 1020 | 373 | 176 | 152 | 251 |
| 13 | 240 | 734 | 1880 | 750 | 562 | 612 | 1430 | 884 | 329 | 180 | 290 | 208 |
| 14 | 242 | 758 | 1360 | 725 | 571 | 562 | 5760 | 799 | 300 | 220 | 193 | 182 |
| 15 | 575 | 690 | 1700 | 700 | 536 | 537 | 5220 | 733 | 287 | 212 | 385 | 166 |
| 16 | 791 | 655 | 1800 | 658 | 490 | 541 | 3920 | 678 | 270 | 194 | 482 | 162 |
| 17 | 594 | 616 | 1680 | 745 | 422 | 567 | 3050 | 626 | 247 | 177 | 404 | 162 |
| 18 | 515 | 583 | 3920 | 642 | 415 | 539 | 2480 | 596 | 243 | 162 | 329 | 584 |
| 19 | 473 | 559 | 3700 | 628 | 393 | 541 | 2060 | 788 | 300 | 160 | 256 | 1640 |
| 20 | 451 | 596 | 2510 | 674 | 379 | 529 | 1690 | 782 | 267 | 163 | 218 | 1120 |
| 21 | 458 | 708 | 1950 | 631 | 381 | 808 | 1510 | 687 | 227 | 152 | 352 | 809 |
| 22 | 467 | 668 | 1600 | 568 | 391 | 1110 | 1350 | 636 | 209 | 143 | 647 | 608 |
| 23 | 392 | 627 | 1480 | 582 | 431 | 950 | 1540 | 598 | 202 | 132 | 552 | 477 |
| 24 | 377 | 583 | 1510 | 596 | 425 | 816 | 1990 | 704 | 187 | 278 | 370 | 380 |
| 25 | 389 | 577 | 2340 | 578 | 407 | 768 | 1710 | 770 | 173 | 747 | 285 | 315 |
| 26 | 353 | 568 | 2260 | 502 | 392 | 753 | 1740 | 740 | 271 | 507 | 237 | 281 |
| 27 | 560 | 533 | 1830 | 458 | 383 | 789 | 2700 | 844 | 257 | 345 | 209 | 272 |
| 28 | 908 | 530 | 1590 | 449 | 389 | 794 | 2580 | 1020 | 213 | 309 | 189 | 427 |
| 29 | 1910 | 677 | 1410 | 464 | 414 | 775 | 2020 | 1250 | 201 | 351 | 177 | 1820 |
| 30 | 2950 | 686 | 1330 | 485 | --- | 662 | 1670 | 1060 | 187 | 271 | 162 | 2000 |
| 31 | 1920 | --- | 1260 | 462 | --- | 753 | --- | 868 | --- | 230 | 208 | --- |
| TOTAL | 17015 | 21978 | 45051 | 25299 | 15332 | 22438 | 70909 | 32103 | 11302 | 8076 | 8287 | 14189 |
| MEAN | 549 | 733 | 1453 | 816 | 529 | 724 | 2364 | 1036 | 377 | 261 | 267 | 473 |
| MAX | 2950 | 1410 | 3920 | 1580 | 1080 | 1110 | 5760 | 2010 | 802 | 747 | 647 | 2000 |
| MIN | 192 | 530 | 400 | 449 | 379 | 468 | 969 | 596 | 173 | 132 | 143 | 112 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 2004, BY WATER YEAR (WY)

| | MEAN | MAX | (WY) | MIN | (WY) |
|------|------|------|------|------|------|
| 2003 | 423 | 2007 | 1956 | 123 | 1998 |
| 2004 | 652 | 2233 | 1956 | 127 | 1932 |
| 2005 | 868 | 2371 | 1997 | 186 | 1966 |
| 2006 | 954 | 3167 | 1979 | 183 | 1981 |
| 2007 | 993 | 2493 | 1970 | 262 | 1980 |
| 2008 | 1503 | 4063 | 1936 | 622 | 2002 |
| 2009 | 1442 | 3643 | 1987 | 479 | 1966 |
| 2010 | 889 | 1779 | 1972 | 303 | 1930 |
| 2011 | 631 | 2826 | 1982 | 136 | 1999 |
| 2012 | 333 | 2453 | 1938 | 120 | 1999 |
| 2013 | 306 | 2704 | 1955 | 71.5 | 1999 |
| 2014 | 324 | 1980 | 1954 | 104 | 1997 |

SUMMARY STATISTICS

| | FOR 2003 CALENDAR YEAR | FOR 2004 WATER YEAR | FOR 2004 WATER YEAR | FOR 2004 WATER YEAR | WATER YEARS 1929 - 2004 |
|--------------------------|------------------------|---------------------|---------------------|---------------------|-------------------------|
| ANNUAL TOTAL | 357263 | 291979 | | | |
| ANNUAL MEAN | 979 | 798 | | | 775 |
| HIGHEST ANNUAL MEAN | | | | | 1162 |
| LOWEST ANNUAL MEAN | | | | | 345 |
| HIGHEST DAILY MEAN | 4100 | Jun 23 | 5760 | Apr 14 | 25900 |
| LOWEST DAILY MEAN | 143 | Sep 1 | 112 | Sep 6 | 21 |
| ANNUAL SEVEN-DAY MINIMUM | 165 | Sep 9 | 138 | Sep 2 | 55 |
| MAXIMUM PEAK FLOW | | | 6930 | Apr 14 | 32900 |
| MAXIMUM PEAK STAGE | | | 9.25 | Apr 14 | 21.80 |
| INSTANTANEOUS LOW FLOW | | | 78 | Sep 6 | |
| 10 PERCENT EXCEEDS | 2050 | | 1700 | | 1670 |
| 50 PERCENT EXCEEDS | 675 | | 576 | | 534 |
| 90 PERCENT EXCEEDS | 257 | | 192 | | 161 |

BLACKSTONE RIVER BASIN

01113695 CATAMINT BROOK AT CUMBERLAND, RI

LOCATION.--Lat 41°59'06", long 71°24'51", Providence County, Hydrologic Unit 01090003, on left bank at downstream culvert of bridge at Thomas Leighton Blvd. in Cumberland, RI.

DRAINAGE AREA.--3.55 mi².

PERIOD OF RECORD.--July 1999 to current year. Discharge measurements made in water years 1993-94.

REVISED RECORDS.--WDR MA-RI-02-01: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 180 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records fair except those for estimated daily discharge, which are poor.

AVERAGE DISCHARGE.--5 years (water years 2000-2004), 6.20 ft³/s, 23.72 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 119 ft³/s, Mar. 22, 2001, gage height, 3.15 ft; minimum discharge, no flow, many days during water years 2000-03.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 79 ft³/s, Apr. 14, gage height, 3.00 ft; minimum discharge 0.14 ft³/s, Oct. 14.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004 DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 0.35 | 9.2 | 4.9 | 10 | 3.2 | 3.8 | 32 | 15 | 6.2 | 0.64 | e0.43 | 0.72 |
| 2 | 0.32 | 7.0 | 4.2 | 9.7 | 3.1 | 4.5 | 43 | 14 | 6.4 | 1.1 | e0.34 | 0.69 |
| 3 | 0.27 | 5.9 | 3.6 | 9.6 | 3.4 | 5.3 | 31 | 14 | 5.9 | 0.74 | e0.30 | 0.64 |
| 4 | 0.27 | 5.1 | 3.3 | 10 | 6.3 | 5.6 | 25 | 20 | 5.5 | 0.68 | 0.34 | 0.57 |
| 5 | 0.27 | 4.7 | 3.2 | 15 | 5.1 | 5.6 | 22 | 17 | 4.9 | 2.2 | 1.5 | 0.49 |
| 6 | 0.24 | 5.1 | 3.9 | 15 | 6.0 | 7.6 | 18 | 15 | 4.5 | 2.0 | 0.71 | 0.39 |
| 7 | 0.23 | 4.7 | 6.2 | 12 | 13 | 8.2 | 15 | 13 | 4.5 | e1.9 | 0.51 | 0.36 |
| 8 | 0.22 | 4.1 | 4.2 | 9.7 | 10 | 7.5 | 13 | 11 | 4.2 | e1.3 | 0.44 | 0.54 |
| 9 | 0.21 | 3.4 | 4.0 | 7.8 | 6.9 | 6.5 | 12 | 12 | 4.1 | e0.89 | 0.35 | 1.1 |
| 10 | 0.20 | 3.3 | 3.7 | 6.4 | 5.8 | 5.7 | 11 | 13 | 4.0 | e0.82 | 0.33 | 0.76 |
| 11 | 0.19 | 3.3 | 14 | 5.7 | 5.5 | 5.5 | 10 | 12 | 3.8 | e0.65 | 0.33 | 0.52 |
| 12 | 0.29 | 3.9 | 29 | 5.7 | 5.0 | 5.3 | 9.8 | 10 | 3.5 | e0.61 | 0.50 | 0.42 |
| 13 | 0.24 | 5.0 | 23 | 5.9 | 4.8 | 5.0 | 22 | 9.6 | 3.2 | e0.58 | 3.4 | 0.34 |
| 14 | 0.16 | 5.4 | 17 | 5.5 | 4.6 | 4.4 | 70 | 8.2 | 3.1 | e0.68 | 3.0 | 0.29 |
| 15 | 2.6 | 4.8 | 32 | 5.0 | 4.4 | 4.8 | 51 | 7.7 | 3.1 | e0.68 | 8.3 | 0.27 |
| 16 | 1.9 | 4.5 | 25 | 5.3 | 4.2 | 3.8 | 35 | 7.5 | 2.9 | e0.65 | 7.7 | 0.29 |
| 17 | 1.8 | 3.8 | 27 | 5.2 | 3.7 | 3.7 | 27 | 7.2 | 2.5 | e0.63 | 4.5 | 0.28 |
| 18 | 2.1 | 3.7 | 62 | 4.8 | 3.6 | 3.6 | 23 | 6.6 | 1.1 | e0.54 | 3.6 | 3.9 |
| 19 | 2.0 | 3.7 | 37 | 4.7 | 3.5 | 3.6 | 20 | 7.7 | 1.8 | e0.56 | 2.8 | 7.7 |
| 20 | 2.0 | 4.5 | 27 | 4.3 | 3.3 | 3.7 | 17 | 6.9 | 1.1 | e0.56 | 2.1 | 5.2 |
| 21 | 1.9 | 5.7 | 21 | 4.2 | 3.4 | 5.8 | 15 | 6.0 | 0.87 | e0.50 | 3.4 | 3.5 |
| 22 | 1.6 | 5.2 | 18 | 4.0 | 3.6 | 6.4 | 14 | 5.7 | 0.83 | e0.50 | 7.5 | 2.5 |
| 23 | 1.4 | 4.4 | 16 | 3.9 | 3.8 | 6.4 | 20 | 5.7 | 0.83 | e0.45 | 5.7 | 1.7 |
| 24 | 1.2 | 3.9 | 18 | 3.9 | 3.6 | 6.2 | 21 | 6.2 | 0.70 | e0.45 | 3.7 | 1.2 |
| 25 | 1.1 | 4.2 | 23 | 4.2 | 3.5 | 6.2 | 17 | 6.2 | 0.67 | e0.52 | 2.6 | 0.96 |
| 26 | 1.2 | 3.8 | 19 | 3.8 | 3.3 | 6.5 | 20 | 5.9 | 0.67 | e0.54 | 1.7 | 0.78 |
| 27 | 3.8 | 3.6 | 15 | 3.4 | 3.2 | 7.5 | 27 | 7.5 | 0.67 | e0.46 | 1.3 | 0.63 |
| 28 | 5.2 | 3.8 | 13 | 3.5 | 3.2 | 7.6 | 24 | 9.0 | 0.67 | e0.41 | 1.1 | 1.4 |
| 29 | 18 | 6.1 | 12 | 3.5 | 3.4 | 6.8 | 19 | 9.7 | 0.76 | e0.45 | 0.87 | 11 |
| 30 | 19 | 5.5 | 12 | 3.4 | --- | 6.1 | 16 | 7.4 | 0.67 | e0.41 | 0.72 | 11 |
| 31 | 13 | --- | 11 | 3.3 | --- | 8.8 | --- | 5.9 | --- | e0.41 | 0.86 | --- |
| TOTAL | 83.26 | 141.3 | 512.2 | 198.4 | 136.4 | 178.0 | 699.8 | 302.6 | 83.64 | 23.51 | 70.93 | 60.14 |
| MEAN | 2.69 | 4.71 | 16.5 | 6.40 | 4.70 | 5.74 | 23.3 | 9.76 | 2.79 | 0.76 | 2.29 | 2.00 |
| MAX | 19 | 9.2 | 62 | 15 | 13 | 8.8 | 70 | 20 | 6.4 | 2.2 | 8.3 | 11 |
| MIN | 0.16 | 3.3 | 3.2 | 3.3 | 3.1 | 3.6 | 9.8 | 5.7 | 0.67 | 0.41 | 0.30 | 0.27 |
| CFSM | 0.76 | 1.33 | 4.65 | 1.80 | 1.32 | 1.62 | 6.57 | 2.75 | 0.79 | 0.21 | 0.64 | 0.56 |
| IN. | 0.87 | 1.48 | 5.37 | 2.08 | 1.43 | 1.87 | 7.33 | 3.17 | 0.88 | 0.25 | 0.74 | 0.63 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2004, BY WATER YEAR (WY)

| | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 |
|------|------|------|------|------|------|------|
| MEAN | 1.25 | 3.17 | 8.47 | 5.24 | 5.93 | 13.4 |
| MAX | 3.27 | 4.89 | 16.5 | 8.29 | 9.29 | 23.6 |
| (WY) | 2000 | 2000 | 2004 | 2003 | 2000 | 2001 |
| MIN | 0.00 | 0.00 | 0.00 | 0.62 | 3.08 | 5.74 |
| (WY) | 2002 | 2002 | 2002 | 2002 | 2002 | 2001 |

SUMMARY STATISTICS

| | FOR 2003 CALENDAR YEAR | FOR 2004 WATER YEAR | WATER YEARS 1999 - 2004 |
|--------------------------|------------------------|---------------------|-------------------------|
| ANNUAL TOTAL | 3335.07 | 2490.18 | |
| ANNUAL MEAN | 9.14 | 6.80 | 6.20 |
| HIGHEST ANNUAL MEAN | | | 8.33 |
| LOWEST ANNUAL MEAN | | | 2.87 |
| HIGHEST DAILY MEAN | 62 | Dec 18 | 70 |
| LOWEST DAILY MEAN | 0.16 | Oct 14 | 0.16 |
| ANNUAL SEVEN-DAY MINIMUM | 0.22 | Oct 8 | 0.22 |
| MAXIMUM PEAK FLOW | | | 79 |
| MAXIMUM PEAK STAGE | | | 3.00 |
| INSTANTANEOUS LOW FLOW | | | 0.14 |
| ANNUAL RUNOFF (CFSM) | 2.57 | 1.92 | 1.75 |
| ANNUAL RUNOFF (INCHES) | 34.95 | 26.09 | 23.72 |
| 10 PERCENT EXCEEDS | 21 | 17 | 15 |
| 50 PERCENT EXCEEDS | 5.4 | 4.2 | 4.2 |
| 90 PERCENT EXCEEDS | 0.87 | 0.46 | 0.00 |

e Estimated

BLACKSTONE RIVER BASIN

01113760 ABBOTT RUN AT VALLEY FALLS, RI

LOCATION.--Lat 41° 54' 50", long 71° 23' 05", Providence County, Hydrologic Unit 01090003, on right bank, 100 ft upstream Rt 123, 40 ft upstream of dam, at Valley Falls.

DRAINAGE AREA.--26.9 mi².

PERIOD OF RECORD.--December 2003 to September 2004.

GAGE.--Water-stage recorder.

REMARKS.--Records good except those for estimated daily discharge, which are poor. Flow regulated by flashboards at dam.

EXTREMES FOR DECEMBER 2003 TO SEPTEMBER 2004.--Maximum discharge, 369 ft³/s, Apr 14, gage height, 1.95 ft; minimum discharge, 4.6 ft³/s, May 13 (shutdown from flashboard changes).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-----|-----|-----|------|------|------|------|------|------|------|------|------|
| 1 | --- | --- | --- | 52 | 30 | 33 | 165 | 100 | 45 | 26 | 27 | 29 |
| 2 | --- | --- | --- | 48 | 30 | 33 | 230 | 93 | 45 | 36 | 27 | 29 |
| 3 | --- | --- | --- | 51 | 31 | 28 | 213 | 96 | 42 | 36 | 26 | 29 |
| 4 | --- | --- | --- | 54 | 53 | 27 | 172 | 121 | 40 | 32 | 27 | 29 |
| 5 | --- | --- | --- | 78 | 37 | 26 | 151 | 111 | 36 | 48 | 50 | 28 |
| 6 | --- | --- | --- | 76 | 43 | 36 | 125 | 101 | 34 | 41 | 30 | 28 |
| 7 | --- | --- | --- | 63 | 101 | 32 | 107 | 93 | 35 | 34 | 27 | 28 |
| 8 | --- | --- | --- | 51 | 50 | 34 | 96 | 83 | 32 | 33 | 26 | 32 |
| 9 | --- | --- | e30 | 41 | 38 | 47 | 87 | 78 | 30 | 33 | 26 | 38 |
| 10 | --- | --- | 30 | 37 | 38 | 44 | 80 | 60 | 29 | 32 | 27 | 32 |
| 11 | --- | --- | 80 | 36 | 38 | 44 | 74 | 26 | 28 | 33 | 28 | 29 |
| 12 | --- | --- | 98 | 38 | 36 | 38 | 71 | 12 | 28 | 32 | 28 | 28 |
| 13 | --- | --- | 47 | 38 | 36 | 36 | 120 | 43 | 27 | 35 | 40 | 28 |
| 14 | --- | --- | 42 | 34 | 36 | 33 | 332 | 59 | 27 | 35 | 33 | 27 |
| 15 | --- | --- | 105 | 36 | 35 | 32 | 333 | 55 | 28 | 32 | 79 | 27 |
| 16 | --- | --- | 56 | 42 | 33 | 32 | 253 | 52 | 36 | 31 | 41 | 28 |
| 17 | --- | --- | 60 | 40 | 33 | 37 | 192 | 50 | 36 | 30 | 33 | 28 |
| 18 | --- | --- | 117 | 36 | 33 | 35 | 158 | 47 | 36 | 29 | 30 | 73 |
| 19 | --- | --- | 60 | 35 | 33 | 34 | 136 | 52 | 38 | 31 | 27 | 46 |
| 20 | --- | --- | 52 | 33 | 33 | 33 | 123 | 49 | 33 | 32 | 31 | 32 |
| 21 | --- | --- | 48 | 33 | 34 | 54 | 108 | 44 | 32 | 33 | 34 | 31 |
| 22 | --- | --- | 47 | 33 | 35 | 59 | 98 | 41 | 32 | 34 | 40 | 30 |
| 23 | --- | --- | 45 | 32 | 34 | 55 | 114 | 42 | 32 | 31 | 32 | 29 |
| 24 | --- | --- | 50 | 31 | 33 | 51 | 126 | 47 | 31 | 36 | 31 | 29 |
| 25 | --- | --- | 64 | 29 | 33 | 49 | 114 | 45 | 31 | 30 | 33 | 29 |
| 26 | --- | --- | 60 | 31 | 33 | 49 | 121 | 42 | 32 | 28 | 33 | 29 |
| 27 | --- | --- | 66 | 31 | 33 | 54 | 162 | 55 | 30 | 27 | 30 | 29 |
| 28 | --- | --- | 62 | 32 | 33 | 57 | 149 | 61 | 26 | 33 | 29 | 35 |
| 29 | --- | --- | 59 | 32 | 33 | 52 | 127 | 65 | 27 | 29 | 30 | 82 |
| 30 | --- | --- | 57 | 31 | --- | 47 | 110 | 56 | 26 | 28 | 29 | 43 |
| 31 | --- | --- | 55 | 31 | --- | 60 | --- | 46 | --- | 27 | 31 | --- |
| TOTAL | --- | --- | --- | 1265 | 1098 | 1281 | 4447 | 1925 | 984 | 1007 | 1015 | 1014 |
| MEAN | --- | --- | --- | 40.8 | 37.9 | 41.3 | 148 | 62.1 | 32.8 | 32.5 | 32.7 | 33.8 |
| MAX | --- | --- | --- | 78 | 101 | 60 | 333 | 121 | 45 | 48 | 79 | 82 |
| MIN | --- | --- | --- | 29 | 30 | 26 | 71 | 12 | 26 | 26 | 26 | 27 |
| MED | --- | --- | --- | 36 | 34 | 37 | 126 | 55 | 32 | 32 | 30 | 29 |
| AC-FT | --- | --- | --- | 2510 | 2180 | 2540 | 8820 | 3820 | 1950 | 2000 | 2010 | 2010 |
| CFSM | --- | --- | --- | 1.52 | 1.41 | 1.54 | 5.51 | 2.31 | 1.22 | 1.21 | 1.22 | 1.26 |
| IN. | --- | --- | --- | 1.75 | 1.52 | 1.77 | 6.15 | 2.66 | 1.36 | 1.39 | 1.40 | 1.40 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2004 - 2004, BY WATER YEAR (WY)

| | 2004 | 2004 | 2004 | 2004 | 2004 | 2004 | 2004 | 2004 | 2004 | 2004 | 2004 | 2004 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | --- | --- | --- | 40.8 | 37.9 | 41.3 | 148 | 62.1 | 32.8 | 32.5 | 32.7 | 33.8 |
| MAX | --- | --- | --- | 40.8 | 37.9 | 41.3 | 148 | 62.1 | 32.8 | 32.5 | 32.7 | 33.8 |
| (WY) | --- | --- | --- | 2004 | 2004 | 2004 | 2004 | 2004 | 2004 | 2004 | 2004 | 2004 |
| MIN | --- | --- | --- | 40.8 | 37.9 | 41.3 | 148 | 62.1 | 32.8 | 32.5 | 32.7 | 33.8 |
| (WY) | --- | --- | --- | 2004 | 2004 | 2004 | 2004 | 2004 | 2004 | 2004 | 2004 | 2004 |

e Estimated

BLACKSTONE RIVER BASIN

01113895 BLACKSTONE RIVER AT ROOSEVELT AVE. AT PAWTUCKET, RI

LOCATION.--Lat 41° 53' 19", long 71° 22' 55", Providence County, Hydrologic Unit 01090003, on right bank at upstream side of Roosevelt Ave. bridge at Pawtucket.

DRAINAGE AREA.--474 mi².

PERIOD OF RECORD.--October 2003 to September 2004.

GAGE.--Water-stage recorder. Datum of gage is 20 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good except those for estimated daily discharge, which are fair. Flow regulated by powerplants, by West Hill Reservoir since May 1961, and by other reservoirs upstream. Telephone gage-height telemeter at station.

EXTREMES FOR OCTOBER 2003 TO SEPTEMBER 2004.--Maximum discharge, 7,980 ft³/s, Apr 15, gage height, 6.40 ft; minimum discharge, 132 ft³/s, July 23, Sept. 6.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002 DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|-------|-------|-------|-------|--------|-------|-------|-------|-------|-------|
| 1 | e259 | e1580 | 676 | 1240 | 444 | 478 | 2490 | 1590 | 803 | 214 | 259 | 230 |
| 2 | e255 | e1290 | 623 | 1180 | 447 | 576 | 5060 | 1420 | 768 | 275 | 238 | 197 |
| 3 | e239 | e1040 | 571 | 1170 | 445 | 694 | 4680 | 1410 | 795 | 338 | 192 | 182 |
| 4 | e239 | e896 | 519 | 1230 | 616 | 764 | 3220 | 1940 | 723 | 261 | 160 | 168 |
| 5 | e236 | e875 | 484 | 1520 | 609 | 759 | 2610 | 2130 | 624 | 376 | 298 | 163 |
| 6 | e229 | e962 | 499 | 1680 | 609 | 831 | 2130 | 1790 | 565 | 489 | 312 | 152 |
| 7 | e233 | e1010 | 516 | 1500 | 1150 | 985 | 1750 | 1560 | 573 | 381 | 254 | 150 |
| 8 | e233 | e896 | 508 | 1270 | 1150 | 919 | 1500 | 1270 | 533 | 309 | 209 | 176 |
| 9 | e233 | e825 | 467 | 1060 | 886 | 835 | 1340 | 1190 | 470 | 281 | 186 | 313 |
| 10 | e228 | e769 | 508 | 959 | 749 | 728 | 1210 | 1260 | 430 | 257 | 172 | 493 |
| 11 | e220 | e742 | 920 | 868 | 698 | 681 | 1090 | 1160 | 462 | 225 | 167 | 411 |
| 12 | e227 | e760 | 2440 | 852 | 640 | 657 | 947 | 1040 | 405 | 213 | 163 | 313 |
| 13 | e262 | e778 | 2140 | 798 | 593 | 623 | 1360 | 887 | 368 | 221 | 444 | 252 |
| 14 | e279 | e797 | 1540 | 742 | 584 | 576 | 5810 | 799 | 344 | 259 | 291 | 232 |
| 15 | e765 | e725 | 1930 | 693 | 573 | 547 | 6350 | 737 | 338 | 265 | 553 | 209 |
| 16 | e929 | e691 | 1960 | 613 | 517 | 542 | 4520 | 672 | 318 | 241 | 547 | 208 |
| 17 | e691 | e644 | 1770 | 699 | 486 | 583 | 3420 | 655 | 295 | 218 | 451 | 202 |
| 18 | e579 | e607 | 3760 | 708 | 457 | 564 | 2740 | 622 | 294 | 198 | 391 | 624 |
| 19 | e509 | e593 | 4120 | 664 | 428 | 554 | 2250 | 718 | 335 | 202 | 312 | 1550 |
| 20 | e468 | 624 | 2800 | 659 | 391 | 542 | 1860 | 781 | 320 | 196 | 269 | 1190 |
| 21 | e503 | 743 | 2140 | 613 | 419 | 743 | 1600 | 684 | 280 | 179 | 345 | 839 |
| 22 | e503 | 746 | 1730 | 594 | 429 | 1090 | 1420 | 637 | 257 | 164 | 610 | 645 |
| 23 | e452 | 677 | 1580 | 566 | 459 | 971 | 1590 | 613 | 252 | 148 | 581 | 516 |
| 24 | e473 | 646 | 1550 | 532 | 465 | 831 | 2070 | 683 | 230 | 208 | 421 | 428 |
| 25 | e467 | 628 | 2230 | 528 | 449 | 771 | 1850 | 739 | 217 | 657 | 338 | 369 |
| 26 | e450 | 622 | 2400 | 541 | 432 | 740 | 1830 | 770 | 271 | 511 | 292 | 325 |
| 27 | e773 | 586 | 2000 | 517 | 425 | 770 | 2740 | 823 | 304 | 392 | 257 | 314 |
| 28 | e1160 | 576 | 1680 | 494 | 427 | 791 | 2810 | 994 | 262 | 355 | 229 | 404 |
| 29 | e2310 | 716 | 1510 | 480 | 441 | 771 | 2220 | 1240 | 245 | 407 | 206 | 1690 |
| 30 | e3520 | 744 | 1410 | 464 | --- | 679 | 1800 | 1090 | 232 | 333 | 192 | 2070 |
| 31 | e2310 | --- | 1340 | 461 | --- | 726 | --- | 882 | --- | 281 | 212 | --- |
| TOTAL | 20234 | 23788 | 48321 | 25895 | 16418 | 22321 | 76267 | 32786 | 12313 | 9054 | 9551 | 15015 |
| MEAN | 653 | 793 | 1559 | 835 | 566 | 720 | 2542 | 1058 | 410 | 292 | 308 | 500 |
| MAX | 3520 | 1580 | 4120 | 1680 | 1150 | 1090 | 6350 | 2130 | 803 | 657 | 610 | 2070 |
| MIN | 220 | 576 | 467 | 461 | 391 | 478 | 947 | 613 | 217 | 148 | 160 | 150 |
| MED | 452 | 743 | 1550 | 699 | 465 | 728 | 2100 | 887 | 336 | 261 | 269 | 314 |
| AC-FT | 40130 | 47180 | 95840 | 51360 | 32570 | 44270 | 151300 | 65030 | 24420 | 17960 | 18940 | 29780 |
| CFSM | 1.38 | 1.67 | 3.29 | 1.76 | 1.19 | 1.52 | 5.36 | 2.23 | 0.87 | 0.62 | 0.65 | 1.06 |
| IN. | 1.59 | 1.87 | 3.79 | 2.03 | 1.29 | 1.75 | 5.99 | 2.57 | 0.97 | 0.71 | 0.75 | 1.18 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2004 - 2004, BY WATER YEAR (WY)

| | | | | | | | | | | | | |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 653 | 793 | 1559 | 835 | 566 | 720 | 2542 | 1058 | 410 | 292 | 308 | 500 |
| MAX | 653 | 793 | 1559 | 835 | 566 | 720 | 2542 | 1058 | 410 | 292 | 308 | 500 |
| (WY) | 2004 | 2004 | 2004 | 2004 | 2004 | 2004 | 2004 | 2004 | 2004 | 2004 | 2004 | 2004 |
| MIN | 653 | 793 | 1559 | 835 | 566 | 720 | 2542 | 1058 | 410 | 292 | 308 | 500 |
| (WY) | 2004 | 2004 | 2004 | 2004 | 2004 | 2004 | 2004 | 2004 | 2004 | 2004 | 2004 | 2004 |

SUMMARY STATISTICS

| | FOR 2004 WATER YEAR | |
|--------------------------|---------------------|--------|
| ANNUAL TOTAL | 311963 | |
| ANNUAL MEAN | 852 | |
| HIGHEST DAILY MEAN | 6350 | Apr 15 |
| LOWEST DAILY MEAN | 148 | Jul 23 |
| ANNUAL SEVEN-DAY MINIMUM | 170 | Sep 2 |
| MAXIMUM PEAK FLOW | 7980 | Apr 15 |
| MAXIMUM PEAK STAGE | 6.40 | Apr 15 |
| INSTANTANEOUS LOW FLOW | 132 | Jul 23 |
| ANNUAL RUNOFF (AC-FT) | 618800 | |
| ANNUAL RUNOFF (CFSM) | 1.80 | |
| ANNUAL RUNOFF (INCHES) | 24.48 | |
| 10 PERCENT EXCEEDS | 1810 | |
| 50 PERCENT EXCEEDS | 609 | |
| 90 PERCENT EXCEEDS | 229 | |

c Estimated

MOSHASSUCK RIVER BASIN

01114000 MOSHASSUCK RIVER AT PROVIDENCE, RI

LOCATION.--Lat 41° 50' 02", long 71° 24' 42", Providence County, Hydrologic Unit 01090004, on left bank 800 ft upstream from bridge on U.S. Highway 44 at Providence and 0.5 mi above mouth.

DRAINAGE AREA.--23.1 mi².

PERIOD OF RECORD.--Discharge: June 1963 to current year.

Water-quality records: Water year 1971.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 8.19 ft above National Geodetic Vertical Datum of 1929. Prior to Nov. 7, 1973, at datum 0.88 ft lower. Mar. 10, 1972, to Nov. 7, 1973, stage record obtained at site 200 ft upstream. Gage heights of published extremes are for site and datum then in use.

REMARKS.--Records good except those for estimated daily discharge, which are poor. Occasional regulation at low flow. Satellite gage-height telemeter at station.

AVERAGE DISCHARGE.--41 years (water years 1964--2004), 40.0 ft³/s, 23.55 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,390 ft³/s, Mar. 18, 1968, gage height, 3.46 ft, present datum, from rating curve extended above 460 ft³/s; maximum gage height, 5.81 ft, July 30, 1976; minimum discharge, 1.3 ft³/s, Aug. 23, 1970; minimum daily discharge, 1.7 ft³/s, Aug. 10, 1970.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 901 ft³/s, Apr. 13 gage height, 4.94 ft; minimum discharge, 6.5 ft³/s, Sept. 5--8.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004 DAILY MEAN VALUES

Table with 12 columns (DAY, OCT, NOV, DEC, JAN, FEB, MAR, APR, MAY, JUN, JUL, AUG, SEP) and 31 rows of daily discharge data. Includes summary rows for TOTAL, MEAN, MAX, MIN, CFMS, and IN.

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1963 - 2004, BY WATER YEAR (WY)

Table with 12 columns (MEAN, MAX, (WY), MIN, (WY)) and 12 rows showing monthly mean statistics for water years 1963 through 1970.

SUMMARY STATISTICS

Table with 3 main sections: FOR 2003 CALENDAR YEAR, FOR 2004 WATER YEAR, and WATER YEARS 1963 - 2004. Lists various discharge statistics like ANNUAL TOTAL, MEAN, HIGHEST ANNUAL MEAN, etc.

e Estimated

WOONASQUATUCKET RIVER BASIN

01114500 WOONASQUATUCKET RIVER AT CENTERDALE, RI

LOCATION.--Lat 41° 51' 32", long 71° 29' 16", Providence County, Hydrologic Unit 01090004, on right bank 75 ft downstream from bridge on U.S. Highway 44 at Centerdale and 6.5 mi upstream from mouth.

DRAINAGE AREA.--38.3 mi².

PERIOD OF RECORD.--Discharge: July 1941 to current year.

Water-quality records: Water years 1955-56.

GAGE.--Water-stage recorder. Elevation of gage is 95 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good except those for estimated daily discharge, which are poor. Some regulation by reservoirs upstream; regulation greater prior to 1956. Discharge figures prior to 1966 included leakage around station through bypass canal; leakage negligible subsequently. Satellite gage-height telemeter at station.

AVERAGE DISCHARGE.--63 years (water years 1942-2004), 73.6 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,520 ft³/s, June 30, 1998, gage height, 7.26, maximum gage height, 7.75 ft, Mar. 18, 1968, from floodmarks; minimum daily discharge, 2.1 ft³/s, Aug. 26, 1963.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge during March 1936, 1,000 ft³/s, by computation of flow over dam 0.7 mi downstream.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 771 ft³/s, Apr. 14, gage height, 5.10 ft; minimum discharge, 11 ft³/s, July 23-28, 30, Aug. 30, Sept. 5-8, 17, 18.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1 | 20 | 260 | 56 | 127 | 18 | 75 | 237 | 133 | 60 | 15 | 17 | 15 |
| 2 | 20 | 233 | 67 | 126 | 18 | 77 | 226 | 123 | 59 | 21 | 20 | 21 |
| 3 | 19 | 208 | 102 | 127 | 22 | 78 | 162 | 125 | 54 | 19 | 18 | 15 |
| 4 | 19 | 154 | 103 | 137 | 30 | 73 | 162 | 161 | 48 | 17 | 17 | 13 |
| 5 | 20 | 122 | 99 | 160 | 30 | 56 | 180 | 147 | 46 | 30 | 43 | 12 |
| 6 | 19 | 117 | 89 | 144 | 50 | 65 | 150 | 134 | 45 | 29 | 22 | 12 |
| 7 | 19 | 112 | 85 | 129 | 108 | 64 | 129 | 121 | 45 | 21 | 17 | 11 |
| 8 | 19 | 110 | 80 | 122 | 80 | 59 | 118 | 109 | 40 | 19 | 20 | 25 |
| 9 | 19 | 109 | 78 | 117 | 97 | 56 | 107 | 107 | 36 | 43 | 20 | 59 |
| 10 | 19 | 107 | 75 | 123 | 110 | 54 | 78 | 106 | 35 | 87 | 19 | 46 |
| 11 | 18 | 107 | 242 | 124 | 100 | 53 | 72 | 102 | 34 | 86 | 22 | 19 |
| 12 | 20 | 106 | 207 | 116 | 92 | 52 | 71 | 99 | 24 | 84 | 24 | 21 |
| 13 | 21 | 107 | 121 | 91 | 87 | 50 | 189 | 92 | 24 | 88 | 85 | 25 |
| 14 | 19 | 105 | 107 | 58 | 83 | 49 | 712 | 59 | 29 | 85 | 56 | 16 |
| 15 | 74 | 103 | 233 | 56 | 81 | 49 | 602 | 55 | 31 | 82 | 125 | 14 |
| 16 | 35 | 102 | 168 | e55 | 78 | 50 | 426 | 53 | 30 | 78 | 79 | 14 |
| 17 | 26 | 100 | 216 | e55 | 77 | e52 | 311 | 52 | 29 | 76 | 88 | 12 |
| 18 | 27 | 63 | 445 | 55 | 77 | e51 | 250 | 52 | 30 | 74 | 81 | 82 |
| 19 | 27 | 32 | 302 | 53 | 76 | e51 | 208 | 54 | 26 | 58 | 77 | 67 |
| 20 | 53 | 71 | 240 | 52 | 75 | 50 | 177 | 51 | 20 | 19 | 59 | 68 |
| 21 | 95 | 83 | 199 | 50 | 77 | 71 | 144 | 49 | 18 | 14 | 48 | 73 |
| 22 | 115 | 58 | 177 | 49 | 78 | 68 | 126 | 49 | 18 | 12 | 57 | 68 |
| 23 | 109 | 23 | 166 | 48 | 77 | 59 | 141 | 51 | 17 | 12 | 42 | 52 |
| 24 | 106 | 23 | 194 | 40 | 76 | 56 | 142 | 51 | 16 | 15 | 20 | 20 |
| 25 | 104 | 24 | 289 | 18 | 75 | 55 | 134 | 49 | 16 | 12 | 41 | 16 |
| 26 | 102 | 23 | 297 | 17 | 74 | 55 | 176 | 44 | 16 | 11 | 46 | 17 |
| 27 | 116 | 23 | 276 | 17 | 74 | 58 | 251 | 55 | 16 | 11 | 19 | 27 |
| 28 | 113 | 24 | 249 | 18 | 73 | 57 | 222 | 58 | 15 | 17 | 15 | 45 |
| 29 | 256 | 29 | 186 | 18 | 74 | 54 | 182 | 61 | 17 | 13 | 13 | 125 |
| 30 | 218 | 27 | 141 | 18 | --- | 49 | 152 | 61 | 16 | 12 | 12 | 100 |
| 31 | 275 | --- | 130 | 18 | --- | 74 | --- | 57 | --- | 14 | 15 | --- |
| TOTAL | 2122 | 2765 | 5419 | 2338 | 2067 | 1820 | 6237 | 2520 | 910 | 1174 | 1237 | 1110 |
| MEAN | 68.5 | 92.2 | 175 | 75.4 | 71.3 | 58.7 | 208 | 81.3 | 30.3 | 37.9 | 39.9 | 37.0 |
| MAX | 275 | 260 | 445 | 160 | 110 | 78 | 712 | 161 | 60 | 88 | 125 | 125 |
| MIN | 18 | 23 | 56 | 17 | 18 | 49 | 71 | 44 | 15 | 11 | 12 | 11 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 2004, BY WATER YEAR (WY)

| | 1941 | 1942 | 1943 | 1944 | 1945 | 1946 | 1947 | 1948 | 1949 | 1950 | 1951 | 1952 | 1953 | 1954 | 1955 | 1956 | 1957 | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 | 1970 | 1971 | 1972 | 1973 | 1974 | 1975 | 1976 | 1977 | 1978 | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 38.6 | 60.0 | 86.6 | 91.2 | 101 | 140 | 131 | 86.2 | 59.2 | 31.7 | 28.9 | 30.1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MAX | 200 | 208 | 239 | 281 | 254 | 357 | 364 | 191 | 214 | 112 | 83.6 | 116 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| (WY) | 1956 | 1956 | 1973 | 1979 | 1970 | 1983 | 1983 | 1967 | 1982 | 1998 | 1955 | 1954 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MIN | 10.3 | 9.90 | 17.9 | 20.6 | 28.2 | 51.3 | 44.9 | 34.1 | 23.2 | 10.3 | 9.21 | 6.99 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| (WY) | 1958 | 1958 | 1966 | 1966 | 2002 | 2002 | 1966 | 1986 | 1965 | 2002 | 1963 | 1980 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

SUMMARY STATISTICS FOR 2003 CALENDAR YEAR FOR 2004 WATER YEAR WATER YEARS 1941 - 2004

| | 2003 CALENDAR YEAR | 2004 WATER YEAR | 1941 - 2004 |
|--------------------------|--------------------|-----------------|-------------|
| ANNUAL TOTAL | 36367 | 29719 | |
| ANNUAL MEAN | 99.6 | 81.2 | 73.6 |
| HIGHEST ANNUAL MEAN | | | 119 |
| LOWEST ANNUAL MEAN | | | 31.5 |
| HIGHEST DAILY MEAN | 445 | 712 | 1250 |
| LOWEST DAILY MEAN | 18 | 11 | 2.1 |
| ANNUAL SEVEN-DAY MINIMUM | 19 | 12 | 3.1 |
| MAXIMUM PEAK FLOW | | 771 | 1520 |
| MAXIMUM PEAK STAGE | | 5.10 | 7.75 |
| INSTANTANEOUS LOW FLOW | | 11 | |
| 10 PERCENT EXCEEDS | 208 | 170 | 151 |
| 50 PERCENT EXCEEDS | 88 | 58 | 52 |
| 90 PERCENT EXCEEDS | 25 | 17 | 17 |

e Estimated

PAWTUXET RIVER BASIN

01115098 PEEPTOAD BROOK AT ELMDALE ROAD NEAR NORTH SCITUATE, RI

LOCATION.--Lat 41°51'08", long 71°23'35", Providence County, Hydrologic Unit 01090004, on left bank 5 ft downstream from bridge on Elmdale Road, 0.5 mi upstream from regulating reservoir and 1.7 mi northwest of North Scituate.

DRAINAGE AREA.--4.83 mi².

WATER DISCHARGE RECORDS

PERIOD OF RECORD.--Discharge: June 1994 to current year.

Water-quality records: Water years, 2000-03.

REVISED RECORDS.--WDR MA-RI-03-01: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 315 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--10 years (water years 1995-2004), 10.0 ft³/s, 28.25 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 180 ft³/s, Oct. 20, 1996, gage height, 2.40 ft; no flow Sept. 13, 16, 17, 1995.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 132 ft³/s, Apr. 14, gage height, 2.36 ft; minimum discharge, 0.47 ft³/s, July 24, 31, Aug. 1.

**DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES**

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|-------|-------|-------|-------|------|-------|-------|-------|-------|-------|
| 1 | 2.1 | 24 | 11 | 15 | 4.3 | 7.4 | 62 | 17 | 6.6 | 0.61 | 0.52 | 0.79 |
| 2 | 2.0 | 20 | 9.2 | 14 | 4.1 | 9.2 | 72 | 16 | 6.8 | 0.78 | 0.72 | 0.68 |
| 3 | 1.8 | 17 | 7.8 | 15 | 4.3 | 11 | 43 | 18 | 5.9 | 0.83 | 0.64 | 0.61 |
| 4 | 1.7 | 15 | 7.1 | 16 | 7.0 | 11 | 33 | 29 | 4.9 | 0.69 | 0.55 | 0.58 |
| 5 | 1.9 | 15 | 6.9 | 24 | 6.9 | 11 | 33 | 23 | 4.0 | 1.0 | 1.9 | 0.54 |
| 6 | 1.7 | 17 | 8.2 | 25 | 7.9 | 16 | 25 | 18 | 3.7 | 1.5 | 1.7 | 0.51 |
| 7 | 1.6 | 15 | 8.8 | 18 | 23 | 19 | 21 | 15 | 3.8 | 1.1 | 1.2 | 0.50 |
| 8 | 1.6 | 13 | 8.3 | 14 | 19 | 15 | 19 | 13 | 3.4 | 0.90 | 0.95 | 1.0 |
| 9 | 1.5 | 11 | 7.9 | 11 | 13 | 12 | 17 | 12 | 2.9 | 0.84 | 0.78 | 1.8 |
| 10 | 1.4 | 10 | 7.8 | 9.0 | 10 | 11 | 16 | 12 | 2.6 | 0.72 | 0.66 | 1.6 |
| 11 | 1.4 | 9.8 | 28 | 7.6 | 9.4 | 10 | 14 | 11 | 2.3 | 0.61 | 0.59 | 1.1 |
| 12 | 1.5 | 11 | 61 | 7.9 | 8.2 | 10 | 13 | 10 | 1.9 | 0.56 | 0.59 | 0.92 |
| 13 | 1.8 | 13 | 31 | 8.5 | 7.5 | 9.3 | 35 | 8.9 | 1.6 | 0.67 | 3.0 | 0.81 |
| 14 | 1.7 | 12 | 21 | 8.4 | 7.1 | 8.3 | 108 | 8.0 | 1.5 | 0.93 | 2.0 | 0.75 |
| 15 | 12 | 10 | 45 | 7.7 | 6.8 | 7.9 | 65 | 7.4 | 1.5 | 0.89 | 8.1 | 0.72 |
| 16 | 12 | 9.7 | 39 | 6.9 | 5.9 | 8.0 | 44 | 6.8 | 1.4 | 0.77 | 9.4 | 0.77 |
| 17 | 8.3 | 9.2 | 34 | 6.4 | 5.4 | 8.4 | 33 | 6.5 | 1.2 | 0.67 | 5.9 | 0.82 |
| 18 | 6.5 | 9.1 | 91 | 6.8 | 5.2 | 8.0 | 28 | 6.1 | 1.2 | 0.60 | 3.6 | 8.3 |
| 19 | 5.5 | 8.7 | 48 | 7.1 | 5.0 | 7.8 | 24 | 6.4 | 1.6 | 0.80 | 2.4 | 13 |
| 20 | 5.5 | 10 | 33 | 6.7 | 5.0 | 7.5 | 21 | 5.9 | 1.4 | 0.84 | 1.8 | 6.5 |
| 21 | 4.9 | 11 | 27 | 6.4 | 5.2 | 15 | 18 | 5.3 | 1.1 | 0.68 | 1.8 | 3.7 |
| 22 | 4.4 | 11 | 23 | 6.0 | 6.0 | 19 | 17 | 5.0 | 0.90 | 0.57 | 4.3 | 2.5 |
| 23 | 4.3 | 9.5 | 21 | 6.0 | 6.5 | 14 | 21 | 5.0 | 0.86 | 0.51 | 3.8 | 1.9 |
| 24 | 4.1 | 8.7 | 25 | 5.6 | 6.4 | 11 | 25 | 5.8 | 0.76 | 0.70 | 2.4 | 1.5 |
| 25 | 3.7 | 8.9 | 46 | 4.9 | 5.9 | 11 | 19 | 6.0 | 0.72 | 0.86 | 1.7 | 1.3 |
| 26 | 3.7 | 8.5 | 32 | 4.4 | 5.6 | 11 | 27 | 5.8 | 0.72 | 0.73 | 1.3 | 1.1 |
| 27 | 14 | 8.1 | 24 | 4.4 | 5.4 | 12 | 46 | 9.6 | 0.70 | 0.61 | 1.1 | 1.0 |
| 28 | 33 | 8.1 | 20 | 4.8 | 5.5 | 12 | 33 | 12 | 0.66 | 0.61 | 0.94 | 1.3 |
| 29 | 73 | 13 | 18 | 4.8 | 6.1 | 11 | 23 | 14 | 0.68 | 0.62 | 0.84 | 12 |
| 30 | 68 | 12 | 17 | 4.5 | --- | 9.7 | 19 | 9.2 | 0.66 | 0.56 | 0.76 | 14 |
| 31 | 34 | --- | 16 | 4.4 | --- | 14 | --- | 6.7 | --- | 0.51 | 0.80 | --- |
| TOTAL | 320.6 | 358.3 | 783.0 | 291.2 | 217.6 | 347.5 | 974 | 334.4 | 67.96 | 23.27 | 66.74 | 82.60 |
| MEAN | 10.3 | 11.9 | 25.3 | 9.39 | 7.50 | 11.2 | 32.5 | 10.8 | 2.27 | 0.75 | 2.15 | 2.75 |
| MAX | 73 | 24 | 91 | 25 | 23 | 19 | 108 | 29 | 6.8 | 1.5 | 9.4 | 14 |
| MIN | 1.4 | 8.1 | 6.9 | 4.4 | 4.1 | 7.4 | 13 | 5.0 | 0.66 | 0.51 | 0.52 | 0.50 |
| CFSM | 2.14 | 2.47 | 5.23 | 1.94 | 1.55 | 2.32 | 6.72 | 2.23 | 0.47 | 0.16 | 0.45 | 0.57 |
| IN. | 2.47 | 2.76 | 6.03 | 2.24 | 1.68 | 2.68 | 7.50 | 2.58 | 0.52 | 0.18 | 0.51 | 0.64 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 2004, BY WATER YEAR (WY)

| | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 4.27 | 7.44 | 12.6 | 14.2 | 14.2 | 20.6 | 20.1 | 12.1 | 8.80 | 2.77 | 1.74 | 1.86 |
| MAX | 15.7 | 14.4 | 33.6 | 23.9 | 22.4 | 29.6 | 32.5 | 23.5 | 21.1 | 11.0 | 5.12 | 4.59 |
| (WY) | 1997 | 1996 | 1997 | 1996 | 1998 | 2001 | 2004 | 1998 | 1998 | 1998 | 2003 | 1999 |
| MIN | 0.46 | 0.63 | 1.44 | 3.94 | 7.50 | 11.2 | 9.40 | 6.99 | 1.87 | 0.58 | 0.11 | 0.21 |
| (WY) | 2002 | 2002 | 2002 | 2002 | 2004 | 2004 | 1999 | 2001 | 1999 | 1995 | 1999 | 1995 |

SUMMARY STATISTICS

| | FOR 2003 CALENDAR YEAR | FOR 2004 WATER YEAR | WATER YEARS 1994 - 2004 |
|--------------------------|------------------------|---------------------|-------------------------|
| ANNUAL TOTAL | 4957.57 | 3867.17 | |
| ANNUAL MEAN | 13.6 | 10.6 | 10.0 |
| HIGHEST ANNUAL MEAN | | | 14.1 |
| LOWEST ANNUAL MEAN | | | 5.10 |
| HIGHEST DAILY MEAN | 91 | Dec 18 | 117 |
| LOWEST DAILY MEAN | 0.93 | Aug 31 | 0.00 |
| ANNUAL SEVEN-DAY MINIMUM | 1.0 | Aug 26 | 0.01 |
| MAXIMUM PEAK FLOW | | | 180 |
| MAXIMUM PEAK STAGE | | | 2.36 |
| INSTANTANEOUS LOW FLOW | | | 0.47 |
| ANNUAL RUNOFF (CFSM) | 2.81 | | 2.19 |
| ANNUAL RUNOFF (INCHES) | 38.18 | | 29.78 |
| 10 PERCENT EXCEEDS | 30 | | 24 |
| 50 PERCENT EXCEEDS | 9.3 | | 6.9 |
| 90 PERCENT EXCEEDS | 2.3 | | 0.72 |

PAWTUXET RIVER BASIN

01115098 PEEPTOAD BROOK AT ELMDALE ROAD NEAR NORTH SCITUATE, RI--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: January 2000 to May 2001, October 2001 to current year.

WATER TEMPERATURE: January 2000 to May 2001, October 2001 to current year.

INSTRUMENTATION.--Specific conductance and water temperature water-quality monitor since January 2000.

REMARKS.--Records fair. Missing periods are not estimated.

EXTREMES FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE: Maximum recorded, 269 $\mu\text{S}/\text{cm}$, May 29, 2002; minimum, 43 $\mu\text{S}/\text{cm}$, Aug. 4, 2002.

WATER TEMPERATURE: Maximum recorded, 31.4°C, July 4, 2002; minimum, 0.1°C, several days during 2003 winter period.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 237 $\mu\text{S}/\text{cm}$, Feb. 8; minimum, 92 $\mu\text{S}/\text{cm}$, Apr. 14.

WATER TEMPERATURE: Maximum recorded, 28.0°C, July 21; minimum, 0.3°C, several days during winter period.

WATER-QUALITY DATA, OCTOBER 2003 TO SEPTEMBER 2004

SPECIFIC CONDUCTANCE ($\mu\text{C}/\text{M}$ AT 25°C), OCTOBER 2003 TO SEPTEMBER 2004

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|
| | | | | | | | | | | | | |
| 1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 123 | 120 | 122 |
| 2 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 124 | 119 | 122 |
| 3 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 125 | 123 | 124 |
| 4 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 125 | 115 | 122 |
| 5 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 125 | 116 | 122 |
| 6 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 133 | 123 | 130 |
| 7 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 132 | 126 | 130 |
| 8 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 136 | 130 | 133 |
| 9 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 141 | 133 | 137 |
| 10 | --- | --- | --- | --- | --- | --- | 140 | 138 | 139 | 145 | 138 | 142 |
| 11 | --- | --- | --- | --- | --- | --- | 148 | 135 | 142 | 146 | 142 | 145 |
| 12 | --- | --- | --- | --- | --- | --- | 136 | 118 | 127 | 146 | 135 | 140 |
| 13 | --- | --- | --- | --- | --- | --- | 137 | 135 | 135 | 136 | 134 | 135 |
| 14 | --- | --- | --- | --- | --- | --- | 135 | 129 | 132 | 139 | 134 | 136 |
| 15 | --- | --- | --- | --- | --- | --- | 130 | 123 | 127 | 139 | 136 | 137 |
| 16 | --- | --- | --- | --- | --- | --- | 134 | 126 | 129 | 142 | 135 | 138 |
| 17 | --- | --- | --- | --- | --- | --- | 145 | 134 | 139 | 144 | 141 | 142 |
| 18 | --- | --- | --- | --- | --- | --- | 145 | 114 | 128 | 142 | 136 | 138 |
| 19 | --- | --- | --- | --- | --- | --- | 130 | 117 | 123 | 136 | 135 | 135 |
| 20 | --- | --- | --- | --- | --- | --- | 117 | 115 | 116 | 140 | 135 | 137 |
| 21 | --- | --- | --- | --- | --- | --- | 115 | 113 | 114 | 140 | 139 | 140 |
| 22 | --- | --- | --- | --- | --- | --- | 118 | 113 | 115 | 140 | 138 | 139 |
| 23 | --- | --- | --- | --- | --- | --- | 120 | 116 | 118 | 139 | 137 | 138 |
| 24 | --- | --- | --- | --- | --- | --- | 118 | 111 | 117 | 141 | 139 | 140 |
| 25 | --- | --- | --- | --- | --- | --- | 115 | 104 | 109 | 144 | 141 | 142 |
| 26 | --- | --- | --- | --- | --- | --- | 116 | 107 | 111 | 145 | 144 | 144 |
| 27 | --- | --- | --- | --- | --- | --- | 117 | 111 | 114 | 160 | 142 | 143 |
| 28 | --- | --- | --- | --- | --- | --- | 118 | 114 | 116 | 157 | 139 | 141 |
| 29 | --- | --- | --- | --- | --- | --- | 120 | 115 | 118 | 139 | 138 | 138 |
| 30 | --- | --- | --- | --- | --- | --- | 124 | 117 | 120 | 140 | 138 | 139 |
| 31 | --- | --- | --- | --- | --- | --- | 124 | 122 | 123 | 140 | 139 | 139 |
| MONTH | --- | --- | --- | --- | --- | --- | --- | --- | --- | 160 | 115 | 136 |

PAWTUXET RIVER BASIN

01115098 PEEPTOAD BROOK AT ELMDALE ROAD NEAR NORTH SCITUATE, RI--Continued

SPECIFIC CONDUCTANCE (µS/CM AT 25°C), OCTOBER 2003 TO SEPTEMBER 2004

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | |
|-------|-----|----------|------|-----|-------|------|-----|-------|------|-----|-----|------|--|
| | | FEBRUARY | | | MARCH | | | APRIL | | | MAY | | |
| 1 | 140 | 139 | 139 | 173 | 163 | 166 | 157 | 139 | 149 | 146 | 140 | 144 | |
| 2 | 142 | 138 | 139 | 165 | 156 | 160 | 171 | 141 | 146 | 147 | 141 | 144 | |
| 3 | 158 | 138 | 140 | 157 | 149 | 154 | 152 | 150 | 151 | 148 | 138 | 145 | |
| 4 | 152 | 140 | 143 | 152 | 148 | 150 | 152 | 142 | 149 | 148 | 138 | 144 | |
| 5 | 171 | 152 | 165 | 151 | 149 | 150 | 152 | 144 | 149 | 141 | 137 | 139 | |
| 6 | 185 | 170 | 173 | 151 | 145 | 149 | 148 | 144 | 146 | 147 | 139 | 142 | |
| 7 | 222 | 165 | 189 | 153 | 144 | 148 | 145 | 143 | 144 | 150 | 141 | 146 | |
| 8 | 237 | 212 | 230 | 154 | 146 | 149 | 145 | 141 | 143 | 152 | 144 | 147 | |
| 9 | 212 | 183 | 196 | 160 | 154 | 157 | 150 | 141 | 146 | 152 | 142 | 146 | |
| 10 | 183 | 175 | 180 | 162 | 158 | 160 | 152 | 144 | 147 | 150 | 144 | 146 | |
| 11 | 178 | 171 | 173 | 163 | 160 | 162 | 149 | 144 | 146 | 152 | 142 | 149 | |
| 12 | 173 | 166 | 168 | 164 | 158 | 161 | 151 | 144 | 148 | 157 | 144 | 150 | |
| 13 | 169 | 163 | 165 | 161 | 158 | 160 | 149 | 132 | 144 | 157 | 146 | 152 | |
| 14 | 169 | 163 | 165 | 162 | 158 | 160 | 132 | 92 | 117 | 158 | 148 | 152 | |
| 15 | 167 | 162 | 164 | 160 | 157 | 158 | 123 | 111 | 118 | 163 | 148 | 153 | |
| 16 | 166 | 162 | 164 | 159 | 156 | 157 | 123 | 114 | 117 | 161 | 153 | 157 | |
| 17 | 166 | 163 | 164 | 159 | 156 | 158 | 126 | 118 | 121 | 159 | 150 | 154 | |
| 18 | 166 | 162 | 164 | 162 | 155 | 159 | 130 | 122 | 126 | 159 | 153 | 156 | |
| 19 | 168 | 162 | 164 | 163 | 159 | 161 | 132 | 124 | 129 | 159 | 152 | 155 | |
| 20 | 170 | 166 | 169 | 163 | 160 | 162 | 138 | 131 | 134 | 165 | 152 | 157 | |
| 21 | 173 | 168 | 170 | 167 | 160 | 163 | 136 | 129 | 133 | 162 | 155 | 159 | |
| 22 | 174 | 170 | 172 | 173 | 167 | 171 | 137 | 131 | 135 | 163 | 154 | 158 | |
| 23 | 176 | 170 | 173 | 173 | 167 | 171 | 139 | 134 | 136 | 160 | 154 | 156 | |
| 24 | 176 | 172 | 173 | 171 | 164 | 168 | 141 | 134 | 136 | 158 | 155 | 157 | |
| 25 | 174 | 170 | 172 | 168 | 160 | 164 | 138 | 134 | 135 | 159 | 154 | 156 | |
| 26 | 175 | 170 | 172 | 165 | 160 | 163 | 137 | 131 | 135 | 160 | 156 | 157 | |
| 27 | 176 | 169 | 172 | 167 | 163 | 164 | 134 | 126 | 129 | 159 | 153 | 156 | |
| 28 | 177 | 168 | 172 | 164 | 161 | 163 | 140 | 131 | 136 | 157 | 148 | 154 | |
| 29 | 175 | 166 | 171 | 165 | 157 | 163 | 142 | 135 | 138 | 157 | 145 | 152 | |
| 30 | --- | --- | --- | 164 | 162 | 163 | 145 | 139 | 142 | 156 | 154 | 155 | |
| 31 | --- | --- | --- | 163 | 157 | 160 | --- | --- | --- | 158 | 155 | 156 | |
| MONTH | 237 | 138 | 169 | 173 | 144 | 160 | 171 | 92 | 138 | 165 | 137 | 151 | |

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | |
|-------|-----|------|------|-----|------|------|-----|--------|------|-----|-----------|------|--|
| | | JUNE | | | JULY | | | AUGUST | | | SEPTEMBER | | |
| 1 | 156 | 153 | 154 | 172 | 164 | 167 | 158 | 151 | 155 | 202 | 187 | 194 | |
| 2 | 160 | 154 | 156 | 170 | 158 | 165 | 159 | 126 | 147 | 201 | 191 | 197 | |
| 3 | 162 | 154 | 157 | 168 | 150 | 162 | 155 | 126 | 142 | 202 | 198 | 200 | |
| 4 | 162 | 156 | 159 | 167 | 153 | 162 | 154 | 130 | 143 | 205 | 200 | 202 | |
| 5 | 165 | 157 | 161 | 168 | 160 | 165 | 155 | 140 | 151 | 208 | 200 | 204 | |
| 6 | 164 | 155 | 158 | 168 | 162 | 165 | 160 | 155 | 158 | 211 | 208 | 210 | |
| 7 | 162 | 155 | 157 | 166 | 154 | 161 | 162 | 158 | 160 | 211 | 209 | 210 | |
| 8 | 165 | 160 | 162 | 166 | 163 | 165 | 160 | 158 | 160 | 209 | 187 | 197 | |
| 9 | 164 | 149 | 160 | 166 | 163 | 165 | 160 | 156 | 159 | 195 | 191 | 192 | |
| 10 | 164 | 159 | 163 | 166 | 151 | 161 | 162 | 158 | 160 | 195 | 183 | 190 | |
| 11 | 164 | 161 | 162 | 164 | 156 | 161 | 164 | 158 | 161 | 192 | 184 | 186 | |
| 12 | 164 | 162 | 163 | 166 | 163 | 164 | 164 | 140 | 160 | 193 | 184 | 188 | |
| 13 | 166 | 163 | 164 | 166 | 163 | 164 | 155 | 143 | 151 | 195 | 188 | 191 | |
| 14 | 168 | 164 | 165 | 164 | 162 | 162 | 156 | 147 | 153 | 192 | 189 | 191 | |
| 15 | 167 | 162 | 165 | 165 | 163 | 164 | 156 | 146 | 152 | 195 | 191 | 193 | |
| 16 | 166 | 147 | 161 | 165 | 163 | 164 | 168 | 155 | 163 | 199 | 194 | 197 | |
| 17 | 168 | 157 | 164 | 165 | 142 | 158 | 167 | 160 | 164 | 196 | 184 | 192 | |
| 18 | 166 | 163 | 164 | 166 | 157 | 161 | 178 | 166 | 171 | 187 | 169 | 178 | |
| 19 | 166 | 158 | 163 | 164 | 160 | 162 | 177 | 175 | 177 | 177 | 158 | 169 | |
| 20 | 166 | 164 | 165 | 164 | 136 | 154 | 178 | 175 | 176 | 162 | 155 | 157 | |
| 21 | 166 | 164 | 165 | 164 | 125 | 150 | 181 | 176 | 179 | 165 | 162 | 164 | |
| 22 | 167 | 165 | 166 | 163 | 142 | 152 | 188 | 177 | 181 | 173 | 165 | 169 | |
| 23 | 170 | 164 | 167 | 162 | 144 | 154 | 192 | 186 | 189 | 179 | 172 | 176 | |
| 24 | 170 | 167 | 167 | 162 | 153 | 158 | 192 | 185 | 190 | 183 | 179 | 181 | |
| 25 | 168 | 167 | 168 | 163 | 160 | 161 | 195 | 187 | 191 | 189 | 183 | 186 | |
| 26 | 169 | 167 | 169 | 164 | 158 | 161 | 195 | 188 | 192 | 192 | 189 | 190 | |
| 27 | 172 | 169 | 170 | 164 | 161 | 163 | 195 | 190 | 192 | 198 | 191 | 194 | |
| 28 | 170 | 167 | 169 | 166 | 162 | 164 | 194 | 185 | 191 | 203 | 197 | 201 | |
| 29 | 172 | 167 | 168 | 162 | 148 | 158 | 195 | 184 | 191 | 203 | 175 | 183 | |
| 30 | 169 | 164 | 167 | 164 | 154 | 159 | 196 | 182 | 191 | 180 | 167 | 172 | |
| 31 | --- | --- | --- | 163 | 145 | 155 | 195 | 177 | 187 | --- | --- | --- | |
| MONTH | 172 | 147 | 163 | 172 | 125 | 161 | 196 | 126 | 169 | 211 | 155 | 188 | |

PAWTUXET RIVER BASIN

01115098 PEEPTOAD BROOK AT ELMDALE ROAD NEAR NORTH SCITUATE, RI--Continued

WATER TEMPERATURE (DEG. C), OCTOBER 2003 TO SEPTEMBER 2004

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|---------|-----|------|----------|-----|------|----------|-----|------|---------|-----|------|
| | OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | | |
| 1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 3.7 | 2.8 | 3.2 |
| 2 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 3.1 | 2.3 | 2.6 |
| 3 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 3.1 | 2.3 | 2.7 |
| 4 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 4.4 | 3.1 | 3.6 |
| 5 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 4.4 | 3.9 | 4.2 |
| 6 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 3.9 | 2.5 | 3.3 |
| 7 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 2.5 | 1.1 | 1.6 |
| 8 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1.6 | .7 | 1.2 |
| 9 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1.6 | .7 | 1.1 |
| 10 | --- | --- | --- | --- | --- | --- | 0.6 | 0.5 | 0.6 | 1.6 | .8 | 1.2 |
| 11 | --- | --- | --- | --- | --- | --- | 1.8 | .6 | 1.1 | 1.7 | .8 | 1.3 |
| 12 | --- | --- | --- | --- | --- | --- | 1.2 | .8 | 1.0 | 1.4 | .6 | .9 |
| 13 | --- | --- | --- | --- | --- | --- | 1.1 | .7 | .9 | .6 | .5 | .6 |
| 14 | --- | --- | --- | --- | --- | --- | .7 | .4 | .5 | .7 | .5 | .6 |
| 15 | --- | --- | --- | --- | --- | --- | .6 | .3 | .5 | .6 | .4 | .5 |
| 16 | --- | --- | --- | --- | --- | --- | .7 | .3 | .4 | .5 | .4 | .4 |
| 17 | --- | --- | --- | --- | --- | --- | 2.3 | .7 | 1.0 | .7 | .4 | .5 |
| 18 | --- | --- | --- | --- | --- | --- | 3.2 | 2.0 | 2.3 | .6 | .4 | .4 |
| 19 | --- | --- | --- | --- | --- | --- | 2.0 | 1.6 | 1.8 | .4 | .3 | .4 |
| 20 | --- | --- | --- | --- | --- | --- | 1.8 | 1.5 | 1.7 | .4 | .3 | .4 |
| 21 | --- | --- | --- | --- | --- | --- | 1.8 | 1.3 | 1.4 | .4 | .3 | .3 |
| 22 | --- | --- | --- | --- | --- | --- | 1.9 | 1.2 | 1.5 | .4 | .3 | .3 |
| 23 | --- | --- | --- | --- | --- | --- | 2.9 | 1.9 | 2.4 | .4 | .3 | .3 |
| 24 | --- | --- | --- | --- | --- | --- | 4.1 | 2.9 | 3.4 | .4 | .3 | .3 |
| 25 | --- | --- | --- | --- | --- | --- | 5.5 | 4.1 | 5.1 | .4 | .3 | .4 |
| 26 | --- | --- | --- | --- | --- | --- | 5.0 | 2.8 | 3.9 | .4 | .3 | .4 |
| 27 | --- | --- | --- | --- | --- | --- | 2.8 | 2.1 | 2.6 | .4 | .3 | .4 |
| 28 | --- | --- | --- | --- | --- | --- | 2.8 | 2.1 | 2.5 | .4 | .3 | .4 |
| 29 | --- | --- | --- | --- | --- | --- | 3.2 | 2.4 | 2.8 | .4 | .3 | .4 |
| 30 | --- | --- | --- | --- | --- | --- | 3.6 | 3.2 | 3.4 | .4 | .3 | .3 |
| 31 | --- | --- | --- | --- | --- | --- | 3.7 | 3.5 | 3.6 | .4 | .3 | .3 |
| MONTH | --- | --- | --- | --- | --- | --- | --- | --- | --- | 4.4 | 0.3 | 1.1 |

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|----------|-----|------|-------|-----|------|-------|------|------|------|------|------|
| | FEBRUARY | | | MARCH | | | APRIL | | | MAY | | |
| 1 | 0.4 | 0.3 | 0.3 | 4.6 | 4.1 | 4.4 | 7.0 | 5.8 | 6.2 | 19.0 | 15.5 | 17.2 |
| 2 | .4 | .3 | .3 | 4.7 | 4.4 | 4.5 | 5.9 | 5.6 | 5.7 | 18.5 | 16.7 | 17.7 |
| 3 | .4 | .3 | .3 | 4.9 | 4.4 | 4.7 | 5.7 | 5.4 | 5.5 | 17.6 | 16.1 | 16.9 |
| 4 | .7 | .4 | .5 | 4.8 | 4.5 | 4.6 | 6.6 | 5.6 | 6.0 | 16.1 | 14.3 | 15.1 |
| 5 | .8 | .4 | .6 | 4.6 | 4.4 | 4.5 | 6.6 | 5.5 | 6.0 | 15.0 | 13.7 | 14.4 |
| 6 | .7 | .4 | .5 | 4.6 | 4.2 | 4.4 | 6.9 | 5.2 | 5.9 | 17.0 | 13.4 | 15.0 |
| 7 | .9 | .5 | .7 | 4.6 | 3.9 | 4.3 | 7.2 | 6.2 | 6.6 | 19.4 | 15.0 | 17.1 |
| 8 | .9 | .3 | .6 | 4.4 | 4.0 | 4.3 | 8.9 | 6.5 | 7.6 | 17.5 | 15.6 | 16.7 |
| 9 | .8 | .3 | .6 | 4.0 | 3.3 | 3.7 | 9.9 | 8.2 | 9.1 | 16.7 | 14.6 | 15.4 |
| 10 | 1.3 | .5 | .8 | 3.6 | 3.3 | 3.4 | 10.4 | 8.4 | 9.5 | 17.4 | 13.7 | 15.3 |
| 11 | 1.5 | 1.0 | 1.2 | 4.2 | 3.5 | 3.8 | 10.0 | 9.4 | 9.7 | 20.9 | 16.4 | 18.5 |
| 12 | 1.5 | 1.1 | 1.2 | 4.6 | 3.8 | 4.2 | 11.0 | 9.0 | 10.1 | 23.5 | 18.7 | 20.8 |
| 13 | 1.9 | 1.1 | 1.5 | 4.0 | 3.1 | 3.6 | 10.5 | 7.8 | 9.3 | 23.1 | 20.2 | 21.5 |
| 14 | 2.2 | 1.7 | 1.9 | 4.3 | 3.2 | 3.9 | 9.3 | 7.6 | 8.8 | 21.1 | 18.6 | 19.8 |
| 15 | 2.3 | 2.0 | 2.1 | 5.0 | 4.0 | 4.5 | 9.8 | 8.8 | 9.2 | 23.1 | 19.3 | 21.1 |
| 16 | 2.2 | 1.5 | 1.9 | 4.6 | 3.8 | 4.3 | 11.2 | 8.4 | 9.4 | 22.8 | 20.1 | 21.6 |
| 17 | 2.0 | 1.4 | 1.7 | 4.1 | 1.8 | 2.8 | 12.9 | 8.9 | 10.6 | 20.8 | 18.9 | 19.9 |
| 18 | 1.9 | 1.2 | 1.5 | 2.5 | 1.9 | 2.2 | 15.1 | 11.4 | 13.2 | 20.3 | 18.9 | 19.6 |
| 19 | 1.8 | 1.2 | 1.5 | 2.7 | 2.4 | 2.5 | 16.5 | 12.7 | 14.5 | 21.1 | 19.4 | 20.1 |
| 20 | 2.2 | 1.8 | 2.0 | 3.8 | 2.4 | 3.1 | 18.5 | 14.6 | 16.3 | 20.5 | 18.1 | 19.4 |
| 21 | 2.5 | 2.1 | 2.2 | 4.5 | 3.8 | 4.1 | 16.5 | 13.6 | 14.8 | 21.0 | 18.6 | 19.9 |
| 22 | 3.4 | 2.4 | 2.9 | 4.1 | 3.1 | 3.7 | 18.5 | 13.5 | 15.7 | 20.8 | 17.5 | 19.3 |
| 23 | 3.4 | 3.2 | 3.4 | 4.0 | 2.8 | 3.6 | 17.6 | 13.4 | 15.3 | 20.7 | 16.8 | 18.5 |
| 24 | 3.5 | 2.7 | 3.1 | 5.1 | 3.9 | 4.4 | 14.4 | 12.2 | 13.4 | 18.8 | 17.3 | 17.9 |
| 25 | 3.3 | 2.4 | 2.8 | 6.3 | 4.6 | 5.2 | 14.4 | 12.7 | 13.3 | 17.8 | 16.5 | 17.2 |
| 26 | 3.6 | 2.9 | 3.3 | 10.6 | 6.3 | 7.9 | 13.1 | 11.1 | 11.9 | 16.5 | 15.2 | 15.6 |
| 27 | 4.0 | 3.3 | 3.7 | 11.8 | 9.8 | 10.8 | 14.5 | 10.8 | 12.4 | 17.2 | 14.8 | 15.9 |
| 28 | 4.2 | 3.7 | 3.9 | 10.6 | 7.8 | 9.1 | 13.8 | 11.9 | 13.0 | 17.0 | 15.4 | 15.9 |
| 29 | 4.4 | 3.9 | 4.2 | 9.1 | 7.0 | 8.0 | 15.8 | 12.4 | 13.8 | 16.9 | 15.0 | 16.0 |
| 30 | --- | --- | --- | 8.2 | 7.3 | 7.7 | 18.0 | 13.8 | 15.7 | 18.2 | 15.5 | 16.9 |
| 31 | --- | --- | --- | 7.7 | 7.0 | 7.4 | --- | --- | --- | 18.3 | 16.3 | 17.4 |
| MONTH | 4.4 | 0.3 | 1.8 | 11.8 | 1.8 | 4.8 | 18.5 | 5.2 | 10.6 | 23.5 | 13.4 | 17.9 |

PAWTUXET RIVER BASIN

01115098 PEEPTOAD BROOK AT ELMDALE ROAD NEAR NORTH SCITUATE, RI--Continued

WATER TEMPERATURE (DEG. C), OCTOBER 2003 TO SEPTEMBER 2004

| DAY | JUNE | | | JULY | | | AUGUST | | | SEPTEMBER | | |
|-------|------|------|------|------|------|------|--------|------|------|-----------|------|------|
| | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
| 1 | 17.6 | 15.7 | 16.6 | 24.9 | 22.4 | 23.8 | 26.0 | 25.1 | 25.3 | 24.8 | 23.1 | 24.0 |
| 2 | 19.1 | 15.2 | 16.8 | 25.7 | 23.0 | 24.3 | 27.8 | 24.6 | 26.0 | 23.9 | 22.1 | 22.8 |
| 3 | 20.6 | 17.1 | 18.7 | 26.4 | 23.1 | 24.6 | 27.8 | 25.4 | 26.6 | 22.6 | 20.9 | 21.9 |
| 4 | 21.3 | 17.4 | 19.3 | 26.2 | 23.4 | 24.8 | 27.6 | 25.7 | 26.6 | 23.7 | 21.4 | 22.4 |
| 5 | 20.2 | 18.1 | 19.3 | 24.7 | 23.2 | 23.6 | 27.0 | 24.2 | 24.9 | 22.9 | 20.9 | 21.6 |
| 6 | 19.2 | 16.6 | 17.8 | 24.8 | 22.7 | 23.7 | 24.3 | 22.7 | 23.4 | 21.0 | 19.1 | 20.2 |
| 7 | 19.7 | 16.0 | 17.7 | 26.0 | 22.9 | 24.4 | 23.8 | 21.6 | 22.7 | 21.4 | 19.9 | 20.6 |
| 8 | 22.1 | 18.7 | 20.4 | 24.4 | 23.4 | 23.9 | 23.4 | 21.1 | 22.3 | 21.8 | 21.1 | 21.4 |
| 9 | 26.2 | 20.8 | 23.2 | 24.3 | 23.2 | 23.8 | 24.3 | 21.1 | 22.7 | 21.8 | 21.2 | 21.6 |
| 10 | 24.9 | 21.9 | 23.1 | 26.1 | 22.7 | 24.3 | 24.2 | 21.9 | 23.2 | 23.2 | 21.1 | 21.9 |
| 11 | 22.6 | 19.9 | 21.3 | 25.6 | 23.6 | 24.7 | 24.1 | 22.6 | 23.3 | 22.4 | 20.6 | 21.2 |
| 12 | 22.6 | 19.4 | 20.9 | 24.4 | 22.9 | 23.6 | 24.8 | 22.8 | 23.8 | 21.2 | 19.3 | 20.3 |
| 13 | 21.6 | 19.3 | 20.6 | 23.3 | 21.3 | 22.1 | 24.5 | 23.8 | 24.2 | 21.5 | 19.8 | 20.7 |
| 14 | 20.6 | 19.6 | 20.0 | 21.6 | 20.8 | 21.2 | 25.5 | 23.4 | 24.4 | 20.8 | 19.3 | 20.0 |
| 15 | 24.3 | 19.5 | 21.5 | 22.4 | 20.9 | 21.6 | 24.5 | 21.5 | 23.0 | 20.0 | 18.6 | 19.2 |
| 16 | 26.5 | 22.1 | 23.9 | 23.2 | 21.2 | 22.3 | 21.5 | 20.0 | 20.6 | 19.9 | 19.2 | 19.5 |
| 17 | 25.8 | 23.4 | 24.6 | 26.9 | 21.8 | 24.1 | 20.9 | 19.4 | 20.2 | 20.9 | 19.6 | 20.2 |
| 18 | 25.4 | 23.5 | 24.4 | 25.4 | 23.6 | 24.6 | 21.6 | 19.8 | 20.8 | 20.9 | 18.2 | 19.7 |
| 19 | 25.1 | 22.4 | 23.6 | 24.8 | 23.9 | 24.3 | 22.9 | 21.4 | 22.0 | 18.2 | 16.3 | 17.3 |
| 20 | 23.5 | 21.5 | 22.5 | 27.3 | 23.6 | 25.2 | 24.3 | 22.0 | 23.1 | 16.8 | 15.2 | 16.0 |
| 21 | 23.7 | 20.8 | 22.2 | 28.0 | 24.2 | 25.9 | 24.0 | 22.5 | 23.3 | 17.2 | 15.5 | 16.2 |
| 22 | 22.4 | 21.3 | 21.9 | 26.8 | 24.8 | 26.0 | 22.5 | 20.8 | 21.8 | 19.7 | 16.1 | 17.4 |
| 23 | 24.4 | 21.3 | 22.7 | 26.8 | 25.1 | 25.9 | 22.5 | 20.4 | 21.5 | 19.6 | 17.3 | 18.4 |
| 24 | 23.6 | 21.6 | 22.9 | 26.1 | 23.5 | 24.9 | 22.9 | 21.2 | 22.0 | 19.5 | 17.8 | 18.6 |
| 25 | 23.8 | 22.0 | 22.9 | 23.8 | 22.5 | 23.1 | 22.2 | 20.3 | 21.3 | 19.0 | 17.5 | 18.3 |
| 26 | 23.8 | 22.3 | 23.0 | 24.9 | 21.9 | 23.3 | 21.7 | 19.5 | 20.6 | 20.6 | 18.6 | 19.4 |
| 27 | 23.5 | 21.1 | 22.4 | 23.7 | 22.2 | 23.1 | 23.1 | 20.5 | 21.6 | 19.6 | 17.9 | 18.6 |
| 28 | 23.8 | 20.8 | 22.3 | 23.1 | 21.8 | 22.2 | 24.8 | 21.9 | 23.3 | 18.7 | 18.2 | 18.4 |
| 29 | 24.1 | 21.4 | 22.7 | 26.1 | 21.6 | 23.3 | 25.3 | 23.3 | 24.3 | 18.2 | 15.3 | 16.8 |
| 30 | 24.8 | 21.9 | 23.4 | 25.3 | 23.0 | 24.3 | 25.8 | 24.0 | 24.8 | 15.9 | 14.6 | 15.2 |
| 31 | --- | --- | --- | 26.4 | 24.1 | 25.3 | 26.0 | 24.7 | 25.3 | --- | --- | --- |
| MONTH | 26.5 | 15.2 | 21.4 | 28.0 | 20.8 | 23.9 | 27.8 | 19.4 | 23.2 | 24.8 | 14.6 | 19.7 |

PAWTUXET RIVER BASIN

0115110 HUNTINGHOUSE BROOK AT ELMDALE RD AT NORTH SCITUATE, RI

LOCATION.--Lat 41°50'48", long 71°36'44", Providence County, Hydrologic Unit 01090004, on right bank 1,000 ft downstream from bridge on Elmdale Road, and 1.6 mi northwest of North Scituate

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: January 2000 to May 2001, October 2001 to current year.

WATER TEMPERATURE: January 2000 to May 2001, October 2001 to current year.

INSTRUMENTATION.--Specific conductance and water temperature water-quality monitor since January 2000.

REMARKS.--Records fair. Missing periods are not estimated.

EXTREMES FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE: Maximum recorded, 163 $\mu\text{S}/\text{cm}$, Feb. 3, 2003; minimum, 15 $\mu\text{S}/\text{cm}$, Nov. 5, 6, 2002, May 26, 2003

WATER TEMPERATURE: Maximum recorded, 23.9°C, July 4; minimum, -0.3°C, on many days during winter periods in 2002, 2003, and 2004.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 117 $\mu\text{S}/\text{cm}$, Aug. 6; minimum, 19 $\mu\text{S}/\text{cm}$, Oct. 29, Apr. 13.

WATER TEMPERATURE: Maximum recorded, 22.4°C, July 31, Aug. 30; minimum, -0.3°C, Dec. 15, 16.

WATER-QUALITY DATA, OCTOBER 2003 TO SEPTEMBER 2004

SPECIFIC CONDUCTANCE ($\mu\text{S}/\text{CM}$ at 25°C), OCTOBER 2003 TO SEPTEMBER 2004

| DAY | OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | | |
|-------|---------|-----|------|----------|-----|------|----------|-----|------|---------|-----|------|
| | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
| 1 | 72 | 70 | 71 | 37 | 29 | 32 | 51 | 48 | 49 | 81 | 79 | 80 |
| 2 | 73 | 71 | 72 | 32 | 29 | 30 | 50 | 45 | 49 | 82 | 80 | 81 |
| 3 | 72 | 70 | 71 | 39 | 29 | 34 | 45 | 42 | 44 | 81 | 78 | 80 |
| 4 | 75 | 71 | 73 | 39 | 30 | 34 | 46 | 43 | 45 | 78 | 75 | 76 |
| 5 | 74 | 72 | 73 | 36 | 29 | 31 | 46 | 43 | 45 | 76 | 70 | 75 |
| 6 | 73 | 71 | 71 | 39 | 32 | 36 | 44 | 43 | 44 | 80 | 76 | 78 |
| 7 | 71 | 69 | 69 | 36 | 28 | 32 | 44 | 42 | 43 | 81 | 79 | 80 |
| 8 | 72 | 69 | 70 | 28 | 27 | 28 | 43 | 41 | 42 | 80 | 79 | 79 |
| 9 | 73 | 72 | 73 | 32 | 28 | 30 | 43 | 41 | 43 | 79 | 77 | 78 |
| 10 | 75 | 73 | 74 | 31 | 29 | 30 | 44 | 43 | 43 | 78 | 77 | 78 |
| 11 | 74 | 72 | 73 | 40 | 30 | 32 | --- | --- | --- | 77 | 77 | 77 |
| 12 | 72 | 72 | 72 | 42 | 38 | 40 | --- | --- | --- | 77 | 74 | 76 |
| 13 | 75 | 72 | 72 | 42 | 29 | 36 | --- | --- | --- | 75 | 70 | 74 |
| 14 | 77 | 75 | 76 | 33 | 29 | 32 | --- | --- | --- | 74 | 67 | 71 |
| 15 | 76 | 67 | 70 | 40 | 33 | 37 | --- | --- | --- | 74 | 69 | 72 |
| 16 | 71 | 68 | 70 | 37 | 33 | 35 | --- | --- | --- | 71 | 60 | 67 |
| 17 | 72 | 70 | 71 | 35 | 32 | 33 | --- | --- | --- | 74 | 60 | 68 |
| 18 | 73 | 71 | 72 | 38 | 35 | 37 | --- | --- | --- | 75 | 70 | 73 |
| 19 | 74 | 71 | 73 | 38 | 34 | 35 | --- | --- | --- | 76 | 73 | 75 |
| 20 | 74 | 72 | 73 | 35 | 33 | 34 | --- | --- | --- | 76 | 75 | 76 |
| 21 | 79 | 74 | 76 | 34 | 32 | 33 | --- | --- | --- | 76 | 75 | 76 |
| 22 | 79 | 63 | 71 | 37 | 33 | 35 | --- | --- | --- | 76 | 75 | 76 |
| 23 | 63 | 62 | 62 | 39 | 35 | 37 | 54 | 52 | 53 | 77 | 75 | 76 |
| 24 | 64 | 62 | 63 | 39 | 36 | 38 | 68 | 43 | 53 | 78 | 73 | 76 |
| 25 | 64 | 62 | 63 | 39 | 36 | 37 | 64 | 42 | 54 | 77 | 76 | 76 |
| 26 | 66 | 62 | 63 | 41 | 37 | 39 | 82 | 63 | 77 | 77 | 69 | 75 |
| 27 | 69 | 53 | 63 | 40 | 38 | 39 | 84 | 82 | 83 | 76 | 69 | 75 |
| 28 | 60 | 51 | 55 | 39 | 36 | 36 | 85 | 84 | 84 | 76 | 74 | 75 |
| 29 | 60 | 19 | 34 | 44 | 35 | 39 | 85 | 81 | 83 | 75 | 74 | 74 |
| 30 | 22 | 20 | 21 | 48 | 37 | 42 | 82 | 78 | 80 | 76 | 73 | 74 |
| 31 | 34 | 22 | 27 | --- | --- | --- | 80 | 79 | 79 | 75 | 67 | 73 |
| MONTH | 79 | 19 | 66 | 48 | 27 | 35 | --- | --- | --- | 82 | 60 | 75 |

PAWTUXET RIVER BASIN

0115110 HUNTINGHOUSE BROOK AT ELMDALE RD AT NORTH SCITUATE, RI--Continued

SPECIFIC CONDUCTANCE (µS/CM at 25°C), OCTOBER 2003 TO SEPTEMBER 2004

| DAY | MAX | FEBRUARY | | | MAX | MARCH | | | MAX | APRIL | | | MAX | MAY | | |
|-------|-----|----------|------|--|-----|-------|------|-----|-----|-------|------|----|-----|-----|------|--|
| | | MIN | MEAN | | | MIN | MEAN | | | MIN | MEAN | | | MIN | MEAN | |
| 1 | 76 | 70 | 73 | | 79 | 70 | 76 | 56 | 38 | 43 | 72 | 63 | 67 | | | |
| 2 | 76 | 74 | 75 | | 78 | 68 | 71 | 43 | 38 | 41 | 82 | 69 | 75 | | | |
| 3 | 76 | 73 | 75 | | 76 | 65 | 71 | 46 | 43 | 45 | 81 | 62 | 75 | | | |
| 4 | 77 | 71 | 75 | | 76 | 61 | 68 | 49 | 46 | 47 | 62 | 55 | 57 | | | |
| 5 | 77 | 74 | 75 | | 75 | 61 | 72 | 49 | 46 | 47 | 72 | 55 | 64 | | | |
| 6 | 77 | 72 | 75 | | 74 | 59 | 66 | 54 | 49 | 50 | 77 | 68 | 72 | | | |
| 7 | 76 | 70 | 73 | | 65 | 60 | 63 | 59 | 53 | 56 | 75 | 62 | 70 | | | |
| 8 | 73 | 67 | 70 | | 73 | 64 | 69 | 62 | 57 | 58 | 78 | 63 | 71 | | | |
| 9 | 77 | 68 | 73 | | 70 | 63 | 67 | 64 | 55 | 60 | 78 | 73 | 77 | | | |
| 10 | 77 | 73 | 75 | | 70 | 58 | 66 | 63 | 58 | 61 | 78 | 70 | 76 | | | |
| 11 | 77 | 73 | 75 | | 70 | 63 | 65 | 63 | 60 | 61 | 75 | 66 | 71 | | | |
| 12 | 76 | 72 | 74 | | 73 | 64 | 67 | 64 | 59 | 61 | 80 | 70 | 75 | | | |
| 13 | 77 | 73 | 75 | | 72 | 65 | 69 | 62 | 19 | 49 | 79 | 74 | 77 | | | |
| 14 | 79 | 75 | 77 | | 77 | 67 | 73 | 33 | 24 | 28 | 81 | 69 | 76 | | | |
| 15 | 77 | 70 | 75 | | 78 | 67 | 70 | 35 | 31 | 33 | 79 | 72 | 76 | | | |
| 16 | 76 | 71 | 73 | | 79 | 65 | 73 | 45 | 35 | 39 | 78 | 69 | 73 | | | |
| 17 | 76 | 71 | 74 | | 72 | 64 | 69 | 47 | 39 | 43 | 80 | 72 | 76 | | | |
| 18 | 76 | 74 | 75 | | 84 | 70 | 76 | 56 | 40 | 50 | 80 | 71 | 74 | | | |
| 19 | 78 | 73 | 75 | | 80 | 73 | 78 | 58 | 53 | 56 | 87 | 70 | 72 | | | |
| 20 | 80 | 75 | 78 | | 82 | 71 | 77 | 66 | 51 | 59 | 77 | 70 | 74 | | | |
| 21 | 82 | 77 | 80 | | 82 | 72 | 77 | 66 | 61 | 63 | 77 | 70 | 73 | | | |
| 22 | 81 | 76 | 78 | | 82 | 70 | 78 | 69 | 62 | 66 | 80 | 72 | 75 | | | |
| 23 | 80 | 76 | 78 | | 94 | 78 | 82 | 69 | 63 | 65 | 79 | 71 | 74 | | | |
| 24 | 79 | 76 | 78 | | 86 | 79 | 82 | 65 | 60 | 61 | 78 | 68 | 74 | | | |
| 25 | 81 | 74 | 78 | | 82 | 79 | 80 | 62 | 60 | 61 | 78 | 69 | 73 | | | |
| 26 | 81 | 74 | 79 | | 86 | 78 | 79 | 61 | 52 | 57 | 77 | 68 | 73 | | | |
| 27 | 82 | 75 | 79 | | 80 | 78 | 78 | 62 | 53 | 57 | 74 | 61 | 65 | | | |
| 28 | 82 | 77 | 80 | | 81 | 78 | 79 | 63 | 57 | 59 | 66 | 58 | 62 | | | |
| 29 | 82 | 75 | 79 | | 85 | 79 | 81 | 68 | 57 | 62 | 63 | 59 | 61 | | | |
| 30 | --- | --- | --- | | 83 | 80 | 81 | 67 | 60 | 64 | 65 | 60 | 62 | | | |
| 31 | --- | --- | --- | | 84 | 55 | 79 | --- | --- | --- | 66 | 63 | 64 | | | |
| MONTH | 82 | 67 | 76 | | 94 | 55 | 74 | 69 | 19 | 53 | 87 | 55 | 71 | | | |

| DAY | MAX | JUNE | | | MAX | JULY | | | MAX | AUGUST | | | MAX | SEPTEMBER | | |
|-------|-----|------|------|--|-----|------|------|-----|-----|--------|------|-----|-----|-----------|------|--|
| | | MIN | MEAN | | | MIN | MEAN | | | MIN | MEAN | | | MIN | MEAN | |
| 1 | 65 | 60 | 63 | | 80 | 77 | 78 | 81 | 80 | 81 | 86 | 84 | 85 | | | |
| 2 | 66 | 63 | 65 | | 80 | 72 | 76 | 82 | 79 | 80 | 85 | 83 | 84 | | | |
| 3 | 66 | 64 | 65 | | 75 | 72 | 73 | 82 | 80 | 81 | 93 | 85 | 90 | | | |
| 4 | 68 | 64 | 66 | | 78 | 75 | 77 | 84 | 82 | 83 | 94 | 84 | 88 | | | |
| 5 | 70 | 67 | 68 | | 79 | 66 | 74 | 106 | 62 | 80 | 86 | 83 | 85 | | | |
| 6 | 72 | 69 | 70 | | 84 | 69 | 77 | 117 | 106 | 115 | 87 | 84 | 86 | | | |
| 7 | 76 | 70 | 72 | | 92 | 82 | 88 | 115 | 109 | 113 | 89 | 87 | 88 | | | |
| 8 | 80 | 68 | 73 | | 92 | 90 | 91 | 109 | 101 | 104 | 89 | 69 | 78 | | | |
| 9 | 78 | 70 | 73 | | 90 | 87 | 88 | 101 | 97 | 99 | 98 | 77 | 88 | | | |
| 10 | 75 | 68 | 71 | | 87 | 86 | 86 | 97 | 92 | 94 | 103 | 98 | 102 | | | |
| 11 | 73 | 69 | 71 | | 86 | 85 | 86 | 100 | 94 | 96 | 103 | 98 | 101 | | | |
| 12 | 72 | 69 | 71 | | 86 | 85 | 86 | 102 | 63 | 99 | 98 | 92 | 95 | | | |
| 13 | 73 | 70 | 72 | | 86 | 80 | 84 | 88 | 63 | 79 | 92 | 91 | 91 | | | |
| 14 | 77 | 70 | 74 | | 80 | 74 | 76 | 95 | 88 | 92 | 92 | 88 | 89 | | | |
| 15 | 81 | 77 | 79 | | 77 | 75 | 76 | 95 | 76 | 87 | 88 | 86 | 87 | | | |
| 16 | 86 | 78 | 83 | | 77 | 76 | 77 | 98 | 91 | 95 | 87 | 84 | 85 | | | |
| 17 | 85 | 72 | 80 | | 80 | 77 | 78 | 99 | 97 | 98 | 85 | 82 | 83 | | | |
| 18 | 88 | 71 | 79 | | 85 | 79 | 80 | 99 | 98 | 99 | 82 | 64 | 73 | | | |
| 19 | 77 | 67 | 71 | | 85 | 80 | 81 | 99 | 97 | 98 | 83 | 72 | 79 | | | |
| 20 | 73 | 70 | 71 | | 80 | 78 | 78 | 99 | 96 | 97 | 85 | 82 | 83 | | | |
| 21 | 85 | 73 | 78 | | 80 | 77 | 78 | 99 | 87 | 97 | 88 | 84 | 86 | | | |
| 22 | 84 | 80 | 83 | | 81 | 80 | 80 | 99 | 87 | 95 | 88 | 87 | 88 | | | |
| 23 | 84 | 80 | 82 | | 83 | 80 | 82 | 97 | 94 | 95 | 88 | 88 | 88 | | | |
| 24 | 83 | 75 | 81 | | 83 | 74 | 80 | 96 | 92 | 94 | 88 | 87 | 87 | | | |
| 25 | 75 | 70 | 72 | | 74 | 70 | 71 | 92 | 91 | 91 | 87 | 86 | 86 | | | |
| 26 | 73 | 71 | 72 | | 74 | 71 | 72 | 92 | 90 | 91 | 88 | 86 | 87 | | | |
| 27 | 73 | 71 | 72 | | 74 | 73 | 74 | 92 | 89 | 91 | 87 | 86 | 87 | | | |
| 28 | 73 | 71 | 72 | | 77 | 73 | 75 | 91 | 89 | 90 | 86 | 78 | 84 | | | |
| 29 | 78 | 72 | 75 | | 77 | 75 | 76 | 91 | 90 | 90 | 81 | 70 | 75 | | | |
| 30 | 77 | 76 | 76 | | 76 | 75 | 76 | 92 | 90 | 90 | 77 | 74 | 75 | | | |
| 31 | --- | --- | --- | | 80 | 76 | 79 | 92 | 85 | 88 | --- | --- | --- | | | |
| MONTH | 88 | 60 | 73 | | 92 | 66 | 79 | 117 | 62 | 93 | 103 | 64 | 86 | | | |

PAWTUXET RIVER BASIN

01115110 HUNTINGHOUSE BROOK AT ELMDALE RD AT NORTH SCITUATE, RI--Continued

WATER TEMPERATURE (DEG. C), OCTOBER 2003 TO SEPTEMBER 2004

| DAY | OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | | |
|-------|---------|------|------|----------|------|------|----------|------|------|---------|-----|------|
| | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
| 1 | 12.4 | 10.7 | 11.5 | 12.9 | 10.5 | 11.7 | 5.3 | 3.7 | 4.7 | 3.9 | 3.2 | 3.5 |
| 2 | 12.4 | 10.7 | 11.7 | 13.1 | 12.2 | 12.6 | 3.7 | .3 | 2.3 | 3.4 | 2.6 | 3.1 |
| 3 | 10.7 | 8.7 | 9.6 | 14.1 | 12.3 | 13.2 | .3 | -.1 | .1 | 4.8 | 3.4 | 4.0 |
| 4 | 9.9 | 8.0 | 8.8 | 13.6 | 10.6 | 12.2 | .5 | -.1 | .2 | 5.9 | 4.8 | 5.4 |
| 5 | 10.3 | 9.1 | 9.7 | 10.6 | 9.9 | 10.2 | .4 | -.1 | .1 | 5.5 | 3.8 | 4.6 |
| 6 | 9.1 | 7.4 | 8.3 | 11.7 | 10.4 | 11.2 | .1 | -.1 | .0 | 4.1 | 2.5 | 3.4 |
| 7 | 8.4 | 6.5 | 7.7 | 11.3 | 9.6 | 10.8 | .0 | -.1 | -.1 | 2.5 | 1.6 | 1.9 |
| 8 | 11.1 | 8.1 | 9.5 | 9.6 | 5.4 | 7.7 | .1 | -.1 | -.1 | 2.3 | 1.7 | 1.9 |
| 9 | 12.6 | 11.0 | 11.8 | 5.4 | 3.1 | 4.1 | .1 | -.2 | .0 | 2.3 | 1.7 | 2.0 |
| 10 | 12.4 | 11.6 | 11.9 | 3.8 | 2.0 | 3.0 | .2 | .0 | .1 | 2.2 | 1.9 | 2.1 |
| 11 | 11.8 | 10.7 | 11.3 | 4.9 | 2.2 | 3.4 | .6 | -.1 | .2 | 2.2 | 1.7 | 2.0 |
| 12 | 11.9 | 11.2 | 11.5 | 7.7 | 4.9 | 6.2 | 1.5 | .4 | 1.0 | 2.1 | 1.3 | 1.6 |
| 13 | 12.7 | 11.6 | 12.1 | 9.0 | 6.6 | 8.2 | 1.0 | -.2 | .3 | 1.6 | .6 | 1.1 |
| 14 | 11.8 | 10.0 | 11.1 | 6.6 | 3.4 | 4.7 | -.1 | -.2 | -.2 | 1.1 | .3 | .7 |
| 15 | 13.4 | 11.7 | 12.9 | 3.4 | 2.4 | 2.9 | -.1 | -.3 | -.1 | 1.1 | .5 | .8 |
| 16 | 12.6 | 10.7 | 11.4 | 4.2 | 1.9 | 3.0 | .3 | -.3 | .0 | .7 | .2 | .4 |
| 17 | 10.8 | 9.0 | 9.9 | 5.0 | 4.2 | 4.6 | 4.0 | .1 | 1.7 | 1.0 | .2 | .6 |
| 18 | 10.2 | 9.0 | 9.7 | 5.8 | 4.5 | 5.2 | 4.0 | 2.2 | 2.7 | 1.1 | .5 | .9 |
| 19 | 9.0 | 6.8 | 7.9 | 8.7 | 5.4 | 6.9 | 2.2 | 1.3 | 1.8 | 1.2 | .9 | 1.1 |
| 20 | 7.2 | 5.5 | 6.5 | 9.5 | 8.3 | 9.1 | 2.1 | 1.1 | 1.7 | 1.3 | 1.0 | 1.2 |
| 21 | 10.5 | 6.8 | 8.9 | 8.5 | 7.0 | 8.0 | 1.8 | 1.0 | 1.5 | 1.3 | 1.0 | 1.1 |
| 22 | 10.4 | 8.2 | 9.5 | 7.0 | 5.6 | 6.3 | 2.1 | .9 | 1.7 | 1.4 | 1.0 | 1.2 |
| 23 | 8.2 | 6.0 | 7.0 | 5.6 | 4.5 | 5.1 | 3.9 | 2.0 | 3.1 | 1.3 | 1.1 | 1.2 |
| 24 | 6.3 | 4.8 | 5.6 | 5.8 | 3.7 | 4.7 | 7.0 | 3.8 | 5.1 | 1.4 | .8 | 1.2 |
| 25 | 6.0 | 3.7 | 5.0 | 6.1 | 4.3 | 5.6 | 7.2 | 5.8 | 6.9 | 1.3 | 1.0 | 1.2 |
| 26 | 10.4 | 6.0 | 8.2 | 4.4 | 3.0 | 3.9 | 5.8 | 4.0 | 4.6 | 1.4 | .9 | 1.2 |
| 27 | 13.1 | 10.4 | 12.0 | 5.4 | 4.1 | 4.8 | 4.0 | 3.2 | 3.6 | 1.1 | .9 | 1.0 |
| 28 | 12.8 | 11.4 | 11.9 | 9.0 | 5.4 | 6.4 | 3.3 | 2.2 | 2.8 | 1.2 | .8 | 1.1 |
| 29 | 13.4 | 11.1 | 12.3 | 9.4 | 5.8 | 8.0 | 4.6 | 2.7 | 3.5 | 1.1 | .8 | .9 |
| 30 | 12.2 | 9.6 | 10.8 | 5.8 | 4.8 | 5.1 | 5.3 | 3.6 | 4.4 | 1.0 | .8 | .9 |
| 31 | 10.5 | 8.2 | 9.5 | --- | --- | --- | 4.5 | 3.8 | 4.2 | 1.0 | .7 | .8 |
| MONTH | 13.4 | 3.7 | 9.9 | 14.1 | 1.9 | 7.0 | 7.2 | -0.3 | 1.9 | 5.9 | 0.2 | 1.7 |

| DAY | FEBRUARY | | | MARCH | | | APRIL | | | MAY | | |
|-------|----------|------|------|-------|------|------|-------|------|------|------|------|------|
| | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
| 1 | 1.1 | 0.7 | 0.8 | 3.5 | 1.4 | 2.3 | 4.8 | 3.9 | 4.4 | 17.1 | 12.8 | 15.0 |
| 2 | 1.2 | .8 | .9 | 3.7 | 1.4 | 2.4 | 4.7 | 4.3 | 4.5 | 15.8 | 14.6 | 15.2 |
| 3 | 1.2 | .7 | .9 | 4.1 | 1.7 | 2.9 | 4.7 | 4.0 | 4.4 | 14.8 | 13.4 | 14.2 |
| 4 | 1.3 | .5 | .8 | 3.8 | 2.1 | 2.9 | 5.9 | 4.4 | 5.1 | 14.4 | 11.1 | 12.7 |
| 5 | 1.1 | .6 | .8 | 3.2 | 2.3 | 2.7 | 6.3 | 3.7 | 5.0 | 12.7 | 9.2 | 11.2 |
| 6 | 1.0 | .4 | .7 | 4.3 | 2.5 | 3.6 | 6.9 | 2.4 | 4.7 | 14.6 | 10.2 | 12.4 |
| 7 | .8 | .1 | .5 | 4.0 | 1.3 | 2.7 | 6.8 | 4.2 | 5.4 | 17.2 | 12.4 | 14.7 |
| 8 | .6 | -0.1 | .2 | 3.3 | 1.3 | 2.2 | 8.1 | 4.4 | 6.4 | 15.5 | 12.1 | 13.7 |
| 9 | 1.1 | .0 | .5 | 1.8 | .8 | 1.3 | 9.2 | 6.0 | 7.7 | 12.9 | 10.9 | 11.5 |
| 10 | 1.1 | .6 | .8 | 2.5 | .0 | 1.3 | 9.9 | 5.5 | 7.8 | 14.7 | 9.7 | 12.2 |
| 11 | 1.0 | .5 | .7 | 2.9 | 1.2 | 2.0 | 8.3 | 6.1 | 7.1 | 17.3 | 13.1 | 15.2 |
| 12 | .9 | .4 | .6 | 3.4 | 1.3 | 2.3 | 9.6 | 6.1 | 7.8 | 18.1 | 14.8 | 16.5 |
| 13 | 1.0 | .5 | .7 | 3.6 | .9 | 2.2 | 8.3 | 5.8 | 6.7 | 17.7 | 15.3 | 16.8 |
| 14 | 1.0 | .5 | .7 | 3.1 | .4 | 1.9 | 8.9 | 6.4 | 8.3 | 16.1 | 13.2 | 14.8 |
| 15 | .9 | .0 | .5 | 5.5 | 2.3 | 3.8 | 9.2 | 7.5 | 8.3 | 18.5 | 14.8 | 16.6 |
| 16 | .8 | .1 | .4 | 4.0 | .1 | 2.3 | 10.3 | 5.5 | 7.9 | 17.6 | 15.2 | 16.6 |
| 17 | .7 | .1 | .5 | .6 | .1 | .2 | 11.6 | 6.3 | 8.9 | 16.4 | 14.1 | 15.2 |
| 18 | .8 | .5 | .6 | 1.5 | .0 | .7 | 13.6 | 9.6 | 11.6 | 16.1 | 14.1 | 15.0 |
| 19 | 1.1 | .5 | .7 | 1.6 | .2 | .8 | 15.1 | 10.3 | 12.6 | 16.2 | 14.8 | 15.6 |
| 20 | 1.2 | .5 | .8 | 2.8 | -0.1 | 1.2 | 16.1 | 12.5 | 14.2 | 15.5 | 12.8 | 14.3 |
| 21 | 1.1 | .7 | .9 | 3.6 | 1.7 | 2.5 | 13.5 | 10.4 | 11.7 | 15.6 | 13.4 | 14.5 |
| 22 | 1.4 | .7 | .9 | 3.2 | .3 | 1.7 | 15.7 | 10.8 | 13.1 | 15.0 | 12.4 | 14.0 |
| 23 | 1.3 | .7 | .9 | 3.3 | .4 | 1.9 | 14.7 | 10.1 | 12.3 | 15.0 | 11.7 | 13.2 |
| 24 | 1.2 | .6 | .9 | 5.2 | 1.8 | 3.5 | 14.3 | 8.9 | 11.4 | 13.6 | 12.7 | 13.2 |
| 25 | 1.5 | .3 | 1.0 | 6.0 | 4.2 | 5.2 | 12.3 | 9.1 | 10.7 | 13.1 | 11.9 | 12.6 |
| 26 | 1.8 | .4 | 1.1 | 9.0 | 5.4 | 7.1 | 9.9 | 8.6 | 9.1 | 11.9 | 11.1 | 11.3 |
| 27 | 2.1 | .4 | 1.3 | 8.7 | 7.6 | 8.2 | 13.9 | 9.4 | 11.3 | 13.6 | 11.2 | 12.3 |
| 28 | 2.7 | .8 | 1.7 | 8.0 | 5.2 | 6.8 | 13.4 | 9.6 | 11.5 | 13.4 | 12.5 | 12.8 |
| 29 | 3.1 | 1.1 | 2.0 | 7.2 | 4.0 | 5.6 | 14.4 | 8.7 | 11.5 | 13.7 | 12.2 | 12.9 |
| 30 | --- | --- | --- | 6.0 | 4.7 | 5.3 | 16.3 | 11.4 | 13.8 | 13.6 | 11.0 | 12.4 |
| 31 | --- | --- | --- | 5.7 | 4.5 | 5.3 | --- | --- | --- | 13.3 | 10.9 | 12.2 |
| MONTH | 3.1 | -0.1 | 0.8 | 9.0 | -0.1 | 3.1 | 16.3 | 2.4 | 8.8 | 18.5 | 9.2 | 13.9 |

PAWTUXET RIVER BASIN

01115170 MOSWANSICUT STREAM NEAR NORTH SCITUATE, RI--Continued

SPECIFIC CONDUCTANCE (µS/CM AT 25°C), OCTOBER OCTOBER 2003 TO SEPTEMBER 2004

| DAY | MAX | FEBRUARY | | | MAX | MARCH | | | MAX | APRIL | | | MAX | MAY | | |
|-------|------|----------|------|-----|-----|-------|------|-----|-----|-------|------|-----|-----|------|-----|-----|
| | | MIN | MEAN | MAX | | MIN | MEAN | MAX | | MIN | MEAN | MIN | | MEAN | MAX | MIN |
| 1 | 180 | 164 | 171 | 182 | 174 | 177 | 161 | 153 | 157 | --- | --- | --- | | | | |
| 2 | 183 | 164 | 173 | 176 | 157 | 170 | 164 | 156 | 162 | --- | --- | --- | | | | |
| 3 | 1770 | 162 | 268 | 169 | 157 | 162 | 165 | 164 | 164 | --- | --- | --- | | | | |
| 4 | 1260 | 199 | 408 | 181 | 166 | 171 | 165 | 162 | 164 | --- | --- | --- | | | | |
| 5 | 208 | 190 | 199 | 174 | 164 | 169 | 166 | 162 | 164 | --- | --- | --- | | | | |
| 6 | 2100 | 172 | 523 | 170 | 142 | 155 | 167 | 164 | 166 | --- | --- | --- | | | | |
| 7 | 1400 | 211 | 411 | 154 | 143 | 147 | 168 | 165 | 167 | --- | --- | --- | | | | |
| 8 | 257 | 195 | 223 | 162 | 144 | 154 | 168 | 165 | 167 | --- | --- | --- | | | | |
| 9 | 205 | 189 | 197 | 173 | 162 | 168 | 167 | 166 | 166 | --- | --- | --- | | | | |
| 10 | 275 | 195 | 215 | 174 | 167 | 171 | 167 | 166 | 166 | --- | --- | --- | | | | |
| 11 | 205 | 197 | 201 | 176 | 171 | 173 | 168 | 166 | 167 | 178 | 176 | 176 | | | | |
| 12 | 203 | 194 | 199 | 176 | 172 | 174 | 170 | 166 | 167 | 180 | 176 | 178 | | | | |
| 13 | 228 | 200 | 207 | 173 | 168 | 171 | 170 | 136 | 160 | 181 | 178 | 180 | | | | |
| 14 | 220 | 201 | 207 | 174 | 170 | 172 | 162 | 147 | 158 | 180 | 178 | 179 | | | | |
| 15 | 204 | 194 | 200 | 173 | 167 | 171 | 162 | 154 | 158 | 181 | 179 | 180 | | | | |
| 16 | 211 | 191 | 197 | 174 | 172 | 173 | 164 | 161 | 163 | 182 | 180 | 180 | | | | |
| 17 | 202 | 191 | 195 | 195 | 174 | 184 | 165 | 162 | 164 | 182 | 180 | 180 | | | | |
| 18 | 213 | 195 | 201 | 185 | 176 | 180 | 168 | 163 | 166 | 181 | 179 | 180 | | | | |
| 19 | --- | --- | --- | 185 | 175 | 179 | 167 | 165 | 166 | 181 | 179 | 180 | | | | |
| 20 | 207 | 189 | 197 | 182 | 170 | 174 | --- | --- | --- | 181 | 179 | 180 | | | | |
| 21 | 249 | 187 | 205 | 182 | 169 | 174 | --- | --- | --- | 183 | 179 | 181 | | | | |
| 22 | 233 | 188 | 202 | 174 | 170 | 172 | --- | --- | --- | 181 | 178 | 180 | | | | |
| 23 | 194 | 182 | 189 | 175 | 170 | 173 | --- | --- | --- | 182 | 178 | 180 | | | | |
| 24 | 189 | 181 | 185 | 175 | 170 | 173 | --- | --- | --- | 180 | 179 | 179 | | | | |
| 25 | 185 | 177 | 183 | 174 | 170 | 172 | --- | --- | --- | 181 | 178 | 179 | | | | |
| 26 | 184 | 176 | 182 | 173 | 169 | 171 | --- | --- | --- | 179 | 178 | 178 | | | | |
| 27 | 184 | 174 | 181 | 174 | 169 | 171 | --- | --- | --- | 182 | 177 | 178 | | | | |
| 28 | 182 | 172 | 178 | 173 | 171 | 172 | --- | --- | --- | 182 | 174 | 177 | | | | |
| 29 | 180 | 170 | 176 | 174 | 169 | 171 | --- | --- | --- | 182 | 175 | 176 | | | | |
| 30 | --- | --- | --- | 172 | 169 | 170 | --- | --- | --- | --- | --- | --- | | | | |
| 31 | --- | --- | --- | 173 | 157 | 169 | --- | --- | --- | 179 | 175 | 178 | | | | |
| MONTH | --- | --- | --- | 195 | 142 | 170 | --- | --- | --- | --- | --- | --- | | | | |

| DAY | MAX | JUNE | | | MAX | JULY | | | MAX | AUGUST | | | MAX | SEPTEMBER | | |
|-------|-----|------|------|-----|-----|------|------|-----|-----|--------|------|-----|-----|-----------|-----|-----|
| | | MIN | MEAN | MAX | | MIN | MEAN | MAX | | MIN | MEAN | MIN | | MEAN | MAX | MIN |
| 1 | --- | --- | e177 | 187 | 185 | 186 | 189 | 185 | 188 | 187 | 182 | 185 | | | | |
| 2 | 181 | 175 | 177 | 188 | 168 | 184 | 189 | 177 | 186 | 188 | 184 | 186 | | | | |
| 3 | 183 | 177 | 178 | 186 | 182 | 185 | 189 | 182 | 185 | 188 | 185 | 186 | | | | |
| 4 | 183 | 176 | 179 | 186 | 181 | 185 | 187 | 176 | 182 | 188 | 182 | 186 | | | | |
| 5 | 185 | 179 | 180 | 186 | 159 | 182 | 187 | 156 | 178 | 189 | 187 | 188 | | | | |
| 6 | 184 | 178 | 179 | 186 | 183 | 185 | 188 | 187 | 188 | 189 | 187 | 188 | | | | |
| 7 | 188 | 178 | 181 | 186 | 183 | 185 | 190 | 187 | 188 | 189 | 187 | 188 | | | | |
| 8 | 188 | 179 | 182 | 186 | 184 | 185 | 189 | 187 | 188 | 188 | 158 | 183 | | | | |
| 9 | --- | --- | --- | 186 | 184 | 185 | 189 | 187 | 188 | 190 | 176 | 184 | | | | |
| 10 | --- | --- | --- | 186 | 184 | 186 | 189 | 186 | 188 | 187 | 186 | 186 | | | | |
| 11 | --- | --- | --- | 187 | 183 | 185 | 190 | 185 | 188 | 187 | 186 | 186 | | | | |
| 12 | --- | --- | --- | 189 | 186 | 187 | 189 | 134 | 185 | 191 | 185 | 187 | | | | |
| 13 | --- | --- | --- | 188 | 182 | 185 | 185 | 130 | 178 | 190 | 185 | 187 | | | | |
| 14 | 190 | 182 | 184 | 186 | 185 | 186 | 186 | 182 | 184 | 190 | 185 | 187 | | | | |
| 15 | 193 | 183 | 184 | 187 | 186 | 186 | 184 | 174 | 178 | 191 | 185 | 187 | | | | |
| 16 | 187 | 184 | 185 | 187 | 186 | 187 | 183 | 181 | 182 | 190 | 183 | 186 | | | | |
| 17 | 189 | 183 | 185 | 189 | 186 | 187 | 184 | 178 | 182 | 191 | 185 | 187 | | | | |
| 18 | 194 | 183 | 185 | 189 | 185 | 187 | 185 | 183 | 184 | 191 | 142 | 177 | | | | |
| 19 | 197 | 179 | 184 | 188 | 185 | 187 | 185 | 182 | 183 | 188 | 181 | 184 | | | | |
| 20 | 190 | 183 | 184 | 189 | 183 | 186 | 185 | 180 | 183 | 189 | 182 | 185 | | | | |
| 21 | 186 | 184 | 185 | 188 | 179 | 185 | 186 | 178 | 183 | 188 | 183 | 185 | | | | |
| 22 | 186 | 184 | 185 | 188 | 175 | 183 | 187 | 179 | 183 | 189 | 183 | 185 | | | | |
| 23 | 186 | 184 | 185 | 186 | 176 | 182 | 188 | 182 | 185 | 190 | 184 | 186 | | | | |
| 24 | 186 | 184 | 185 | 188 | 166 | 185 | 187 | 181 | 184 | 189 | 183 | 185 | | | | |
| 25 | 186 | 185 | 186 | 189 | 188 | 188 | 190 | 183 | 185 | 189 | 183 | 185 | | | | |
| 26 | 192 | 185 | 186 | 189 | 187 | 188 | 188 | 184 | 185 | 189 | 183 | 186 | | | | |
| 27 | 187 | 184 | 186 | 190 | 188 | 189 | 190 | 186 | 187 | 188 | 182 | 185 | | | | |
| 28 | 190 | 184 | 186 | 190 | 174 | 187 | 187 | 184 | 185 | 188 | 169 | 182 | | | | |
| 29 | 188 | 184 | 186 | 189 | 188 | 188 | 187 | 182 | 185 | 186 | 176 | 180 | | | | |
| 30 | 186 | 185 | 186 | 189 | 186 | 188 | 185 | 179 | 182 | 186 | 179 | 182 | | | | |
| 31 | --- | --- | --- | 189 | 184 | 187 | 184 | 172 | 179 | --- | --- | --- | | | | |
| MONTH | --- | --- | --- | 190 | 159 | 186 | 190 | 130 | 184 | 191 | 142 | 185 | | | | |

e Estimated

PAWTUXET RIVER BASIN

01115170 MOSWANSICUT STREAM NEAR NORTH SCITUATE, RI--Continued

WATER TEMPERATURE (DEG. C), OCTOBER 2003 TO SEPTEMBER 2004

| DAY | MAX | OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | | |
|-------|------|---------|------|------|----------|------|-----|----------|------|-----|---------|------|--|
| | | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | |
| 1 | 20.0 | 17.5 | 18.6 | 13.4 | 12.2 | 12.7 | 7.2 | 1.3 | 4.0 | 3.8 | 2.4 | 3.0 | |
| 2 | 20.3 | 16.5 | 18.4 | 14.6 | 12.8 | 13.4 | --- | --- | --- | 3.4 | 1.7 | 2.7 | |
| 3 | 19.7 | 15.9 | 17.2 | 14.6 | 13.3 | 13.8 | --- | --- | --- | 4.4 | 2.8 | 3.6 | |
| 4 | 17.5 | 15.7 | 16.5 | 14.2 | 10.1 | 12.0 | --- | --- | --- | 5.3 | 4.3 | 4.7 | |
| 5 | 17.9 | 14.9 | 16.3 | 12.3 | 10.2 | 11.3 | --- | --- | --- | 4.3 | 3.2 | 3.4 | |
| 6 | 17.4 | 14.1 | 15.5 | 13.8 | 12.3 | 12.8 | --- | --- | --- | 3.2 | .7 | 2.2 | |
| 7 | 17.1 | 13.6 | 15.0 | 13.2 | 11.0 | 12.1 | --- | --- | --- | 1.5 | .5 | .8 | |
| 8 | 17.8 | 13.7 | 15.6 | 11.0 | 7.1 | 9.2 | --- | --- | --- | 1.1 | .2 | .6 | |
| 9 | 19.6 | 15.2 | 17.0 | 8.5 | 6.2 | 7.2 | --- | --- | --- | .4 | -.2 | .0 | |
| 10 | 17.4 | 15.1 | 16.2 | 9.3 | 5.1 | 7.3 | --- | --- | --- | --- | --- | --- | |
| 11 | 17.4 | 13.9 | 15.3 | 9.1 | 6.0 | 7.9 | 2.5 | 0.3 | 1.0 | --- | --- | --- | |
| 12 | 15.1 | 14.0 | 14.5 | 10.4 | 8.9 | 9.7 | 1.7 | .3 | .7 | 1.5 | .3 | 1.0 | |
| 13 | 18.0 | 14.4 | 15.7 | 11.0 | 6.8 | 9.6 | .8 | -.1 | .3 | 2.1 | .0 | 1.1 | |
| 14 | 17.9 | 13.9 | 15.6 | 6.8 | 5.1 | 5.8 | .2 | -.5 | -.3 | .2 | -.2 | .0 | |
| 15 | 16.3 | 13.5 | 15.3 | 6.5 | 4.5 | 5.3 | .3 | .0 | .1 | .3 | -.1 | .1 | |
| 16 | 16.0 | 13.1 | 14.2 | 7.6 | 4.4 | 6.1 | .8 | .1 | .4 | -.1 | -.2 | -.2 | |
| 17 | --- | --- | --- | 7.2 | 6.5 | 6.9 | 4.2 | .6 | 2.0 | .9 | -.2 | .2 | |
| 18 | --- | --- | --- | 8.3 | 5.5 | 6.6 | 3.5 | 1.1 | 1.9 | 1.5 | .9 | 1.2 | |
| 19 | --- | --- | --- | 10.6 | 6.2 | 8.9 | 1.8 | .3 | 1.0 | 1.2 | .3 | .7 | |
| 20 | --- | --- | --- | 10.9 | 8.0 | 9.7 | 2.0 | .4 | 1.1 | 1.0 | .3 | .5 | |
| 21 | --- | --- | --- | 10.9 | 7.1 | 8.3 | 1.4 | .2 | .8 | 1.3 | .2 | .6 | |
| 22 | --- | --- | --- | 8.4 | 5.8 | 7.1 | 2.9 | 1.0 | 1.9 | 1.8 | .2 | 1.0 | |
| 23 | --- | --- | --- | 7.6 | 4.7 | 5.9 | 5.4 | 2.3 | 3.8 | 1.0 | .1 | .4 | |
| 24 | --- | --- | --- | 7.8 | 4.0 | 6.1 | 8.3 | 3.7 | 6.1 | 1.0 | .0 | .3 | |
| 25 | --- | --- | --- | 8.0 | 2.0 | 5.6 | 7.5 | 3.5 | 6.2 | .3 | -.1 | .1 | |
| 26 | --- | --- | --- | 6.7 | 1.0 | 4.4 | 3.8 | 2.1 | 3.0 | .6 | .1 | .3 | |
| 27 | --- | --- | --- | 8.0 | 4.5 | 6.3 | 3.7 | 1.7 | 2.5 | 1.2 | .3 | .7 | |
| 28 | 13.6 | 11.0 | 12.1 | 12.0 | 7.0 | 8.8 | 3.5 | 1.1 | 2.2 | 1.4 | .0 | .7 | |
| 29 | 14.7 | 11.6 | 12.8 | 11.9 | 2.8 | 7.1 | 4.5 | 2.0 | 3.1 | 1.4 | .3 | .7 | |
| 30 | 13.2 | 11.7 | 12.2 | 7.1 | 2.7 | 4.3 | 5.8 | 2.9 | 4.1 | 1.2 | .2 | .5 | |
| 31 | 13.4 | 11.5 | 12.2 | --- | --- | --- | 4.7 | 2.7 | 3.6 | 1.4 | .2 | .6 | |
| MONTH | --- | --- | --- | 14.6 | 1.0 | 8.4 | --- | --- | --- | --- | --- | --- | |

| DAY | MAX | FEBRUARY | | | MARCH | | | APRIL | | | MAY | | |
|-------|-----|----------|------|-----|-------|------|------|-------|------|------|------|------|--|
| | | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | |
| 1 | 1.6 | 0.2 | 0.6 | 7.5 | 3.4 | 4.9 | 5.7 | 5.3 | 5.5 | 14.8 | 13.3 | 14.1 | |
| 2 | 2.0 | .2 | .8 | 7.8 | 4.0 | 5.1 | 5.6 | 5.3 | 5.5 | 15.2 | 14.3 | 14.7 | |
| 3 | 2.0 | .3 | 1.1 | 7.9 | 3.6 | 5.1 | 5.6 | 5.3 | 5.4 | 15.1 | 14.7 | 14.9 | |
| 4 | 2.6 | .8 | 1.5 | 6.8 | 3.9 | 5.0 | 6.3 | 5.5 | 5.8 | 15.5 | 14.3 | 14.8 | |
| 5 | 2.7 | .7 | 1.5 | 5.7 | 4.3 | 4.9 | 7.1 | 5.4 | 6.0 | 15.6 | 13.7 | 14.5 | |
| 6 | 1.8 | .3 | 1.3 | 5.3 | 3.9 | 4.8 | 7.3 | 5.1 | 5.9 | 17.0 | 13.9 | 15.0 | |
| 7 | 2.9 | .8 | 1.6 | 6.1 | 3.8 | 4.7 | 6.5 | 5.4 | 5.8 | 16.5 | 14.9 | 15.7 | |
| 8 | 1.8 | .2 | .8 | 4.6 | 3.0 | 3.7 | 7.7 | 5.3 | 6.3 | 17.8 | 14.9 | 15.8 | |
| 9 | 3.0 | .8 | 1.8 | 4.2 | 3.4 | 3.9 | 8.6 | 5.9 | 6.7 | 15.4 | 14.3 | 14.8 | |
| 10 | 4.0 | 1.9 | 2.5 | 4.4 | 3.0 | 3.8 | 8.0 | 5.8 | 6.7 | 17.9 | 14.5 | 15.9 | |
| 11 | 3.8 | 1.2 | 2.0 | 4.4 | 3.3 | 3.7 | 8.0 | 6.4 | 7.2 | 18.6 | 15.4 | 16.9 | |
| 12 | 3.4 | .9 | 1.9 | 5.0 | 3.6 | 4.1 | 9.4 | 6.8 | 8.0 | 22.0 | 17.5 | 19.2 | |
| 13 | 4.1 | 1.6 | 2.4 | 5.5 | 3.1 | 4.1 | 7.8 | 7.0 | 7.2 | 21.0 | 18.9 | 20.2 | |
| 14 | 4.2 | 1.8 | 2.5 | 5.0 | 3.0 | 4.0 | 8.9 | 7.7 | 8.1 | 19.9 | 18.0 | 18.9 | |
| 15 | 2.9 | .9 | 1.7 | 6.2 | 3.6 | 4.6 | 8.8 | 8.0 | 8.4 | 20.7 | 18.8 | 19.8 | |
| 16 | 3.1 | .7 | 1.5 | 4.3 | 2.6 | 3.6 | 9.9 | 7.6 | 8.5 | 20.7 | 19.7 | 20.3 | |
| 17 | 3.3 | 1.1 | 2.0 | 2.9 | 2.6 | 2.7 | 9.4 | 8.1 | 8.6 | 21.4 | 19.4 | 20.2 | |
| 18 | 3.0 | 1.8 | 2.4 | 3.4 | 2.3 | 2.9 | 12.2 | 8.5 | 10.2 | 20.5 | 19.2 | 19.8 | |
| 19 | 4.3 | 1.5 | 2.5 | 3.2 | 2.3 | 2.8 | 10.9 | 9.7 | 10.3 | 20.8 | 19.6 | 20.1 | |
| 20 | 4.3 | 1.9 | 2.9 | 5.1 | 2.7 | 3.9 | 13.8 | 10.6 | 12.1 | 21.4 | 19.0 | 20.0 | |
| 21 | 4.3 | 2.8 | 3.3 | 5.2 | 3.5 | 4.0 | 13.0 | 11.6 | 12.1 | 22.1 | 19.0 | 20.2 | |
| 22 | 5.3 | 2.5 | 3.4 | 5.0 | 2.7 | 3.7 | 13.5 | 11.6 | 12.3 | 20.4 | 18.6 | 19.7 | |
| 23 | 5.4 | 2.2 | 3.3 | 5.1 | 3.1 | 3.9 | 13.0 | 11.9 | 12.6 | 22.5 | 18.1 | 20.0 | |
| 24 | 4.4 | 2.2 | 3.3 | 5.8 | 3.4 | 4.5 | 14.1 | 11.9 | 12.7 | 20.3 | 19.0 | 19.5 | |
| 25 | 5.2 | 1.9 | 3.1 | 5.7 | 4.1 | 4.8 | 14.2 | 11.9 | 12.7 | 19.2 | 17.7 | 18.6 | |
| 26 | 5.6 | 2.1 | 3.3 | 7.3 | 4.5 | 5.6 | 12.2 | 11.7 | 11.9 | 17.7 | 17.3 | 17.4 | |
| 27 | 5.8 | 2.2 | 3.5 | 7.5 | 5.0 | 6.2 | 13.2 | 11.9 | 12.3 | 20.0 | 16.7 | 18.3 | |
| 28 | 6.5 | 2.4 | 4.0 | 6.8 | 4.7 | 5.7 | 13.6 | 11.8 | 12.6 | 18.4 | 17.7 | 18.0 | |
| 29 | 6.8 | 2.9 | 4.4 | 7.2 | 4.4 | 5.6 | 13.8 | 12.1 | 12.8 | 19.1 | 17.6 | 18.2 | |
| 30 | --- | --- | --- | 6.4 | 5.0 | 5.6 | 14.3 | 12.6 | 13.3 | 19.5 | 17.1 | 18.2 | |
| 31 | --- | --- | --- | 6.1 | 5.5 | 5.8 | --- | --- | --- | 19.9 | 17.3 | 18.3 | |
| MONTH | 6.8 | 0.2 | 2.3 | 7.9 | 2.3 | 4.4 | 14.3 | 5.1 | 9.1 | 22.5 | 13.3 | 17.8 | |

PAWTUXET RIVER BASIN

01115170 MOSWANSICUT STREAM NEAR NORTH SCITUATE, RI--Continued

WATER TEMPERATURE (DEG. C), OCTOBER 2003 TO SEPTEMBER 2004

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|------|------|------|------|------|-------|------|------|------|------|------|------|
| | | | | | | | | | | | | |
| 1 | 18.0 | 17.4 | 17.7 | 23.4 | 21.1 | 22.3 | 23.9 | 23.2 | 23.6 | 24.6 | 23.2 | 23.8 |
| 2 | 18.8 | 17.4 | 17.9 | 23.4 | 21.2 | 22.5 | 25.6 | 23.1 | 24.0 | 24.4 | 22.6 | 23.4 |
| 3 | 20.4 | 17.8 | 18.9 | 24.5 | 21.8 | 23.1 | 25.0 | 23.4 | 24.3 | 24.0 | 22.1 | 23.2 |
| 4 | 21.4 | 18.0 | 19.3 | 24.7 | 22.0 | 23.3 | 25.8 | 24.1 | 25.0 | 24.9 | 23.0 | 23.8 |
| 5 | 20.8 | 19.1 | 19.8 | 23.4 | 21.4 | 22.6 | 24.9 | 21.7 | 23.1 | 23.4 | 21.6 | 22.6 |
| 6 | 19.4 | 17.7 | 18.5 | 23.8 | 22.0 | 22.8 | 23.6 | 22.3 | 22.9 | 22.9 | 20.7 | 21.9 |
| 7 | 20.9 | 17.5 | 18.9 | 24.4 | 22.0 | 23.1 | 23.6 | 21.4 | 22.5 | 23.3 | 21.6 | 22.5 |
| 8 | 22.7 | 19.0 | 20.5 | 23.6 | 22.5 | 23.0 | 23.4 | 21.4 | 22.3 | 23.3 | 21.8 | 22.8 |
| 9 | 23.1 | 19.6 | 21.4 | 23.9 | 22.5 | 23.0 | 23.6 | 21.3 | 22.5 | 23.6 | 22.4 | 23.1 |
| 10 | 22.5 | 21.0 | 21.9 | 24.1 | 21.9 | 23.1 | 24.1 | 22.0 | 23.0 | 23.1 | 21.8 | 22.6 |
| 11 | 22.2 | 19.8 | 21.0 | 24.6 | 22.5 | 23.6 | 23.9 | 22.8 | 23.2 | 22.8 | 21.2 | 21.9 |
| 12 | 22.2 | 19.3 | 20.8 | 23.7 | 22.7 | 23.2 | 24.1 | 21.6 | 23.3 | 22.5 | 20.6 | 21.7 |
| 13 | 21.8 | 19.2 | 20.3 | 22.8 | 21.8 | 22.2 | 23.9 | 21.6 | 23.2 | 23.3 | 21.4 | 22.3 |
| 14 | 19.8 | 19.0 | 19.4 | 22.3 | 21.5 | 21.8 | 24.7 | 22.9 | 23.9 | 22.5 | 21.0 | 21.8 |
| 15 | 22.9 | 19.0 | 20.5 | 22.8 | 21.4 | 22.0 | 24.2 | 23.5 | 24.0 | 21.8 | 20.4 | 21.2 |
| 16 | 23.7 | 20.2 | 21.7 | 23.1 | 21.2 | 22.1 | 23.5 | 22.9 | 23.3 | 22.0 | 21.1 | 21.5 |
| 17 | 24.1 | 21.1 | 22.3 | 23.6 | 21.5 | 22.6 | 24.9 | 22.6 | 23.3 | 22.3 | 21.5 | 21.8 |
| 18 | 23.6 | 22.4 | 23.0 | 24.1 | 22.6 | 23.4 | 23.9 | 22.5 | 23.2 | 21.8 | 19.8 | 20.8 |
| 19 | 23.6 | 21.6 | 22.5 | 23.7 | 23.2 | 23.5 | 24.0 | 23.3 | 23.6 | 20.6 | 19.5 | 20.0 |
| 20 | 22.6 | 20.3 | 21.4 | 24.5 | 22.9 | 23.6 | 24.7 | 23.3 | 23.9 | 20.6 | 18.9 | 19.6 |
| 21 | 22.5 | 19.7 | 21.0 | 25.2 | 22.9 | 24.1 | 24.3 | 23.5 | 24.0 | 20.7 | 19.2 | 19.9 |
| 22 | 21.5 | 20.1 | 20.9 | 25.6 | 23.6 | 24.6 | 24.9 | 22.7 | 23.7 | 21.3 | 19.2 | 20.1 |
| 23 | 22.7 | 20.4 | 21.4 | 25.6 | 24.2 | 24.9 | 24.4 | 22.5 | 23.4 | 21.6 | 19.8 | 20.6 |
| 24 | 22.7 | 19.7 | 21.3 | 24.8 | 22.2 | 23.6 | 24.5 | 22.8 | 23.6 | 21.4 | 20.0 | 20.5 |
| 25 | 22.2 | 20.6 | 21.4 | 23.1 | 21.6 | 22.3 | 24.2 | 22.1 | 23.0 | 20.8 | 19.5 | 20.1 |
| 26 | 22.4 | 20.7 | 21.6 | 23.8 | 21.0 | 22.4; | 23.5 | 21.4 | 22.5 | 21.4 | 20.0 | 20.5 |
| 27 | 22.3 | 20.0 | 21.1 | 23.2 | 21.4 | 22.4 | 23.6 | 22.4 | 23.0 | 20.9 | 19.2 | 20.1 |
| 28 | 22.3 | 19.9 | 21.1 | 22.5 | 21.3 | 21.9 | 24.3 | 22.8 | 23.6 | 20.2 | 19.8 | 20.0 |
| 29 | 22.8 | 19.9 | 21.6 | 23.6 | 21.6 | 22.5 | 24.7 | 23.2 | 24.0 | 20.0 | 18.5 | 19.1 |
| 30 | 23.0 | 20.8 | 21.8 | 24.0 | 21.8 | 23.0 | 25.1 | 23.9 | 24.5 | 19.8 | 18.2 | 18.8 |
| 31 | --- | --- | --- | 24.6 | 22.8 | 23.7 | 25.8 | 24.0 | 24.8 | --- | --- | --- |
| MONTH | 24.1 | 17.4 | 20.7 | 25.6 | 21.0 | 23.0 | 25.8 | 21.3 | 23.5 | 24.9 | 18.2 | 21.4 |

PAWTUXET RIVER BASIN

01115183 QUONAPAUG BROOK AT RT 116, NORTH SCITUATE, RI

LOCATION.--Lat 41°47'51", long 71°24'53", Providence County, Hydrologic Unit 01090004, on left bank 200 ft downstream from bridge on Elmdale Road, and 2.4 mi south of North Scituate

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: January 2000 to May 2001, October 2001 to current year.

WATER TEMPERATURE: January 2000 to May 2001, October 2001 to current year.

INSTRUMENTATION.--Specific conductance and water temperature water-quality monitor since January 2000.

REMARKS.--Records fair. Missing periods are not estimated.

EXTREMES FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE: Maximum recorded, 1,950 $\mu\text{S}/\text{cm}$, Feb. 6, 2004; minimum, 66 $\mu\text{S}/\text{cm}$, Aug. 12, 2004.

WATER TEMPERATURE: Maximum recorded, 29.2°C, July 23, 2002; minimum, -0.2°C, many days during winter period of 2002 and 2003.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 1,950 $\mu\text{S}/\text{cm}$, Feb. 6; minimum, 66 $\mu\text{S}/\text{cm}$, Aug. 12.

WATER TEMPERATURE: Maximum recorded, 23.0°C, Aug. 2; minimum, -0.2°C, on many days during winter period.

WATER-QUALITY DATA, OCTOBER 2003 TO SEPTEMBER 2004

SPECIFIC CONDUCTANCE (μCM AT 25°C), OCTOBER 2003 TO SEPTEMBER 2004

| DAY | OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | | |
|-------|---------|-----|------|----------|-----|------|----------|-----|------|---------|-----|------|
| | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
| 1 | 202 | 196 | 199 | 122 | 112 | 118 | 147 | 141 | 143 | 143 | 141 | 142 |
| 2 | 213 | 196 | 202 | 130 | 122 | 126 | 148 | 131 | 144 | 147 | 126 | 137 |
| 3 | 212 | 200 | 204 | 163 | 130 | 133 | 143 | 132 | 135 | 170 | 143 | 152 |
| 4 | 205 | 200 | 202 | 135 | 132 | 134 | 139 | 128 | 133 | 159 | 146 | 153 |
| 5 | 207 | 202 | 205 | 132 | 120 | 127 | 137 | 121 | 131 | 374 | 154 | 200 |
| 6 | 206 | 203 | 204 | 132 | 124 | 129 | 145 | 123 | 134 | 204 | 154 | 186 |
| 7 | 207 | 204 | 205 | 134 | 131 | 132 | 137 | 125 | 129 | 154 | 143 | 147 |
| 8 | 215 | 205 | 209 | 155 | 131 | 134 | 127 | 121 | 124 | 150 | 144 | 146 |
| 9 | 218 | 215 | 216 | 160 | 136 | 141 | 139 | 122 | 129 | 158 | 146 | 152 |
| 10 | 217 | 214 | 216 | 143 | 137 | 140 | 127 | 124 | 125 | 165 | 158 | 162 |
| 11 | 216 | 211 | 213 | 143 | 133 | 140 | 250 | 81 | 125 | 171 | 159 | 165 |
| 12 | 214 | 203 | 211 | 141 | 133 | 137 | 128 | 114 | 122 | 159 | 147 | 153 |
| 13 | 221 | 203 | 216 | 137 | 128 | 133 | 117 | 111 | 114 | 151 | 137 | 144 |
| 14 | 212 | 205 | 209 | 149 | 137 | 142 | 486 | 112 | 126 | 168 | 149 | 152 |
| 15 | 212 | 128 | 153 | 146 | 143 | 144 | 318 | 87 | 127 | 189 | 146 | 151 |
| 16 | 161 | 150 | 158 | 146 | 140 | 143 | 124 | 110 | 117 | 148 | 146 | 148 |
| 17 | 161 | 154 | 158 | 148 | 140 | 142 | 142 | 93 | 112 | 150 | 145 | 147 |
| 18 | 169 | 154 | 160 | 178 | 139 | 142 | 124 | 94 | 109 | 192 | 141 | 144 |
| 19 | 165 | 157 | 161 | 142 | 138 | 139 | 107 | 96 | 102 | 144 | 137 | 140 |
| 20 | 171 | 158 | 165 | 141 | 134 | 138 | 110 | 98 | 104 | 139 | 137 | 138 |
| 21 | 172 | 164 | 169 | 143 | 136 | 138 | 108 | 100 | 104 | 140 | 137 | 139 |
| 22 | 173 | 172 | 172 | 144 | 139 | 140 | 121 | 105 | 114 | 141 | 137 | 139 |
| 23 | 176 | 171 | 172 | 177 | 141 | 144 | 129 | 121 | 126 | 141 | 137 | 139 |
| 24 | 181 | 175 | 178 | 147 | 141 | 144 | 169 | 110 | 129 | 144 | 141 | 143 |
| 25 | 184 | 175 | 179 | 147 | 138 | 142 | 169 | 112 | 130 | 149 | 144 | 146 |
| 26 | 185 | 176 | 180 | 161 | 143 | 145 | 136 | 133 | 135 | 150 | 148 | 149 |
| 27 | 185 | 132 | 150 | 152 | 141 | 143 | 135 | 132 | 134 | 149 | 146 | 148 |
| 28 | 143 | 131 | 137 | 142 | 134 | 140 | 136 | 120 | 130 | 147 | 145 | 146 |
| 29 | 142 | 91 | 106 | 140 | 129 | 135 | 138 | 128 | 133 | 145 | 141 | 143 |
| 30 | 101 | 95 | 98 | 143 | 139 | 141 | 143 | 135 | 138 | 141 | 138 | 139 |
| 31 | 112 | 101 | 107 | --- | --- | --- | 143 | 140 | 141 | 138 | 135 | 137 |
| MONTH | 221 | 91 | 178 | 178 | 112 | 138 | 486 | 81 | 126 | 374 | 126 | 149 |

PAWTUXET RIVER BASIN

0115183 QUONAPAUG BROOK AT RT 116, NORTH SCITUATE, RI--Continued

WATER TEMPERATURE (DEG. C), OCTOBER 2003 TO SEPTEMBER 2004

| DAY | OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | | |
|-------|---------|------|------|----------|------|------|----------|------|------|---------|------|------|
| | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
| 1 | 12.8 | 10.1 | 11.6 | 13.6 | 10.3 | 11.9 | 5.7 | 2.9 | 4.5 | 3.0 | 1.7 | 2.3 |
| 2 | 13.4 | 10.9 | 12.2 | 13.9 | 12.0 | 12.9 | 2.9 | -1.1 | 1.6 | 1.8 | .2 | 1.2 |
| 3 | 11.0 | 8.5 | 9.8 | 15.3 | 12.3 | 13.8 | .2 | -1.1 | .0 | 3.6 | 1.7 | 2.6 |
| 4 | 11.1 | 7.9 | 9.4 | 13.8 | 10.0 | 12.0 | .2 | -1.1 | .0 | 4.9 | 3.6 | 4.3 |
| 5 | 11.6 | 9.5 | 10.7 | 10.9 | 9.6 | 10.2 | .1 | -2.2 | -1.1 | 4.3 | 2.8 | 3.3 |
| 6 | 9.9 | 6.9 | 8.5 | 12.4 | 10.9 | 11.6 | -1.1 | -2.2 | -2.2 | 2.8 | .1 | 1.9 |
| 7 | 9.8 | 6.1 | 8.0 | 11.8 | 9.1 | 10.8 | -1.1 | -2.2 | -2.2 | .1 | -2.2 | -1.1 |
| 8 | 12.7 | 8.2 | 10.3 | 9.1 | 4.3 | 7.1 | -1.1 | -2.2 | -2.2 | .0 | -2.2 | -2.2 |
| 9 | 14.6 | 11.9 | 13.1 | 4.7 | 2.2 | 3.6 | -1.1 | -2.2 | -1.1 | -1.1 | -2.2 | -2.2 |
| 10 | 13.5 | 12.4 | 12.9 | 4.4 | 1.2 | 2.7 | .0 | -1.1 | -1.1 | -1.1 | -2.2 | -2.2 |
| 11 | 13.4 | 11.2 | 12.2 | 5.2 | 1.4 | 3.3 | 1.2 | -1.1 | .2 | -1.1 | -2.2 | -2.2 |
| 12 | 12.7 | 11.9 | 12.3 | 7.9 | 5.2 | 6.5 | .2 | -2.2 | .0 | -1.1 | -2.2 | -2.2 |
| 13 | 14.4 | 12.3 | 13.1 | 9.3 | 5.6 | 8.1 | .1 | -2.2 | -1.1 | -1.1 | -2.2 | -2.2 |
| 14 | 12.6 | 9.5 | 11.3 | 5.6 | 2.7 | 3.8 | -1.1 | -2.2 | -2.2 | -1.1 | -2.2 | -2.2 |
| 15 | 14.1 | 12.2 | 13.4 | 3.4 | 1.6 | 2.4 | -1.1 | -2.2 | -2.2 | -1.1 | -2.2 | -2.2 |
| 16 | 12.3 | 10.5 | 11.5 | 4.4 | 1.1 | 3.0 | -1.1 | -2.2 | -2.2 | -1.1 | -2.2 | -2.2 |
| 17 | 11.3 | 8.7 | 10.1 | 5.0 | 4.2 | 4.7 | 1.9 | -2.2 | .4 | -1.1 | -2.2 | -2.2 |
| 18 | 11.0 | 8.9 | 10.0 | 6.4 | 3.9 | 5.1 | 2.1 | 1.1 | 1.6 | -2.2 | -2.2 | -2.2 |
| 19 | 8.9 | 6.6 | 7.7 | 9.5 | 5.2 | 7.3 | 1.1 | .2 | .7 | -2.2 | -2.2 | -2.2 |
| 20 | 8.3 | 4.9 | 6.6 | 10.0 | 7.8 | 9.4 | .7 | -2.2 | .3 | -1.1 | -2.2 | -2.2 |
| 21 | 12.2 | 7.1 | 10.0 | 9.0 | 6.4 | 7.8 | .1 | -2.2 | -1.1 | -2.2 | -2.2 | -2.2 |
| 22 | 11.7 | 8.0 | 9.8 | 7.3 | 5.0 | 6.0 | 1.2 | -1.1 | .6 | -2.2 | -2.2 | -2.2 |
| 23 | 8.0 | 5.7 | 7.0 | 6.1 | 3.8 | 4.9 | 3.5 | 1.2 | 2.4 | -1.1 | -2.2 | -2.2 |
| 24 | 6.7 | 4.5 | 5.6 | 6.1 | 3.0 | 4.7 | 6.9 | 3.0 | 4.9 | -1.1 | -2.2 | -2.2 |
| 25 | 7.4 | 3.4 | 5.5 | 6.4 | 3.4 | 5.6 | 7.1 | 4.6 | 6.4 | -1.1 | -2.2 | -2.2 |
| 26 | 11.7 | 7.0 | 9.5 | 4.7 | 2.1 | 3.6 | 4.6 | 2.3 | 3.1 | -1.1 | -2.2 | -2.2 |
| 27 | 13.7 | 11.7 | 12.8 | 6.0 | 4.0 | 5.1 | 2.8 | 1.4 | 2.1 | -2.2 | -2.2 | -2.2 |
| 28 | 12.9 | 11.3 | 12.0 | 10.3 | 5.6 | 7.0 | 2.0 | .2 | 1.1 | -2.2 | -2.2 | -2.2 |
| 29 | 13.7 | 11.3 | 12.6 | 10.5 | 4.6 | 7.9 | 2.9 | .7 | 1.8 | -2.2 | -2.2 | -2.2 |
| 30 | 12.2 | 9.3 | 10.9 | 5.5 | 4.2 | 4.7 | 4.8 | 2.0 | 3.3 | -2.2 | -2.2 | -2.2 |
| 31 | 11.1 | 8.0 | 9.7 | --- | --- | --- | 3.8 | 2.4 | 3.1 | -2.2 | -2.2 | -2.2 |
| MONTH | 14.6 | 3.4 | 10.3 | 15.3 | 1.1 | 6.9 | 7.1 | -0.2 | 1.2 | 4.9 | -0.2 | 0.3 |

| DAY | FEBRUARY | | | MARCH | | | APRIL | | | MAY | | |
|-------|----------|------|------|-------|------|------|-------|------|------|------|------|------|
| | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
| 1 | -0.2 | -0.2 | -0.2 | 1.6 | 0.4 | 0.8 | 4.3 | 3.1 | 3.7 | 19.3 | 12.1 | 15.4 |
| 2 | -1.1 | -2.2 | -2.2 | 1.6 | .7 | 1.0 | 4.5 | 4.0 | 4.2 | 16.5 | 14.4 | 15.4 |
| 3 | -1.1 | -2.2 | -2.2 | 2.3 | .7 | 1.3 | 4.7 | 3.8 | 4.2 | 14.9 | 13.7 | 14.4 |
| 4 | -1.1 | -2.2 | -2.2 | 2.1 | .7 | 1.3 | 6.0 | 4.2 | 5.1 | 16.0 | 11.2 | 13.2 |
| 5 | -1.1 | -2.2 | -2.2 | 1.8 | .9 | 1.3 | 7.0 | 3.3 | 4.9 | 14.2 | 8.5 | 11.5 |
| 6 | -1.1 | -2.2 | -2.2 | 1.9 | .5 | 1.2 | 8.2 | 1.8 | 4.7 | 17.6 | 10.0 | 13.4 |
| 7 | -2.2 | -2.2 | -2.2 | 2.9 | .2 | 1.2 | 7.6 | 3.5 | 5.3 | 20.4 | 12.2 | 15.7 |
| 8 | -2.2 | -2.2 | -2.2 | 1.1 | .3 | .7 | 9.6 | 3.7 | 6.5 | 17.3 | 11.2 | 13.9 |
| 9 | -2.2 | -2.2 | -2.2 | 1.3 | -1.1 | .5 | 10.1 | 5.2 | 7.6 | 12.4 | 10.3 | 11.3 |
| 10 | -2.2 | -2.2 | -2.2 | 2.5 | -2.2 | .8 | 11.6 | 4.3 | 7.7 | 18.0 | 9.4 | 13.2 |
| 11 | -1.1 | -2.2 | -2.2 | 2.7 | .4 | 1.2 | 8.3 | 5.1 | 6.7 | 19.7 | 12.7 | 15.9 |
| 12 | -1.1 | -2.2 | -2.2 | 3.1 | .2 | 1.4 | 10.5 | 5.5 | 7.7 | 20.9 | 14.2 | 17.3 |
| 13 | -1.1 | -2.2 | -2.2 | 4.1 | -2.2 | 1.3 | 7.6 | 6.1 | 6.5 | 19.7 | 14.5 | 17.1 |
| 14 | -1.1 | -2.2 | -2.2 | 2.8 | -2.2 | 1.0 | 9.7 | 7.6 | 9.1 | 18.1 | 12.6 | 15.0 |
| 15 | -1.1 | -2.2 | -2.2 | 5.8 | 1.3 | 3.0 | 9.8 | 7.8 | 8.8 | 20.8 | 14.5 | 17.3 |
| 16 | -1.1 | -2.2 | -2.2 | 2.1 | -2.2 | .9 | 11.9 | 5.5 | 8.4 | 17.6 | 14.8 | 16.5 |
| 17 | -1.1 | -2.2 | -2.2 | -1.1 | -2.2 | -2.2 | 13.1 | 6.2 | 9.5 | 17.1 | 13.8 | 15.0 |
| 18 | -1.1 | -2.2 | -2.2 | .3 | -2.2 | .0 | 15.5 | 9.4 | 12.2 | 16.5 | 13.5 | 14.9 |
| 19 | -1.1 | -2.2 | -2.2 | 1.0 | -2.2 | .2 | 17.1 | 10.2 | 13.4 | 16.8 | 14.3 | 15.6 |
| 20 | -1.1 | -2.2 | -2.2 | 2.1 | -2.2 | .7 | 18.2 | 12.6 | 14.8 | 16.9 | 11.8 | 14.3 |
| 21 | -1.1 | -2.2 | -2.2 | 2.4 | .1 | 1.2 | 14.2 | 9.7 | 11.7 | 16.6 | 13.0 | 14.7 |
| 22 | .0 | -2.2 | -2.2 | 2.8 | -2.2 | .7 | 18.1 | 10.8 | 14.0 | 15.5 | 12.0 | 13.9 |
| 23 | .0 | -2.2 | -1.1 | 2.7 | -2.2 | .8 | 15.0 | 10.1 | 12.3 | 16.3 | 11.5 | 13.6 |
| 24 | .0 | -2.2 | -1.1 | 6.0 | .1 | 2.5 | 15.9 | 8.9 | 11.9 | 14.1 | 12.5 | 13.3 |
| 25 | .3 | -2.2 | .1 | 5.2 | 2.1 | 3.5 | 13.4 | 8.4 | 10.7 | 13.8 | 11.9 | 12.8 |
| 26 | .5 | -2.2 | .1 | 9.1 | 3.4 | 5.7 | 9.8 | 8.2 | 9.1 | 11.9 | 10.9 | 11.4 |
| 27 | .8 | -2.2 | .3 | 7.9 | 5.1 | 6.2 | 15.3 | 9.7 | 11.9 | 14.4 | 11.6 | 12.8 |
| 28 | 1.0 | -1.1 | .4 | 5.9 | 3.0 | 4.9 | 15.1 | 9.6 | 11.9 | 13.4 | 12.4 | 12.9 |
| 29 | 1.4 | .1 | .6 | 8.8 | 1.8 | 4.7 | 16.7 | 8.2 | 12.0 | 14.2 | 11.5 | 13.0 |
| 30 | --- | --- | --- | 5.7 | 2.7 | 4.0 | 18.8 | 10.8 | 14.4 | 14.3 | 9.7 | 12.0 |
| 31 | --- | --- | --- | 4.8 | 3.6 | 4.2 | --- | --- | --- | 13.9 | 10.0 | 12.0 |
| MONTH | 1.4 | -0.2 | -0.1 | 9.1 | -0.2 | 1.9 | 18.8 | 1.8 | 9.0 | 20.9 | 8.5 | 14.2 |

PAWTUXET RIVER BASIN

01115187 PONAGANSET RIVER NEAR SOUTH FOSTER, RI

LOCATION.--Lat 41°49'09", long 71°42'16", Providence County, Hydrologic Unit 01090004, on left bank 5 ft downstream from bridge on Rams Tail Road, 0.3 mi south of South Foster and 0.4 mi upstream from Barden Reservoir.

DRAINAGE AREA.--14.4 mi² (revised).

WATER DISCHARGE RECORD

PERIOD OF RECORD.--Discharge: March 1994 to current year.

Water-quality records: Water years, 2000-03.

REVISED RECORDS.--WDR MA-RI-03-01: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 355 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Satellite gage-height telemeter at station.

AVERAGE DISCHARGE.--10 years (water years 1995-2004), 26.9 ft³/s, 25.34 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,110 ft³/s, June 17, 2001, gage height, 6.32 ft; maximum gage height, 6.37 ft, June 30, 1998; no flow part of each day, Sept. 8-13, 1995.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 970 ft³/s, Apr. 14, gage height, 6.11 ft; minimum discharge, 0.98 ft³/s, July 24, Aug. 1.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|------|------|------|-------|------|------|------|-------|------|-------|-------|
| 1 | 6.7 | 46 | 20 | 29 | e9.9 | 21 | 242 | 39 | 17 | 1.7 | 1.2 | 3.5 |
| 2 | 6.3 | 36 | 18 | 27 | e9.3 | 32 | 208 | 37 | 19 | 1.7 | 6.4 | 2.9 |
| 3 | 5.7 | 31 | e16 | 29 | e9.2 | 38 | 91 | 44 | 16 | 1.8 | 4.8 | 2.2 |
| 4 | 5.3 | 27 | e14 | 36 | e16 | 34 | 63 | 80 | 13 | 1.8 | 2.7 | 1.8 |
| 5 | 5.3 | 27 | e15 | 54 | e15 | 31 | 54 | 56 | 11 | 2.5 | 14 | 1.5 |
| 6 | 4.8 | 35 | e17 | 50 | e19 | 50 | 44 | 43 | 10 | 8.0 | 17 | 1.3 |
| 7 | 4.5 | 30 | e20 | 37 | e58 | 53 | 37 | 36 | 11 | 5.4 | 8.7 | 1.2 |
| 8 | 4.3 | 24 | e19 | e32 | e47 | 38 | 33 | 29 | 10 | 3.3 | 5.2 | 2.7 |
| 9 | 4.0 | 20 | e18 | e26 | e35 | 31 | 30 | 28 | 8.4 | 2.6 | 3.4 | 14 |
| 10 | 3.9 | 19 | 17 | e21 | e24 | 26 | 27 | 28 | 8.0 | 2.1 | 2.4 | 15 |
| 11 | 4.1 | 18 | 129 | e18 | e22 | 26 | 26 | 25 | 7.5 | 1.8 | 2.1 | 9.2 |
| 12 | 4.7 | 21 | 178 | e17 | e20 | 25 | 24 | 22 | 6.5 | 1.6 | 1.9 | 5.6 |
| 13 | 7.2 | 27 | 66 | e18 | e18 | 23 | 100 | 19 | 5.8 | 1.7 | 1.8 | 4.1 |
| 14 | 7.7 | 26 | 46 | e18 | e16 | 20 | 523 | 17 | 5.0 | 2.7 | 1.8 | 3.3 |
| 15 | 27 | 20 | 103 | e17 | e15 | 19 | 212 | 16 | 5.4 | 3.5 | 8.9 | 2.6 |
| 16 | 28 | 18 | 71 | e16 | e14 | 18 | 117 | 15 | 5.0 | 2.7 | 16 | 2.6 |
| 17 | 16 | 17 | 83 | e15 | e13 | 19 | 75 | 15 | 4.4 | 2.3 | 14 | 3.1 |
| 18 | 14 | 17 | 258 | e16 | e12 | 18 | 59 | 14 | 4.4 | 1.9 | 9.5 | 21 |
| 19 | 12 | 17 | 98 | e16 | e11 | 18 | 51 | 15 | 6.1 | 1.9 | 6.2 | 46 |
| 20 | 14 | 21 | 60 | e15 | e11 | 18 | 45 | 13 | 5.6 | 2.0 | 5.1 | 19 |
| 21 | 12 | 24 | 47 | e14 | e13 | 47 | 40 | 12 | 4.3 | 1.8 | 6.2 | 12 |
| 22 | 11 | 20 | 41 | e14 | 17 | 52 | 37 | 11 | 3.6 | 1.6 | 27 | 8.8 |
| 23 | 11 | 18 | 38 | e14 | 17 | 34 | 45 | 12 | 3.5 | 1.2 | 15 | 6.7 |
| 24 | 11 | 16 | 51 | e13 | 15 | 28 | 53 | 13 | 2.9 | 1.3 | 9.0 | 5.3 |
| 25 | 10 | 17 | 116 | e12 | 15 | 29 | 42 | 13 | 2.4 | 2.6 | 6.0 | 6.7 |
| 26 | 9.9 | 17 | 65 | e11 | 15 | 27 | 70 | 12 | 2.4 | 2.8 | 4.4 | 6.6 |
| 27 | 48 | 16 | 48 | e11 | 14 | 28 | 143 | 28 | 2.4 | 2.2 | 3.6 | 3.3 |
| 28 | 100 | 16 | 40 | e11 | 14 | 28 | 81 | 34 | 2.2 | 1.8 | 3.0 | 3.6 |
| 29 | 259 | 28 | 35 | e11 | 17 | 23 | 53 | 39 | 2.1 | 1.7 | 2.6 | 48 |
| 30 | 160 | 26 | 34 | e11 | --- | 20 | 44 | 22 | 1.9 | 1.6 | 2.5 | 43 |
| 31 | 67 | --- | 32 | e10 | --- | 35 | --- | 17 | --- | 1.4 | 3.4 | --- |
| TOTAL | 884.4 | 695 | 1813 | 639 | 531.4 | 909 | 2669 | 804 | 206.8 | 73.0 | 215.8 | 306.6 |
| MEAN | 28.5 | 23.2 | 58.5 | 20.6 | 18.3 | 29.3 | 89.0 | 25.9 | 6.89 | 2.35 | 6.96 | 10.2 |
| MAX | 259 | 46 | 258 | 54 | 58 | 53 | 523 | 80 | 19 | 8.0 | 27 | 48 |
| MIN | 3.9 | 16 | 14 | 10 | 9.2 | 18 | 24 | 11 | 1.9 | 1.2 | 1.2 | 1.2 |
| CFSM | 1.98 | 1.61 | 4.06 | 1.43 | 1.27 | 2.04 | 6.18 | 1.80 | 0.48 | 0.16 | 0.48 | 0.71 |
| IN. | 2.28 | 1.80 | 4.68 | 1.65 | 1.37 | 2.35 | 6.89 | 2.08 | 0.53 | 0.19 | 0.56 | 0.79 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 2004, BY WATER YEAR (WY)

| | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 12.9 | 18.5 | 35.9 | 39.1 | 36.9 | 56.7 | 50.6 | 28.2 | 24.3 | 7.02 | 4.17 | 5.50 |
| MAX | 46.9 | 32.7 | 103 | 71.4 | 59.5 | 101 | 89.0 | 52.4 | 82.9 | 40.0 | 10.0 | 14.9 |
| (WY) | 1997 | 1997 | 1997 | 1999 | 1998 | 2001 | 2004 | 1998 | 1998 | 1998 | 2003 | 1999 |
| MIN | 1.03 | 2.73 | 5.60 | 11.2 | 15.6 | 27.2 | 21.8 | 15.4 | 2.91 | 0.85 | 0.07 | 0.52 |
| (WY) | 1998 | 2002 | 2002 | 2002 | 2002 | 2002 | 1999 | 2001 | 1999 | 1999 | 1999 | 1995 |

SUMMARY STATISTICS

| | FOR 2003 CALENDAR YEAR | FOR 2004 WATER YEAR | WATER YEARS 1994 - 2004 |
|--------------------------|------------------------|---------------------|-------------------------|
| ANNUAL TOTAL | 12313.9 | 9747.0 | |
| ANNUAL MEAN | 33.7 | 26.6 | 26.9 |
| HIGHEST ANNUAL MEAN | | | 37.2 |
| LOWEST ANNUAL MEAN | | | 12.6 |
| HIGHEST DAILY MEAN | 259 | Oct 29 | 625 |
| LOWEST DAILY MEAN | 1.1 | Sep 1 | 0.00 |
| ANNUAL SEVEN-DAY MINIMUM | 1.7 | Aug 26 | 0.00 |
| MAXIMUM PEAK FLOW | | | 1110 |
| MAXIMUM PEAK STAGE | | 6.11 | Apr 14 |
| INSTANTANEOUS LOW FLOW | | 0.98 | Jul 24 |
| ANNUAL RUNOFF (CFSM) | 2.34 | 1.85 | 1.87 |
| ANNUAL RUNOFF (INCHES) | 31.81 | 25.18 | 25.34 |
| 10 PERCENT EXCEEDS | 74 | 52 | 60 |
| 50 PERCENT EXCEEDS | 20 | 16 | 15 |
| 90 PERCENT EXCEEDS | 4.7 | 2.4 | 1.1 |

e Estimated

PAWTUXET RIVER BASIN

01115187 PONAGANSET RIVER NEAR SOUTH FOSTER, RI--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: February 2000 to May 2001, October 2001 to current year.

WATER TEMPERATURE: February 2000 to May 2001, October 2001 to current year.

INSTRUMENTATION.--Specific conductance and water temperature water-quality monitor since February 2000.

REMARKS.--Specific Conductance records fair, water temperature records good. Missing periods are not estimated.

EXTREMES FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE: Maximum recorded, 328 µS/cm, Feb. 6, 2004; minimum, 30 µS/cm, Feb. 17, 2000.

WATER TEMPERATURE: Maximum recorded, 27.2°C, July 5, 2003; minimum, -0.5°C, several days during winter period, water year 2004.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 328 µS/cm, Feb. 6; minimum, 46 µS/cm, Apr. 14.

WATER TEMPERATURE: Maximum recorded, 26.7°C, Aug. 2; minimum, -0.5°C, several days during winter period.

WATER-QUALITY DATA, OCTOBER 2003 TO SEPTEMBER 2004

SPECIFIC CONDUCTANCE (µ/CM AT 25°C), OCTOBER 2003 TO SEPTEMBER 2004

| DAY | MAX | OCTOBER | | MAX | NOVEMBER | | MAX | DECEMBER | | MAX | JANUARY | |
|-------|-----|---------|------|-----|----------|------|-----|----------|------|-----|---------|------|
| | | MIN | MEAN | | MIN | MEAN | | MIN | MEAN | | MIN | MEAN |
| 1 | 89 | 88 | 88 | 65 | 60 | 63 | 76 | 75 | 75 | 67 | 64 | 66 |
| 2 | 94 | 89 | 91 | 66 | 64 | 65 | 76 | 62 | 73 | 67 | 61 | 64 |
| 3 | 94 | 89 | 91 | 68 | 66 | 67 | 70 | 54 | 64 | 71 | 66 | 69 |
| 4 | 89 | 85 | 86 | 69 | 66 | 68 | 74 | 64 | 68 | 72 | 68 | 69 |
| 5 | 88 | 85 | 86 | 68 | 66 | 67 | 71 | 63 | 66 | 91 | 69 | 72 |
| 6 | 87 | 84 | 85 | 70 | 65 | 67 | 69 | 61 | 63 | 77 | 64 | 72 |
| 7 | 88 | 84 | 86 | 70 | 69 | 69 | 70 | 61 | 61 | 64 | 57 | 60 |
| 8 | 91 | 86 | 88 | 69 | 66 | 67 | 63 | 61 | 62 | 65 | 58 | 60 |
| 9 | 94 | 91 | 92 | 69 | 67 | 69 | 64 | 61 | 63 | 65 | 59 | 62 |
| 10 | 95 | 92 | 93 | 70 | 69 | 69 | 67 | 63 | 65 | 68 | 65 | 66 |
| 11 | 95 | 92 | 93 | 71 | 69 | 70 | 131 | 48 | 72 | 68 | 66 | 67 |
| 12 | 95 | 93 | 94 | 70 | 67 | 68 | 58 | 50 | 54 | 68 | 64 | 65 |
| 13 | 94 | 90 | 92 | 73 | 67 | 69 | 55 | 49 | 52 | 67 | 63 | 65 |
| 14 | 93 | 90 | 91 | 74 | 68 | 72 | 76 | 50 | 53 | 67 | 63 | 65 |
| 15 | 110 | 75 | 89 | 75 | 73 | 74 | 77 | 49 | 58 | 71 | 66 | 68 |
| 16 | 97 | 84 | 94 | 74 | 70 | 72 | 62 | 53 | 57 | 72 | 69 | 70 |
| 17 | 96 | 92 | 94 | 73 | 71 | 72 | 89 | 52 | 65 | 71 | 68 | 69 |
| 18 | 94 | 91 | 93 | 72 | 71 | 72 | 57 | 51 | 53 | 69 | 67 | 68 |
| 19 | 91 | 86 | 88 | 74 | 72 | 72 | 55 | 48 | 52 | 70 | 67 | 69 |
| 20 | 87 | 82 | 84 | 77 | 71 | 74 | 57 | 50 | 54 | 69 | 68 | 68 |
| 21 | 89 | 82 | 86 | 75 | 71 | 73 | 57 | 49 | 53 | 71 | 68 | 69 |
| 22 | 89 | 87 | 88 | 76 | 74 | 75 | 61 | 52 | 57 | 70 | 67 | 69 |
| 23 | 87 | 84 | 86 | 76 | 74 | 75 | 64 | 59 | 62 | 70 | 67 | 68 |
| 24 | 86 | 85 | 85 | 76 | 74 | 75 | 76 | 54 | 64 | 71 | 67 | 69 |
| 25 | 89 | 86 | 88 | 75 | 72 | 74 | 62 | 54 | 59 | 83 | 67 | 69 |
| 26 | 90 | 87 | 88 | 77 | 74 | 76 | 60 | 57 | 59 | 83 | 68 | 69 |
| 27 | 112 | 72 | 86 | 77 | 76 | 77 | 61 | 56 | 59 | 83 | 67 | 70 |
| 28 | 81 | 73 | 77 | 78 | 75 | 76 | 63 | 55 | 59 | 81 | 67 | 70 |
| 29 | 83 | 48 | 65 | 81 | 68 | 73 | 65 | 58 | 62 | 80 | 66 | 67 |
| 30 | 56 | 53 | 55 | 76 | 74 | 76 | 65 | 62 | 64 | 82 | 66 | 70 |
| 31 | 61 | 56 | 58 | --- | --- | --- | 66 | 64 | 65 | 73 | 66 | 68 |
| MONTH | 112 | 48 | 86 | 81 | 60 | 71 | 131 | 48 | 61 | 91 | 57 | 67 |

PAWTUXET RIVER BASIN

0115187 PONAGANSET RIVER NEAR SOUTH FOSTER, RI--Continued

TEMPERATURE, WATER (DEG. C), OCTOBER 2003 TO SEPTEMBER 2004

| DAY | OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | | |
|-------|---------|------|------|----------|------|------|----------|------|------|---------|------|------|
| | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
| 1 | 14.9 | 12.2 | 13.1 | 13.3 | 10.5 | 11.8 | 5.1 | 3.3 | 4.4 | 2.5 | 1.4 | 2.0 |
| 2 | 14.5 | 12.4 | 13.3 | 13.6 | 12.2 | 12.9 | 3.3 | -4 | 1.7 | 1.6 | .6 | 1.1 |
| 3 | 13.3 | 10.4 | 11.6 | 14.9 | 12.4 | 13.6 | .3 | -4 | -2 | 3.1 | 1.6 | 2.2 |
| 4 | 11.3 | 9.8 | 10.1 | 14.2 | 11.0 | 12.8 | .6 | -5 | -1 | 4.4 | 3.1 | 3.8 |
| 5 | 11.9 | 9.2 | 10.4 | 11.0 | 10.2 | 10.6 | .3 | -4 | -2 | 4.0 | 2.8 | 3.2 |
| 6 | 11.3 | 9.0 | 10.2 | 12.1 | 11.0 | 11.6 | -.3 | -4 | -4 | 2.8 | .5 | 2.0 |
| 7 | 11.0 | 8.3 | 9.6 | 11.9 | 10.0 | 11.2 | -.3 | -4 | -4 | .5 | -.5 | -.2 |
| 8 | 12.8 | 8.8 | 10.5 | 10.0 | 5.7 | 7.9 | -.3 | -4 | -4 | .0 | -.5 | -.4 |
| 9 | 13.9 | 11.7 | 12.8 | 5.7 | 3.4 | 4.4 | -.3 | -4 | -3 | -.4 | -.5 | -.5 |
| 10 | 13.6 | 12.9 | 13.2 | 4.3 | 1.9 | 3.2 | .0 | -3 | -2 | -.4 | -.5 | -.5 |
| 11 | 13.5 | 11.9 | 12.7 | 4.7 | 2.0 | 3.1 | .9 | -1 | .4 | -.4 | -.5 | -.4 |
| 12 | 13.2 | 12.8 | 12.9 | 7.0 | 4.7 | 5.7 | 1.3 | .4 | .8 | -.3 | -.4 | -.4 |
| 13 | 14.9 | 12.5 | 13.4 | 8.9 | 6.1 | 7.8 | .5 | -4 | .1 | -.2 | -.4 | -.4 |
| 14 | 14.2 | 11.7 | 12.9 | 6.1 | 2.8 | 4.1 | -.2 | -4 | -3 | -.4 | -.4 | -.4 |
| 15 | 14.6 | 12.9 | 13.8 | 3.2 | 1.6 | 2.4 | .1 | -3 | -1 | -.4 | -.4 | -.4 |
| 16 | 12.9 | 10.7 | 11.8 | 3.7 | 1.1 | 2.4 | .5 | -4 | .0 | -.4 | -.4 | -.4 |
| 17 | 11.6 | 9.2 | 10.5 | 4.4 | 3.7 | 4.1 | 3.5 | .0 | 1.5 | -.3 | -.4 | -.4 |
| 18 | 11.3 | 9.9 | 10.6 | 5.8 | 3.9 | 4.8 | 3.2 | 1.4 | 2.1 | -.3 | -.4 | -.4 |
| 19 | 10.5 | 7.4 | 8.6 | 8.5 | 4.9 | 6.2 | 1.4 | .4 | 1.0 | -.4 | -.4 | -.4 |
| 20 | 8.3 | 5.5 | 7.0 | 9.6 | 8.1 | 9.1 | 1.4 | .1 | .8 | -.4 | -.4 | -.4 |
| 21 | 11.4 | 7.3 | 9.0 | 8.6 | 7.1 | 7.8 | .6 | -3 | .2 | -.3 | -.4 | -.4 |
| 22 | 11.4 | 9.1 | 10.4 | 7.1 | 5.4 | 6.4 | 1.6 | .0 | .7 | -.3 | -.4 | -.4 |
| 23 | 9.1 | 6.3 | 7.5 | 5.9 | 4.2 | 5.2 | 3.0 | 1.2 | 2.1 | -.4 | -.4 | -.4 |
| 24 | 6.3 | 5.0 | 5.7 | 5.7 | 3.4 | 4.7 | 6.0 | 2.3 | 4.0 | -.4 | -.4 | -.4 |
| 25 | 6.6 | 3.6 | 5.2 | 6.2 | 4.2 | 5.6 | 6.1 | 4.2 | 5.6 | -.4 | -.4 | -.4 |
| 26 | 10.2 | 6.6 | 7.9 | 4.2 | 2.5 | 3.6 | 4.2 | 2.0 | 2.9 | -.4 | -.4 | -.4 |
| 27 | 13.2 | 10.2 | 12.1 | 5.4 | 3.8 | 4.6 | 2.5 | 1.1 | 1.8 | -.4 | -.4 | -.4 |
| 28 | 13.0 | 11.6 | 12.3 | 8.3 | 5.1 | 5.9 | 2.0 | .4 | 1.2 | -.4 | -.4 | -.4 |
| 29 | 13.3 | 11.6 | 12.4 | 9.3 | 5.3 | 7.8 | 2.6 | .6 | 1.6 | -.4 | -.4 | -.4 |
| 30 | 12.3 | 10.2 | 11.2 | 5.5 | 4.4 | 4.9 | 4.1 | 1.7 | 2.8 | -.4 | -.4 | -.4 |
| 31 | 11.2 | 8.7 | 10.1 | --- | --- | --- | 3.3 | 2.1 | 2.7 | -.4 | -.4 | -.4 |
| MONTH | 14.9 | 3.6 | 10.7 | 14.9 | 1.1 | 6.9 | 6.1 | -0.5 | 1.2 | 4.4 | -0.5 | 0.1 |

| DAY | FEBRUARY | | | MARCH | | | APRIL | | | MAY | | |
|-------|----------|------|------|-------|------|------|-------|------|------|------|------|------|
| | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
| 1 | -0.3 | -0.4 | -0.4 | 4.2 | 0.8 | 2.2 | 5.1 | 4.4 | 4.8 | 18.9 | 13.5 | 16.0 |
| 2 | -.4 | -.5 | -.4 | 4.1 | 1.2 | 2.3 | 4.8 | 4.3 | 4.5 | 17.2 | 15.5 | 16.2 |
| 3 | -.3 | -.4 | -.4 | 4.6 | 1.4 | 2.7 | 4.8 | 4.1 | 4.5 | 15.8 | 14.6 | 15.2 |
| 4 | -.3 | -.4 | -.4 | 3.5 | 1.8 | 2.6 | 6.1 | 4.5 | 5.3 | 15.4 | 11.8 | 13.6 |
| 5 | -.3 | -.4 | -.4 | 3.1 | 1.9 | 2.5 | 7.6 | 3.8 | 5.4 | 14.3 | 10.4 | 12.5 |
| 6 | -.2 | -.4 | -.4 | 4.1 | 2.5 | 3.4 | 8.3 | 2.6 | 5.2 | 17.0 | 11.2 | 13.8 |
| 7 | -.3 | -.4 | -.4 | 5.0 | 1.2 | 3.0 | 7.8 | 4.6 | 5.9 | 20.0 | 13.5 | 16.3 |
| 8 | -.4 | -.4 | -.4 | 3.3 | 1.4 | 2.4 | 9.8 | 4.5 | 6.9 | 17.7 | 13.1 | 15.5 |
| 9 | -.3 | -.4 | -.4 | 2.0 | .7 | 1.3 | 10.6 | 6.3 | 8.3 | 14.9 | 12.3 | 13.1 |
| 10 | -.3 | -.4 | -.4 | 3.1 | -.1 | 1.5 | 11.3 | 5.5 | 8.2 | 17.4 | 11.2 | 14.1 |
| 11 | -.3 | -.4 | -.4 | 3.6 | 1.1 | 2.1 | 9.3 | 6.4 | 7.7 | 21.0 | 14.4 | 17.3 |
| 12 | -.3 | -.4 | -.4 | 4.0 | 1.2 | 2.5 | 11.2 | 6.6 | 8.7 | 22.2 | 16.5 | 19.1 |
| 13 | -.3 | -.4 | -.4 | 4.5 | .4 | 2.3 | 9.5 | 6.5 | 7.4 | 22.3 | 18.3 | 20.0 |
| 14 | -.3 | -.4 | -.4 | 3.6 | .3 | 2.0 | 8.8 | 6.6 | 8.1 | 21.0 | 15.5 | 17.9 |
| 15 | -.3 | -.5 | -.4 | 6.8 | 2.3 | 4.3 | 9.5 | 7.6 | 8.5 | 23.4 | 17.2 | 20.0 |
| 16 | -.3 | -.5 | -.4 | 4.6 | .3 | 2.5 | 11.1 | 6.0 | 8.4 | 21.8 | 18.9 | 19.8 |
| 17 | -.3 | -.5 | -.4 | .6 | -.2 | .2 | 12.7 | 7.0 | 9.7 | 21.6 | 16.5 | 18.8 |
| 18 | -.3 | -.4 | -.4 | 1.6 | -.3 | .6 | 15.2 | 10.1 | 12.4 | 19.7 | 16.5 | 18.1 |
| 19 | -.2 | -.4 | -.4 | 1.8 | .3 | .9 | 17.2 | 11.4 | 13.9 | 19.8 | 17.3 | 18.5 |
| 20 | -.2 | -.4 | -.3 | 3.6 | -.5 | 1.5 | 18.4 | 13.6 | 15.6 | 20.1 | 14.8 | 17.4 |
| 21 | .0 | -.4 | -.2 | 4.6 | 1.9 | 3.1 | 16.8 | 11.7 | 13.5 | 20.0 | 15.4 | 17.6 |
| 22 | .8 | -.3 | .2 | 4.0 | .2 | 1.9 | 18.2 | 12.3 | 14.7 | 19.3 | 15.4 | 17.0 |
| 23 | 1.2 | -.4 | .3 | 4.4 | -.2 | 1.9 | 16.4 | 11.5 | 13.8 | 19.4 | 13.7 | 16.1 |
| 24 | .7 | -.4 | .2 | 6.8 | 1.3 | 3.9 | 15.5 | 10.0 | 12.4 | 17.7 | 15.0 | 16.2 |
| 25 | 1.2 | -.5 | .4 | 7.0 | 4.2 | 5.5 | 13.7 | 9.9 | 12.0 | 16.8 | 14.6 | 15.6 |
| 26 | 1.6 | -.5 | .5 | 11.2 | 5.6 | 8.1 | 11.4 | 9.6 | 10.2 | 15.4 | 13.1 | 13.6 |
| 27 | 2.0 | -.3 | .8 | 10.6 | 8.4 | 9.4 | 14.1 | 9.9 | 11.6 | 18.2 | 12.8 | 15.0 |
| 28 | 2.9 | -.1 | 1.3 | 9.1 | 5.5 | 7.5 | 14.4 | 10.3 | 12.3 | 16.1 | 14.4 | 15.1 |
| 29 | 3.0 | .3 | 1.6 | 9.4 | 3.7 | 6.3 | 16.2 | 9.8 | 12.6 | 17.2 | 13.6 | 15.1 |
| 30 | --- | --- | --- | 7.5 | 4.6 | 5.9 | 18.0 | 12.0 | 14.7 | 18.0 | 11.9 | 14.7 |
| 31 | --- | --- | --- | 6.4 | 5.1 | 5.7 | --- | --- | --- | 17.2 | 12.8 | 15.0 |
| MONTH | 3.0 | -0.5 | -0.1 | 11.2 | -0.5 | 3.3 | 18.4 | 2.6 | 9.6 | 23.4 | 10.4 | 16.3 |

PAWTUXET RIVER BASIN

01115190 DOLLY COLE BROOK AT OLD DANIELSON PARK AT SOUTH FOSTER, RI

LOCATION.--Lat 41°49'20", long 71°42'03", Providence County, Hydrologic Unit 01090004, on right bank 1,000 ft downstream from bridge on State Route 6, and at South Foster.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: February 2000 to May 2001, October 2001 to current year.

WATER TEMPERATURE: February 2000 to May 2001, October 2001 to current year.

INSTRUMENTATION.--Specific conductance and water temperature water-quality monitor since February 2000.

REMARKS.--Records fair. Missing periods are not estimate.

EXTREMES FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE: Maximum recorded, 899 µS/cm, Feb. 6, 2004; minimum, 62 µS/cm, Dec. 14, 2003.

WATER TEMPERATURE: Maximum recorded, 27.4°C, July 4, 2002; minimum, -1.3°C, Dec. 9, 2003.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 899 µS/cm, Feb. 6; minimum, 62 µS/cm, Dec. 14.

WATER TEMPERATURE: Maximum recorded, 25.1°C, June 9; minimum, -1.3°C, Dec. 9.

WATER-QUALITY DATA, OCTOBER 2003 TO SEPTEMBER 2004

SPECIFIC CONDUCTANCE (µCM AT 25°C), OCTOBER 2003 TO SEPTEMBER 2004

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|
| 1 | 117 | 115 | 116 | 87 | 79 | 83 | 122 | 103 | 110 | 97 | 93 | 95 |
| 2 | 117 | 114 | 116 | 89 | 83 | 86 | 115 | 109 | 114 | 103 | 92 | 97 |
| 3 | 115 | 112 | 114 | 92 | 86 | 89 | 114 | 98 | 107 | 116 | 100 | 104 |
| 4 | 116 | 113 | 115 | 93 | 88 | 90 | 115 | 94 | 107 | 105 | 97 | 101 |
| 5 | 116 | 113 | 115 | 100 | 88 | 93 | 112 | 95 | 105 | 209 | 98 | 107 |
| 6 | 115 | 112 | 113 | 95 | 90 | 91 | 114 | 91 | 98 | 127 | 99 | 103 |
| 7 | 116 | 112 | 115 | 102 | 92 | 96 | 126 | 90 | 103 | 100 | 80 | 88 |
| 8 | 118 | 114 | 117 | 98 | 93 | 95 | 104 | 82 | 96 | 92 | 78 | 85 |
| 9 | 120 | 117 | 119 | 100 | 96 | 97 | 100 | 77 | 92 | 94 | 84 | 89 |
| 10 | 119 | 117 | 118 | 101 | 96 | 98 | 106 | 100 | 103 | 99 | 89 | 95 |
| 11 | 119 | 116 | 117 | 100 | 96 | 98 | 144 | 78 | 105 | 99 | 94 | 98 |
| 12 | 120 | 116 | 118 | 98 | 92 | 94 | 93 | 75 | 84 | 111 | 97 | 105 |
| 13 | 117 | 116 | 117 | 99 | 92 | 96 | 82 | 66 | 75 | 109 | 90 | 102 |
| 14 | 121 | 115 | 118 | 104 | 98 | 102 | 405 | 62 | 89 | 100 | 92 | 97 |
| 15 | 136 | 117 | 122 | 106 | 104 | 105 | 285 | 79 | 99 | 103 | 94 | 99 |
| 16 | 118 | 113 | 116 | 106 | 103 | 104 | 101 | 85 | 93 | 104 | 97 | 101 |
| 17 | 121 | 113 | 117 | 106 | 104 | 105 | 110 | 80 | 94 | 101 | 94 | 98 |
| 18 | 124 | 120 | 122 | 104 | 98 | 101 | 100 | 80 | 91 | 100 | 95 | 99 |
| 19 | 120 | 117 | 119 | 101 | 97 | 99 | 89 | 81 | 84 | 98 | 88 | 93 |
| 20 | 117 | 114 | 116 | 102 | 98 | 100 | 92 | 79 | 84 | 104 | 88 | 96 |
| 21 | 119 | 113 | 116 | 100 | 98 | 99 | 91 | 76 | 84 | 100 | 89 | 96 |
| 22 | --- | --- | --- | 100 | 95 | 98 | 95 | 84 | 90 | 100 | 92 | 97 |
| 23 | 111 | 110 | 111 | 100 | 97 | 98 | 97 | 91 | 94 | 102 | 89 | 97 |
| 24 | 114 | 110 | 111 | 101 | 96 | 99 | 104 | 88 | 96 | 104 | 96 | 101 |
| 25 | 116 | 112 | 114 | 98 | 96 | 97 | 95 | 83 | 88 | 106 | 98 | 103 |
| 26 | 116 | 112 | 113 | 100 | 97 | 99 | 98 | 90 | 93 | 105 | 100 | 103 |
| 27 | 126 | 102 | 115 | 100 | 98 | 99 | 93 | 87 | 89 | 104 | 100 | 101 |
| 28 | 110 | 100 | 106 | 103 | 95 | 98 | 93 | 84 | 89 | 103 | 95 | 100 |
| 29 | 105 | 79 | 91 | 106 | 100 | 102 | 95 | 89 | 92 | 101 | 89 | 96 |
| 30 | 82 | 75 | 77 | 104 | 101 | 102 | 96 | 93 | 95 | 104 | 91 | 99 |
| 31 | 84 | 75 | 78 | --- | --- | --- | 96 | 93 | 94 | 103 | 89 | 98 |
| MONTH | --- | --- | --- | 106 | 79 | 97 | 405 | 62 | 95 | 209 | 78 | 98 |

PAWTUXET RIVER BASIN

01115190 DOLLY COLE BROOK AT OLD DANIELSON PARK AT SOUTH FOSTER, RI--Continued

SPECIFIC CONDUCTANCE ($\mu\text{S}/\text{CM}$ AT 25°C), OCTOBER 2003 TO SEPTEMBER 2004

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|
| | | | | | | | | | | | | |
| 1 | 108 | 92 | 100 | 122 | 117 | 119 | 124 | 107 | 113 | 112 | 107 | 110 |
| 2 | 110 | 90 | 102 | 119 | 112 | 116 | 124 | 111 | 114 | 119 | 111 | 114 |
| 3 | 593 | 91 | 138 | 114 | 108 | 111 | 129 | 116 | 120 | 120 | 111 | 115 |
| 4 | 316 | 106 | 130 | 114 | 110 | 112 | 130 | 113 | 119 | 121 | 102 | 107 |
| 5 | 135 | 110 | 125 | 117 | 112 | 115 | 129 | 114 | 120 | 113 | 104 | 109 |
| 6 | 899 | 123 | 258 | 121 | 108 | 114 | 135 | 121 | 126 | 112 | 108 | 109 |
| 7 | 399 | 150 | 200 | 118 | 107 | 112 | 130 | 122 | 125 | 112 | 107 | 109 |
| 8 | 150 | 102 | 120 | 123 | 116 | 119 | 129 | 121 | 124 | 112 | 108 | 110 |
| 9 | 110 | 101 | 105 | 126 | 118 | 123 | 129 | 122 | 124 | 116 | 111 | 114 |
| 10 | 117 | 103 | 108 | 128 | 117 | 123 | 138 | 126 | 133 | 116 | 111 | 113 |
| 11 | 120 | 100 | 108 | 125 | 119 | 122 | 130 | 126 | 128 | 117 | 112 | 115 |
| 12 | 114 | 88 | 103 | 124 | 120 | 122 | 131 | 125 | 128 | 120 | 115 | 117 |
| 13 | 123 | 104 | 114 | 126 | 119 | 123 | 149 | 74 | 127 | 121 | 118 | 120 |
| 14 | 124 | 108 | 116 | 131 | 121 | 127 | 96 | 85 | 90 | 124 | 120 | 121 |
| 15 | 119 | 96 | 109 | 132 | 123 | 128 | 96 | 90 | 93 | 125 | 117 | 122 |
| 16 | 116 | 99 | 107 | 150 | 118 | 126 | 100 | 94 | 97 | 129 | 123 | 126 |
| 17 | 125 | 95 | 111 | 130 | 115 | 119 | 105 | 96 | 100 | 131 | 125 | 128 |
| 18 | 125 | 116 | 120 | 125 | 111 | 118 | 110 | 101 | 105 | 133 | 126 | 130 |
| 19 | 130 | 106 | 120 | 204 | 116 | 124 | 112 | 107 | 109 | 136 | 129 | 133 |
| 20 | 130 | 106 | 122 | 175 | 106 | 122 | 115 | 111 | 113 | 131 | 127 | 129 |
| 21 | 225 | 122 | 130 | 135 | 118 | 128 | 120 | 112 | 114 | 134 | 128 | 131 |
| 22 | 132 | 123 | 128 | 136 | 113 | 123 | 121 | 114 | 117 | 138 | 128 | 132 |
| 23 | 127 | 110 | 121 | 143 | 130 | 135 | 134 | 114 | 122 | 133 | 127 | 131 |
| 24 | 127 | 104 | 119 | 136 | 122 | 130 | 122 | 111 | 115 | 132 | 128 | 130 |
| 25 | 128 | 106 | 120 | 127 | 119 | 123 | 119 | 111 | 114 | 131 | 128 | 130 |
| 26 | 128 | 109 | 121 | 126 | 121 | 124 | 139 | 100 | 118 | 132 | 129 | 130 |
| 27 | 127 | 108 | 121 | 127 | 124 | 125 | 107 | 97 | 102 | 168 | 121 | 138 |
| 28 | 127 | 116 | 123 | 125 | 122 | 123 | 105 | 99 | 102 | 142 | 114 | 123 |
| 29 | 124 | 116 | 122 | 129 | 124 | 127 | 114 | 100 | 104 | 114 | 107 | 109 |
| 30 | --- | --- | --- | 130 | 127 | 128 | 126 | 105 | 107 | 121 | 101 | 108 |
| 31 | --- | --- | --- | 148 | 121 | 135 | --- | --- | --- | 117 | 111 | 115 |
| MONTH | 899 | 88 | 125 | 204 | 106 | 122 | 149 | 74 | 114 | 168 | 101 | 120 |

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|
| | | | | | | | | | | | | |
| 1 | 127 | 116 | 121 | 112 | 108 | 110 | 119 | 107 | 114 | 129 | 125 | 127 |
| 2 | 121 | 118 | 120 | 112 | 96 | 110 | 114 | 110 | 112 | 128 | 124 | 126 |
| 3 | 119 | 116 | 118 | 119 | 112 | 115 | 116 | 112 | 114 | 125 | 123 | 124 |
| 4 | 120 | 117 | 119 | 121 | 117 | 119 | 113 | 106 | 109 | 124 | 121 | 122 |
| 5 | 120 | 118 | 119 | 161 | 96 | 120 | 177 | 74 | 136 | 122 | 119 | 121 |
| 6 | 126 | 118 | 121 | 175 | 142 | 158 | 172 | 145 | 158 | 123 | 118 | 120 |
| 7 | 126 | 122 | 125 | 142 | 130 | 135 | 149 | 131 | 140 | 126 | 120 | 123 |
| 8 | 125 | 122 | 123 | 134 | 122 | 126 | 131 | 122 | 125 | 154 | 106 | 126 |
| 9 | 127 | 120 | 124 | 126 | 120 | 122 | 124 | 118 | 121 | 154 | 145 | 149 |
| 10 | 128 | 124 | 126 | 124 | 117 | 120 | 120 | 117 | 119 | 150 | 140 | 144 |
| 11 | 129 | 124 | 126 | 118 | 112 | 115 | 117 | 111 | 115 | 140 | 132 | 136 |
| 12 | 129 | 126 | 128 | 115 | 109 | 112 | 114 | 108 | 113 | 136 | 132 | 133 |
| 13 | 135 | 128 | 132 | 110 | 105 | 108 | 121 | 106 | 115 | 136 | 127 | 132 |
| 14 | 135 | 132 | 134 | 120 | 110 | 114 | 133 | 121 | 129 | 129 | 127 | 127 |
| 15 | 141 | 135 | 137 | 127 | 120 | 125 | 188 | 109 | 154 | 130 | 126 | 128 |
| 16 | 184 | 104 | 135 | 127 | 123 | 126 | 168 | 146 | 154 | 131 | 126 | 128 |
| 17 | 115 | 103 | 110 | 129 | 121 | 124 | 154 | 140 | 146 | 129 | 126 | 128 |
| 18 | 122 | 115 | 117 | 127 | 120 | 123 | 140 | 133 | 135 | 161 | 108 | 135 |
| 19 | 134 | 115 | 125 | 121 | 116 | 118 | 133 | 130 | 131 | 145 | 112 | 122 |
| 20 | 131 | 119 | 121 | 121 | 117 | 119 | 131 | 130 | 130 | 120 | 114 | 117 |
| 21 | 122 | 118 | 119 | 120 | 116 | 118 | 162 | 117 | 132 | 122 | 118 | 120 |
| 22 | 122 | 115 | 116 | 120 | 113 | 114 | 166 | 141 | 152 | 128 | 122 | 125 |
| 23 | 121 | 115 | 117 | 117 | 113 | 115 | 141 | 132 | 135 | 132 | 128 | 131 |
| 24 | 120 | 115 | 116 | 114 | 79 | 109 | 132 | 128 | 129 | 138 | 132 | 135 |
| 25 | 117 | 114 | 115 | 115 | 111 | 114 | 129 | 125 | 127 | 144 | 138 | 141 |
| 26 | 117 | 114 | 115 | 120 | 115 | 118 | 126 | 124 | 125 | 146 | 122 | 141 |
| 27 | 117 | 114 | 115 | 120 | 118 | 119 | 127 | 124 | 126 | 124 | 121 | 122 |
| 28 | 117 | 114 | 115 | 119 | 116 | 118 | 128 | 126 | 127 | 128 | 121 | 125 |
| 29 | 119 | 111 | 115 | 122 | 116 | 119 | 128 | 124 | 126 | 152 | 115 | 133 |
| 30 | 112 | 111 | 112 | 121 | 116 | 118 | 126 | 119 | 123 | 116 | 113 | 115 |
| 31 | --- | --- | --- | 124 | 117 | 121 | 126 | 123 | 125 | --- | --- | --- |
| MONTH | 184 | 103 | 121 | 175 | 79 | 119 | 188 | 74 | 129 | 161 | 106 | 129 |

PAWTUXET RIVER BASIN

0115190 DOLLY COLE BROOK AT OLD DANIELSON PARK AT SOUTH FOSTER, RI--Continued

WATER TEMPERATURE (DEG. C), OCTOBER 2003 TO SEPTEMBER 2004

| DAY | OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | | |
|-------|---------|------|------|----------|------|------|----------|------|------|---------|------|------|
| | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
| 1 | 14.0 | 12.2 | 13.3 | 13.1 | 10.4 | 11.7 | 5.2 | 3.4 | 4.7 | 2.6 | 1.4 | 2.0 |
| 2 | 14.5 | 11.5 | 13.4 | 13.4 | 11.9 | 12.6 | 3.4 | .5 | 2.3 | 1.8 | .8 | 1.4 |
| 3 | 12.2 | 9.9 | 11.2 | 14.9 | 12.4 | 13.6 | 1.1 | -.4 | .3 | 2.8 | 1.8 | 2.2 |
| 4 | 11.5 | 9.6 | 10.7 | 13.6 | 11.1 | 12.6 | 1.6 | -.6 | .6 | 3.5 | 2.7 | 3.1 |
| 5 | 12.0 | 9.6 | 11.0 | 11.3 | 10.6 | 11.0 | 1.2 | -.5 | .4 | 3.2 | 2.6 | 2.8 |
| 6 | 11.1 | 8.5 | 9.9 | 12.1 | 11.3 | 11.6 | .4 | -.6 | -.2 | 2.6 | .8 | 2.1 |
| 7 | 10.8 | 7.7 | 9.6 | 11.8 | 9.9 | 11.2 | .8 | -.6 | .1 | .8 | -.9 | -.3 |
| 8 | 13.2 | 8.8 | 11.4 | 9.9 | 6.2 | 8.3 | .6 | -1.0 | -.1 | -.1 | -1.0 | -.6 |
| 9 | 14.0 | 12.0 | 13.2 | 6.2 | 4.3 | 5.3 | .4 | -1.3 | -.3 | -.1 | -.7 | -.4 |
| 10 | 13.4 | 12.1 | 12.9 | 5.4 | 3.1 | 4.3 | 1.2 | .4 | .8 | -.1 | -.6 | -.2 |
| 11 | 13.4 | 11.7 | 12.7 | 5.0 | 2.8 | 3.9 | 1.7 | .6 | 1.1 | -.1 | -.6 | -.3 |
| 12 | 13.2 | 12.6 | 12.9 | 6.6 | 4.9 | 5.6 | 1.3 | .3 | .6 | .5 | -.5 | .0 |
| 13 | 14.5 | 12.0 | 13.4 | 7.7 | 5.3 | 6.9 | .9 | -.8 | .2 | .4 | -.8 | -.1 |
| 14 | 13.9 | 10.7 | 12.5 | 5.3 | 3.2 | 4.1 | -.1 | -1.1 | -.7 | .0 | -.6 | -.2 |
| 15 | 14.4 | 11.7 | 13.5 | 3.7 | 2.2 | 3.0 | .4 | -.2 | .0 | .1 | -.6 | -.1 |
| 16 | 13.3 | 10.5 | 11.9 | 4.2 | 1.9 | 3.2 | .9 | -.2 | .2 | .1 | -.5 | -.1 |
| 17 | 12.3 | 9.8 | 11.1 | 4.2 | 3.8 | 4.1 | 3.1 | .2 | 1.6 | -.2 | -.6 | -.4 |
| 18 | 11.7 | 9.4 | 10.8 | 5.6 | 3.7 | 4.7 | 2.4 | 1.3 | 1.8 | -.3 | -.6 | -.4 |
| 19 | 9.4 | 7.2 | 8.6 | 8.1 | 4.6 | 6.1 | 1.8 | .7 | 1.2 | -.4 | -1.0 | -.7 |
| 20 | 9.3 | 6.4 | 8.0 | 8.6 | 7.4 | 8.3 | 1.9 | .3 | 1.0 | -.1 | -1.0 | -.5 |
| 21 | 11.6 | 8.1 | 10.3 | 8.5 | 6.8 | 7.6 | 1.1 | -.2 | .5 | -.1 | -.9 | -.4 |
| 22 | --- | --- | --- | 8.0 | 5.6 | 6.7 | 2.0 | .3 | 1.1 | -.1 | -.9 | -.4 |
| 23 | 8.4 | 6.4 | 7.4 | 6.8 | 5.1 | 5.9 | 2.8 | 1.2 | 1.9 | -.1 | -1.0 | -.5 |
| 24 | 6.6 | 5.3 | 6.0 | 6.2 | 4.0 | 5.3 | 5.1 | 1.9 | 3.4 | -.1 | -.7 | -.3 |
| 25 | 7.6 | 4.0 | 5.9 | 6.1 | 4.1 | 5.5 | 4.8 | 3.3 | 4.2 | .1 | -.6 | -.2 |
| 26 | 10.7 | 7.2 | 8.8 | 4.7 | 3.1 | 4.1 | 3.3 | 2.1 | 2.7 | -.1 | -.6 | -.3 |
| 27 | 12.6 | 10.7 | 11.7 | 5.7 | 4.0 | 4.9 | 2.7 | 1.2 | 1.8 | -.3 | -.6 | -.5 |
| 28 | 13.0 | 11.2 | 11.8 | 8.7 | 5.3 | 6.2 | 2.7 | .7 | 1.6 | -.3 | -.8 | -.5 |
| 29 | 12.9 | 11.5 | 12.1 | 8.9 | 5.2 | 7.4 | 3.0 | 1.0 | 1.9 | -.3 | -1.1 | -.6 |
| 30 | 11.8 | 10.0 | 11.0 | 6.1 | 4.7 | 5.3 | 3.6 | 1.7 | 2.6 | -.1 | -.9 | -.5 |
| 31 | 11.7 | 9.2 | 10.4 | --- | --- | --- | 3.1 | 1.9 | 2.5 | -.2 | -1.1 | -.5 |
| MONTH | --- | --- | --- | 14.9 | 1.9 | 7.0 | 5.2 | -1.3 | 1.3 | 3.5 | -1.1 | 0.1 |

| DAY | FEBRUARY | | | MARCH | | | APRIL | | | MAY | | |
|-------|----------|------|------|-------|------|------|-------|------|------|------|------|------|
| | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
| 1 | -0.1 | -1.0 | -0.4 | 4.6 | 1.2 | 2.8 | 5.6 | 4.9 | 5.3 | 20.4 | 14.3 | 17.2 |
| 2 | -.1 | -1.0 | -.4 | 4.6 | 1.7 | 2.9 | 5.6 | 5.2 | 5.4 | 18.4 | 16.7 | 17.5 |
| 3 | -.4 | -1.0 | -.6 | 5.1 | 1.6 | 3.1 | 5.5 | 4.9 | 5.2 | 17.0 | 15.5 | 16.5 |
| 4 | -.4 | -.5 | -.4 | 3.8 | 2.0 | 2.7 | 6.7 | 5.1 | 5.8 | 17.5 | 13.1 | 15.1 |
| 5 | -.4 | -1.0 | -.5 | 3.3 | 2.1 | 2.7 | 8.1 | 4.4 | 6.0 | 15.8 | 11.7 | 13.8 |
| 6 | -.4 | -.5 | -.4 | 3.9 | 2.2 | 3.2 | 9.0 | 3.6 | 6.0 | 18.6 | 12.3 | 15.1 |
| 7 | -.4 | -.5 | -.4 | 5.5 | 1.5 | 3.2 | 8.3 | 5.0 | 6.4 | 21.1 | 14.0 | 17.2 |
| 8 | -.4 | -1.0 | -.7 | 3.1 | 1.9 | 2.6 | 10.4 | 5.2 | 7.6 | 19.2 | 13.9 | 16.5 |
| 9 | -.1 | -.9 | -.4 | 2.8 | 1.4 | 2.0 | 11.5 | 7.0 | 9.1 | 15.9 | 13.4 | 14.3 |
| 10 | .7 | -.3 | .1 | 3.9 | .6 | 2.2 | 11.6 | 5.8 | 8.8 | 19.4 | 12.4 | 15.7 |
| 11 | .8 | -.4 | .1 | 3.8 | 1.5 | 2.5 | 9.8 | 7.1 | 8.5 | 22.4 | 15.0 | 18.5 |
| 12 | .5 | -1.1 | -.2 | 4.4 | 1.6 | 2.9 | 12.1 | 7.6 | 9.7 | 24.0 | 17.4 | 20.6 |
| 13 | 1.3 | -.3 | .5 | 5.2 | 1.1 | 3.0 | 9.9 | 7.0 | 8.0 | 23.3 | 19.2 | 21.2 |
| 14 | 1.6 | -.2 | .7 | 4.5 | .9 | 2.8 | 9.5 | 8.0 | 8.9 | 22.7 | 16.8 | 19.6 |
| 15 | .7 | -.9 | -.1 | 6.9 | 2.8 | 4.6 | 10.4 | 8.4 | 9.2 | 25.0 | 18.7 | 21.7 |
| 16 | .2 | -.7 | -.2 | 4.1 | .9 | 2.5 | 12.3 | 7.0 | 9.3 | 23.2 | 20.0 | 21.0 |
| 17 | .7 | -.7 | .0 | 1.3 | .6 | 1.0 | 14.0 | 7.8 | 10.5 | 22.3 | 17.8 | 19.9 |
| 18 | .6 | .0 | .3 | 2.0 | .2 | 1.0 | 16.6 | 10.5 | 13.1 | 20.8 | 18.3 | 19.6 |
| 19 | 1.2 | -.6 | .4 | 2.1 | .5 | 1.2 | 18.1 | 12.0 | 14.7 | 20.7 | 18.7 | 19.7 |
| 20 | 1.4 | -.5 | .6 | 4.2 | -.4 | 2.0 | 19.5 | 14.1 | 16.4 | 20.9 | 16.0 | 18.5 |
| 21 | 1.6 | .6 | 1.1 | 4.8 | 2.2 | 3.2 | 16.7 | 12.7 | 14.6 | 21.2 | 17.2 | 19.0 |
| 22 | 2.5 | .4 | 1.4 | 5.0 | 1.0 | 2.7 | 20.0 | 13.4 | 16.2 | 20.6 | 15.9 | 18.0 |
| 23 | 2.6 | .0 | 1.2 | 5.4 | .4 | 2.8 | 17.1 | 12.6 | 14.5 | 20.7 | 14.8 | 17.3 |
| 24 | 1.6 | -.5 | .8 | 7.0 | 2.1 | 4.3 | 17.6 | 11.5 | 14.2 | 19.0 | 16.4 | 17.5 |
| 25 | 2.3 | -.3 | 1.1 | 6.5 | 3.9 | 5.1 | 15.4 | 10.8 | 13.1 | 17.9 | 15.9 | 16.8 |
| 26 | 2.7 | -.1 | 1.3 | 11.4 | 5.6 | 8.2 | 12.1 | 10.5 | 11.1 | 16.3 | 14.2 | 14.7 |
| 27 | 3.0 | -.1 | 1.6 | 11.1 | 8.6 | 9.7 | 15.2 | 11.0 | 12.6 | 19.4 | 13.4 | 16.0 |
| 28 | 3.7 | .5 | 2.1 | 9.9 | 6.3 | 8.3 | 15.9 | 11.3 | 13.2 | 17.7 | 14.9 | 15.8 |
| 29 | 3.8 | .9 | 2.3 | 10.0 | 4.8 | 7.2 | 17.6 | 10.7 | 13.8 | 18.6 | 14.4 | 16.2 |
| 30 | --- | --- | --- | 8.2 | 5.5 | 6.7 | 19.5 | 12.8 | 15.8 | 19.7 | 13.0 | 16.1 |
| 31 | --- | --- | --- | 7.3 | 5.1 | 6.3 | --- | --- | --- | 18.7 | 14.1 | 16.5 |
| MONTH | 3.8 | -1.1 | 0.4 | 11.4 | -0.4 | 3.7 | 20.0 | 3.6 | 10.4 | 25.0 | 11.7 | 17.5 |

PAWTUXET RIVER BASIN

01115190 DOLLY COLE BROOK AT OLD DANIELSON PARK AT SOUTH FOSTER, RI--Continued

WATER TEMPERATURE (DEG. C), OCTOBER 2003 TO SEPTEMBER 2004

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | | | | | | | | | | | |
| 1 | 16.8 | 14.4 | 15.2 | 21.6 | 18.2 | 20.2 | 23.0 | 22.2 | 22.6 | 21.7 | 19.4 | 20.7 |
| 2 | 19.8 | 14.3 | 16.7 | 22.4 | 20.3 | 21.4 | 24.1 | 21.8 | 22.8 | 20.2 | 17.9 | 19.2 |
| 3 | 20.5 | 15.9 | 18.1 | 22.0 | 18.9 | 20.7 | 24.4 | 21.9 | 22.9 | 19.8 | 16.4 | 18.4 |
| 4 | 21.2 | 15.4 | 18.2 | 22.1 | 18.3 | 20.5 | 24.6 | 21.7 | 22.6 | 21.2 | 18.7 | 19.9 |
| 5 | 20.1 | 16.2 | 18.2 | 21.2 | 19.7 | 20.3 | 22.5 | 20.5 | 21.0 | 20.1 | 17.0 | 18.6 |
| 6 | 18.5 | 15.2 | 16.3 | 22.0 | 19.6 | 20.7 | 20.5 | 18.7 | 19.5 | 17.8 | 14.5 | 16.4 |
| 7 | 20.9 | 14.3 | 17.1 | 23.0 | 19.2 | 21.2 | 19.4 | 16.4 | 18.2 | 19.4 | 16.6 | 18.1 |
| 8 | 23.1 | 17.8 | 20.3 | 22.3 | 20.9 | 21.6 | 19.2 | 16.3 | 18.0 | 20.9 | 19.1 | 19.9 |
| 9 | 25.1 | 19.6 | 22.3 | 21.9 | 20.2 | 21.1 | 20.0 | 16.5 | 18.5 | 21.6 | 19.9 | 20.7 |
| 10 | 24.3 | 20.0 | 21.6 | 22.1 | 18.5 | 20.5 | 20.8 | 17.4 | 19.4 | 21.3 | 19.6 | 20.6 |
| 11 | 20.1 | 16.8 | 18.6 | 21.9 | 19.2 | 20.7 | 21.9 | 20.3 | 21.0 | 19.8 | 17.3 | 18.5 |
| 12 | 19.7 | 15.4 | 17.7 | 20.5 | 18.6 | 19.7 | 22.6 | 20.7 | 21.5 | 18.7 | 15.3 | 17.3 |
| 13 | 19.4 | 15.7 | 17.8 | 19.8 | 18.6 | 19.0 | 22.7 | 21.7 | 22.1 | 19.1 | 16.4 | 17.9 |
| 14 | 18.6 | 17.5 | 18.1 | 19.5 | 18.2 | 18.8 | 22.4 | 21.1 | 21.9 | 18.2 | 16.2 | 17.2 |
| 15 | 22.4 | 18.1 | 20.0 | 20.9 | 18.8 | 19.8 | 21.8 | 19.3 | 20.4 | 16.8 | 14.6 | 16.0 |
| 16 | 24.6 | 20.2 | 21.7 | 20.8 | 18.5 | 19.9 | 19.3 | 18.6 | 18.8 | 17.9 | 16.7 | 17.3 |
| 17 | 24.3 | 19.8 | 21.9 | 22.0 | 18.6 | 20.5 | 20.6 | 17.8 | 19.0 | 19.4 | 17.8 | 18.6 |
| 18 | 23.4 | 21.1 | 21.9 | 22.3 | 20.1 | 21.4 | 22.0 | 18.8 | 20.2 | 19.4 | 15.2 | 17.4 |
| 19 | 22.5 | 20.1 | 21.2 | 22.0 | 21.4 | 21.7 | 22.6 | 21.3 | 21.9 | 16.5 | 13.4 | 14.9 |
| 20 | 21.0 | 17.8 | 19.2 | 23.6 | 21.2 | 22.3 | 23.9 | 21.1 | 22.5 | 16.7 | 12.4 | 14.4 |
| 21 | 20.2 | 16.0 | 18.4 | 23.2 | 20.1 | 21.8 | 23.6 | 21.0 | 22.6 | 17.4 | 13.8 | 15.4 |
| 22 | 20.1 | 18.1 | 19.2 | 23.6 | 20.2 | 21.9 | 21.2 | 18.1 | 19.8 | 18.5 | 15.0 | 16.7 |
| 23 | 21.9 | 19.0 | 20.4 | 23.9 | 21.6 | 22.5 | 21.3 | 17.2 | 19.3 | 18.7 | 16.1 | 17.4 |
| 24 | 21.2 | 17.7 | 19.8 | 22.4 | 19.9 | 21.6 | 20.8 | 19.0 | 20.0 | 18.2 | 16.5 | 17.4 |
| 25 | 21.1 | 19.2 | 20.2 | 20.3 | 18.8 | 19.5 | 19.8 | 16.9 | 18.6 | 17.8 | 14.9 | 16.6 |
| 26 | 21.3 | 19.1 | 20.4 | 20.4 | 17.1 | 18.8 | 19.3 | 15.3 | 17.6 | 19.2 | 17.2 | 18.1 |
| 27 | 19.9 | 17.0 | 18.7 | 19.5 | 17.5 | 18.7 | 21.3 | 18.8 | 20.0 | 18.0 | 15.2 | 16.8 |
| 28 | 19.6 | 16.6 | 18.4 | 19.3 | 18.6 | 18.9 | 23.4 | 20.8 | 22.1 | 17.3 | 16.7 | 17.0 |
| 29 | 20.4 | 18.1 | 19.2 | 21.6 | 18.7 | 20.0 | 23.8 | 21.8 | 22.9 | 16.7 | 13.6 | 14.9 |
| 30 | 20.9 | 17.4 | 19.4 | 21.8 | 18.7 | 20.4 | 24.2 | 22.6 | 23.2 | 16.5 | 12.4 | 14.3 |
| 31 | --- | --- | --- | 23.7 | 21.2 | 22.3 | 23.6 | 21.7 | 23.1 | --- | --- | --- |
| MONTH | 25.1 | 14.3 | 19.2 | 23.9 | 17.1 | 20.6 | 24.6 | 15.3 | 20.8 | 21.7 | 12.4 | 17.6 |

PAWTUXET RIVER BASIN

01115265 HEMLOCK BROOK AT KING ROAD NEAR CLAYVILLE, RI

LOCATION.--Lat 41°47'26", long 71°41'57", Providence County, Hydrologic Unit 01090004, on left bank 5 ft downstream from bridge on King Road, and 1.2 mi northeast of Foster Center.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: February 2000 to May 2001, October 2001 to current year.

WATER TEMPERATURE: February 2000 to May 2001, October 2001 to current year.

INSTRUMENTATION.--Specific conductance and water temperature water-quality monitor since February 2000.

REMARKS.--Records fair. Missing periods are not estimated.

EXTREMES FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE: Maximum recorded, 175 µS/cm, Aug. 9, 2004; minimum, 36 µS/cm, Mar. 20, 2003.

WATER TEMPERATURE: Maximum recorded, 28.2°C, July 4, 2002; minimum, -0.3°C, Mar. 20, 2004.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 175 µS/cm, Aug. 9; minimum, 45 µS/cm, Dec. 12, Apr. 14.

WATER TEMPERATURE: Maximum recorded, 25.6°C, Aug. 2, 3; minimum, -0.3°C, Mar. 20.

WATER-QUALITY DATA, OCTOBER 2003 TO SEPTEMBER 2004

SPECIFIC CONDUCTANCE (µCM AT 25°C), OCTOBER 2003 TO SEPTEMBER 2004

| DAY | OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | | |
|-------|---------|-----|------|----------|-----|------|----------|-----|------|---------|-----|------|
| | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
| 1 | 108 | 104 | 106 | 72 | 63 | 68 | 82 | 80 | 81 | 87 | 85 | 86 |
| 2 | 109 | 107 | 108 | 77 | 72 | 74 | 84 | 77 | 82 | 87 | 84 | 86 |
| 3 | 110 | 106 | 108 | 80 | 76 | 79 | 81 | 74 | 78 | 90 | 87 | 88 |
| 4 | 109 | 106 | 108 | 81 | 80 | 81 | 88 | 78 | 84 | 91 | 85 | 89 |
| 5 | 110 | 107 | 108 | 81 | 80 | 81 | 89 | 82 | 85 | 85 | 80 | 82 |
| 6 | 110 | 106 | 108 | 84 | 81 | 83 | 84 | 75 | 81 | 80 | 71 | 76 |
| 7 | 110 | 107 | 108 | 82 | 78 | 79 | 82 | 73 | 79 | 71 | 65 | 68 |
| 8 | 114 | 109 | 112 | 78 | 76 | 77 | 83 | 81 | 82 | 78 | 69 | 74 |
| 9 | 118 | 114 | 115 | 82 | 77 | 79 | 82 | 70 | 78 | 81 | 77 | 79 |
| 10 | 118 | 116 | 117 | 86 | 82 | 84 | 84 | 81 | 82 | 87 | 81 | 84 |
| 11 | 119 | 116 | 118 | 88 | 86 | 87 | 83 | 57 | 71 | 97 | 87 | 93 |
| 12 | 120 | 118 | 118 | 88 | 87 | 88 | 60 | 45 | 49 | 104 | 97 | 102 |
| 13 | 121 | 118 | 119 | 88 | 84 | 85 | 52 | 46 | 49 | 103 | 92 | 101 |
| 14 | 124 | 119 | 121 | 86 | 83 | 85 | 59 | 46 | 53 | 92 | 84 | 85 |
| 15 | 124 | 95 | 106 | 83 | 82 | 83 | 65 | 56 | 61 | 84 | 83 | 84 |
| 16 | 120 | 96 | 108 | 85 | 81 | 83 | 63 | 58 | 60 | 101 | 84 | 89 |
| 17 | 96 | 92 | 94 | 87 | 85 | 86 | 63 | 56 | 60 | 103 | 101 | 102 |
| 18 | 95 | 92 | 94 | 88 | 87 | 87 | 62 | 52 | 56 | 102 | 100 | 101 |
| 19 | 96 | 94 | 95 | 88 | 86 | 87 | 57 | 51 | 54 | 100 | 97 | 99 |
| 20 | 100 | 96 | 98 | 87 | 86 | 86 | 64 | 55 | 60 | 98 | 96 | 97 |
| 21 | 104 | 100 | 102 | 89 | 86 | 88 | 69 | 61 | 66 | 96 | 95 | 96 |
| 22 | 103 | 102 | 102 | 86 | 82 | 84 | 77 | 69 | 73 | 96 | 96 | 96 |
| 23 | 102 | 99 | 101 | 85 | 83 | 84 | 84 | 76 | 80 | 96 | 95 | 96 |
| 24 | 99 | 97 | 98 | 86 | 85 | 86 | 85 | 72 | 81 | 96 | 95 | 95 |
| 25 | 100 | 97 | 98 | 88 | 85 | 86 | 76 | 61 | 69 | 97 | 96 | 97 |
| 26 | 99 | 97 | 97 | 91 | 88 | 90 | 65 | 61 | 63 | 98 | 97 | 98 |
| 27 | 99 | 86 | 90 | 90 | 88 | 89 | 70 | 65 | 68 | 98 | 98 | 98 |
| 28 | 86 | 70 | 76 | 89 | 85 | 88 | 74 | 68 | 71 | 98 | 97 | 98 |
| 29 | 70 | 53 | 60 | 89 | 83 | 85 | 80 | 74 | 77 | 97 | 96 | 96 |
| 30 | 54 | 48 | 51 | 89 | 81 | 85 | 84 | 80 | 83 | 96 | 94 | 95 |
| 31 | 63 | 54 | 58 | --- | --- | --- | 86 | 84 | 85 | 95 | 94 | 94 |
| MONTH | 124 | 48 | 100 | 91 | 63 | 84 | 89 | 45 | 71 | 104 | 65 | 91 |

PAWTUXET RIVER BASIN

01115265 HEMLOCK BROOK AT KING ROAD NEAR CLAYVILLE, RI--Continued

WATER TEMPERATURE (DEG. C), OCTOBER 2003 TO SEPTEMBER 2004

| DAY | MAX | OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | | |
|-------|------|---------|------|------|----------|------|-----|----------|------|-----|---------|------|--|
| | | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | |
| 1 | 14.9 | 13.4 | 14.1 | 12.6 | 10.4 | 11.6 | 5.1 | 3.4 | 4.5 | 2.6 | 1.8 | 2.2 | |
| 2 | 14.9 | 12.8 | 13.8 | 13.2 | 12.1 | 12.7 | 3.4 | .5 | 2.3 | 1.8 | .9 | 1.3 | |
| 3 | 13.0 | 10.9 | 11.8 | 14.5 | 12.6 | 13.6 | .6 | -.1 | .2 | 2.8 | 1.2 | 1.9 | |
| 4 | 11.7 | 10.4 | 11.0 | 13.9 | 11.5 | 12.9 | .8 | -.1 | .3 | 4.0 | 2.8 | 3.6 | |
| 5 | 12.2 | 10.6 | 11.3 | 11.5 | 10.9 | 11.1 | .4 | -.1 | .1 | 4.0 | 3.0 | 3.5 | |
| 6 | 11.3 | 9.2 | 10.2 | 11.9 | 11.2 | 11.6 | .0 | -.1 | -.1 | 3.0 | .9 | 2.2 | |
| 7 | 11.1 | 8.4 | 9.6 | 11.9 | 10.4 | 11.3 | .0 | -.1 | -.1 | .9 | -.1 | .1 | |
| 8 | 12.8 | 9.6 | 11.0 | 10.4 | 6.3 | 8.5 | .1 | -.1 | .0 | .1 | -.1 | -.1 | |
| 9 | 14.1 | 12.0 | 12.9 | 6.3 | 3.6 | 5.0 | .1 | -.1 | .0 | -.1 | -.1 | -.1 | |
| 10 | 13.2 | 12.3 | 12.7 | 4.2 | 2.6 | 3.3 | .4 | .1 | .2 | -.1 | -.1 | -.1 | |
| 11 | 13.2 | 11.5 | 12.2 | 3.8 | 2.2 | 3.0 | .8 | .1 | .5 | -.1 | -.1 | -.1 | |
| 12 | 12.6 | 12.1 | 12.3 | 5.8 | 3.7 | 4.6 | .3 | .0 | .1 | .0 | -.1 | .0 | |
| 13 | 14.2 | 12.2 | 13.0 | 7.6 | 5.8 | 6.8 | .2 | -.1 | .0 | .1 | -.1 | -.1 | |
| 14 | 13.1 | 11.3 | 12.3 | 6.1 | 3.3 | 4.6 | .0 | -.1 | -.1 | -.1 | -.1 | -.1 | |
| 15 | 13.9 | 12.5 | 13.3 | 3.3 | 1.9 | 2.6 | .2 | -.1 | .0 | .0 | -.1 | -.1 | |
| 16 | 12.5 | 11.0 | 11.8 | 3.0 | 1.4 | 2.3 | .2 | -.1 | .0 | .0 | -.1 | -.1 | |
| 17 | 11.3 | 9.8 | 10.7 | 3.7 | 2.7 | 3.3 | 1.7 | .0 | .6 | .0 | -.1 | -.1 | |
| 18 | 11.0 | 9.9 | 10.5 | 5.0 | 3.3 | 4.2 | 2.2 | .9 | 1.5 | .0 | -.1 | -.1 | |
| 19 | 9.9 | 7.8 | 8.8 | 7.4 | 4.4 | 5.7 | 1.4 | .5 | .9 | .0 | -.1 | -.1 | |
| 20 | 8.5 | 6.4 | 7.5 | 8.6 | 7.4 | 8.2 | .8 | .0 | .4 | .0 | -.1 | .0 | |
| 21 | 10.3 | 7.7 | 9.0 | 8.6 | 7.0 | 7.8 | .5 | -.1 | .2 | .0 | -.1 | .0 | |
| 22 | 10.0 | 8.6 | 9.4 | 7.4 | 5.8 | 6.7 | 1.0 | .1 | .5 | .0 | -.1 | .0 | |
| 23 | 8.6 | 6.7 | 7.7 | 6.1 | 4.6 | 5.5 | 2.2 | .7 | 1.5 | .0 | -.1 | .0 | |
| 24 | 7.0 | 5.5 | 6.2 | 5.4 | 3.9 | 4.8 | 5.9 | 2.2 | 3.7 | .0 | .0 | .0 | |
| 25 | 6.9 | 4.3 | 5.7 | 5.6 | 4.1 | 5.1 | 6.4 | 4.9 | 6.0 | .0 | .0 | .0 | |
| 26 | 9.6 | 6.7 | 8.0 | 4.4 | 3.3 | 3.9 | 4.9 | 2.6 | 3.5 | .0 | .0 | .0 | |
| 27 | 12.4 | 9.6 | 11.3 | 4.8 | 3.5 | 4.3 | 2.6 | 1.6 | 2.0 | .0 | -.1 | .0 | |
| 28 | 12.8 | 11.5 | 12.1 | 7.8 | 4.6 | 5.6 | 1.7 | .6 | 1.2 | .0 | -.1 | .0 | |
| 29 | 13.4 | 11.7 | 12.6 | 8.0 | 5.7 | 7.2 | 2.0 | .8 | 1.4 | .0 | -.1 | .0 | |
| 30 | 12.4 | 10.4 | 11.7 | 5.7 | 4.8 | 5.2 | 3.3 | 1.8 | 2.5 | .0 | .0 | .0 | |
| 31 | 11.1 | 9.3 | 10.3 | --- | --- | --- | 3.2 | 2.4 | 2.8 | .0 | .0 | .0 | |
| MONTH | 14.9 | 4.3 | 10.8 | 14.5 | 1.4 | 6.8 | 6.4 | -0.1 | 1.2 | 4.0 | -0.1 | 0.4 | |

| DAY | MAX | FEBRUARY | | | MARCH | | | APRIL | | | MAY | | |
|-------|-----|----------|------|------|-------|------|------|-------|------|------|------|------|--|
| | | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | |
| 1 | 0.0 | 0.0 | 0.0 | 1.8 | 0.2 | 0.9 | 5.2 | 4.5 | 4.8 | 18.7 | 14.9 | 16.7 | |
| 2 | .0 | .0 | .0 | 1.8 | .4 | 1.0 | 4.8 | 4.4 | 4.7 | 17.6 | 16.5 | 17.1 | |
| 3 | .0 | -.1 | .0 | 2.2 | .4 | 1.2 | 4.8 | 4.1 | 4.4 | 16.5 | 14.9 | 15.8 | |
| 4 | .0 | -.1 | -.1 | 1.8 | .7 | 1.2 | 5.9 | 4.4 | 5.2 | 15.6 | 12.7 | 14.2 | |
| 5 | .0 | -.1 | .0 | 2.0 | 1.0 | 1.4 | 6.9 | 4.0 | 5.4 | 14.0 | 11.2 | 12.9 | |
| 6 | .0 | -.1 | -.1 | 3.3 | 2.0 | 2.6 | 7.2 | 3.2 | 5.3 | 15.8 | 11.7 | 13.8 | |
| 7 | .0 | -.1 | -.1 | 3.2 | .6 | 2.0 | 7.2 | 5.0 | 6.0 | 19.1 | 14.4 | 16.5 | |
| 8 | .0 | -.1 | -.1 | 2.6 | 1.0 | 1.7 | 8.5 | 5.2 | 6.9 | 17.8 | 14.8 | 16.3 | |
| 9 | .0 | -.1 | -.1 | 1.3 | .5 | .9 | 10.0 | 7.0 | 8.5 | 15.3 | 13.1 | 14.1 | |
| 10 | .0 | -.1 | .0 | 2.0 | .0 | 1.0 | 10.5 | 6.9 | 8.7 | 16.5 | 11.8 | 14.1 | |
| 11 | .1 | -.1 | .0 | 2.6 | 1.0 | 1.6 | 9.0 | 7.7 | 8.4 | 19.9 | 15.0 | 17.4 | |
| 12 | .1 | -.1 | .0 | 3.0 | 1.3 | 2.0 | 10.3 | 7.2 | 8.6 | 21.5 | 17.6 | 19.6 | |
| 13 | .3 | -.1 | .1 | 3.7 | .8 | 2.1 | 8.8 | 6.6 | 7.6 | 22.1 | 19.4 | 20.5 | |
| 14 | .5 | -.1 | .1 | 3.3 | .9 | 2.1 | 8.8 | 7.6 | 8.3 | 21.1 | 17.5 | 19.2 | |
| 15 | .3 | -.1 | .0 | 5.6 | 2.1 | 3.7 | 9.6 | 8.1 | 8.7 | 22.8 | 18.3 | 20.4 | |
| 16 | .1 | -.1 | -.1 | 3.8 | .9 | 2.8 | 11.2 | 6.4 | 8.7 | 21.4 | 19.5 | 20.6 | |
| 17 | .2 | -.1 | .0 | .9 | .1 | .6 | 12.4 | 7.6 | 10.0 | 21.1 | 18.0 | 19.4 | |
| 18 | .1 | -.1 | .0 | 1.5 | .0 | .6 | 14.6 | 10.6 | 12.7 | 20.1 | 17.9 | 19.0 | |
| 19 | .4 | -.1 | .1 | 1.4 | .1 | .7 | 16.2 | 12.1 | 14.2 | 19.7 | 18.2 | 19.0 | |
| 20 | .4 | -.2 | .1 | 3.0 | -.3 | 1.2 | 17.9 | 14.4 | 16.0 | 19.9 | 16.3 | 18.1 | |
| 21 | .4 | .0 | .2 | 3.8 | 1.8 | 2.6 | 15.8 | 13.3 | 14.2 | 19.7 | 16.7 | 18.1 | |
| 22 | .8 | -.1 | .2 | 2.9 | .3 | 1.7 | 17.3 | 13.1 | 15.0 | 18.9 | 15.9 | 17.5 | |
| 23 | .9 | -.2 | .2 | 3.3 | -.1 | 1.6 | 16.3 | 12.3 | 14.4 | 19.0 | 15.0 | 16.8 | |
| 24 | .6 | -.2 | .1 | 5.1 | 1.7 | 3.3 | 15.1 | 10.9 | 12.9 | 17.4 | 15.9 | 16.7 | |
| 25 | 1.0 | -.2 | .2 | 5.9 | 4.2 | 5.1 | 13.6 | 11.1 | 12.4 | 17.1 | 15.5 | 16.2 | |
| 26 | 1.2 | -.2 | .3 | 9.2 | 5.6 | 7.3 | 11.6 | 10.2 | 10.6 | 15.5 | 14.1 | 14.5 | |
| 27 | 1.4 | -.2 | .5 | 10.0 | 8.5 | 9.2 | 14.3 | 10.0 | 11.8 | 16.2 | 13.5 | 14.8 | |
| 28 | 1.6 | .0 | .6 | 9.2 | 6.1 | 7.9 | 14.5 | 10.8 | 12.7 | 15.3 | 14.6 | 14.9 | |
| 29 | 1.4 | .1 | .7 | 8.4 | 4.9 | 6.5 | 15.3 | 10.5 | 12.9 | 15.7 | 13.7 | 14.6 | |
| 30 | --- | --- | --- | 7.3 | 5.7 | 6.3 | 17.2 | 12.9 | 15.1 | 16.1 | 12.8 | 14.5 | |
| 31 | --- | --- | --- | 6.1 | 5.2 | 5.8 | --- | --- | --- | 16.1 | 13.5 | 14.9 | |
| MONTH | 1.6 | -0.2 | 0.1 | 10.0 | -0.3 | 2.9 | 17.9 | 3.2 | 9.8 | 22.8 | 11.2 | 16.7 | |

PAWTUXET RIVER BASIN

01115275 BEAR TREE BROOK NEAR CLAYVILLE, RI

LOCATION.--Lat 41°46'57", long 71°40'31", Providence County, Hydrologic Unit 01090004, on right bank, upstream of bridge on Rockland Cemetary Road, 0.4 mi north of Clayville.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: January 2000 to May 2001, October 2001 to current year.

WATER TEMPERATURE: January 2000 to May 2001, October 2001 to current year.

INSTRUMENTATION.--Specific conductance and water temperature water-quality monitor since January 2000.

REMARKS.--Records good for Specific Conductance and water temperature. Missing periods are not estimated.

EXTREMES FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE: Maximum recorded, 614 µS/cm, Mar. 2, 2003; minimum, 81 µS/cm, Dec. 20, 2002.

WATER TEMPERATURE: Maximum recorded, 20.7°C, June 27, 2003; minimum, -0.1°C, several days during winter periods of water years 2002-2004.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 470 µS/cm, Aug. 4; minimum, 86 µS/cm, Apr. 13.

WATER TEMPERATURE: Maximum recorded, 18.7°C, Aug. 30; minimum, -0.1°C, Dec. 14, Jan. 14.

WATER-QUALITY DATA, OCTOBER 2003 TO SEPTEMBER 2004

SPECIFIC CONDUCTANCE (µCM AT 25°C), OCTOBER 2003 TO SEPTEMBER 2004

| DAY | OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | | |
|-------|---------|-----|------|----------|-----|------|----------|-----|------|---------|-----|------|
| | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
| 1 | 286 | 277 | 281 | 179 | 169 | 175 | 216 | 208 | 211 | 180 | 174 | 177 |
| 2 | 292 | 285 | 289 | 184 | 178 | 181 | 224 | 216 | 220 | 186 | 180 | 184 |
| 3 | 290 | 286 | 288 | 190 | 184 | 187 | 231 | 218 | 225 | 189 | 186 | 188 |
| 4 | 292 | 284 | 288 | 190 | 188 | 189 | 232 | 225 | 229 | 188 | 187 | 188 |
| 5 | 284 | 274 | 278 | 189 | 174 | 183 | 231 | 217 | 226 | 190 | 187 | 189 |
| 6 | 280 | 273 | 276 | 184 | 174 | 179 | 221 | 204 | 215 | 191 | 187 | 189 |
| 7 | 281 | 276 | 278 | 190 | 184 | 188 | 225 | 217 | 222 | 191 | 184 | 188 |
| 8 | 291 | 280 | 285 | 194 | 189 | 191 | 225 | 219 | 223 | 186 | 175 | 181 |
| 9 | 289 | 283 | 286 | 202 | 194 | 198 | 227 | 209 | 221 | 179 | 167 | 171 |
| 10 | 288 | 283 | 286 | 206 | 200 | 203 | 226 | 218 | 222 | 178 | 167 | 174 |
| 11 | 284 | 279 | 281 | 207 | 192 | 202 | 218 | 115 | 175 | 199 | 178 | 185 |
| 12 | 286 | 261 | 277 | 196 | 189 | 192 | 154 | 114 | 130 | 213 | 197 | 207 |
| 13 | 276 | 258 | 266 | 197 | 182 | 188 | 178 | 154 | 168 | 215 | 189 | 209 |
| 14 | 282 | 273 | 277 | 204 | 187 | 197 | 195 | 169 | 184 | 189 | 182 | 185 |
| 15 | 285 | 152 | 186 | 210 | 204 | 207 | 195 | 141 | 154 | 192 | 185 | 187 |
| 16 | 227 | 182 | 208 | 212 | 206 | 209 | 172 | 148 | 160 | 189 | 186 | 188 |
| 17 | 240 | 227 | 235 | 206 | 205 | 205 | 178 | 142 | 170 | 210 | 188 | 197 |
| 18 | 241 | 226 | 232 | 206 | 204 | 205 | 143 | 133 | 137 | 210 | 206 | 209 |
| 19 | 231 | 217 | 227 | 211 | 206 | 208 | 165 | 141 | 155 | 208 | 192 | 201 |
| 20 | 228 | 216 | 221 | 212 | 193 | 201 | 174 | 164 | 169 | 202 | 187 | 194 |
| 21 | 243 | 228 | 237 | 203 | 194 | 199 | 183 | 174 | 178 | 208 | 185 | 195 |
| 22 | 243 | 240 | 241 | 208 | 203 | 206 | 185 | 183 | 184 | 214 | 184 | 203 |
| 23 | 241 | 237 | 239 | 212 | 208 | 210 | 186 | 182 | 184 | 206 | 187 | 195 |
| 24 | 244 | 237 | 239 | 216 | 211 | 213 | 184 | 179 | 181 | 196 | 169 | 183 |
| 25 | 247 | 244 | 245 | 211 | 204 | 207 | 180 | 147 | 159 | 174 | 170 | 172 |
| 26 | 252 | 244 | 248 | 216 | 210 | 213 | 155 | 149 | 152 | 187 | 172 | 178 |
| 27 | 248 | 146 | 173 | 214 | 211 | 212 | 160 | 153 | 156 | 199 | 183 | 191 |
| 28 | 183 | 146 | 160 | 214 | 207 | 212 | 165 | 160 | 162 | 200 | 175 | 191 |
| 29 | 184 | 91 | 121 | 207 | 178 | 186 | 166 | 164 | 165 | 198 | 184 | 192 |
| 30 | 154 | 105 | 128 | 209 | 194 | 202 | 168 | 164 | 166 | 196 | 179 | 186 |
| 31 | 169 | 154 | 162 | --- | --- | --- | 174 | 168 | 171 | 196 | 180 | 188 |
| MONTH | 292 | 91 | 240 | 216 | 169 | 198 | 232 | 114 | 183 | 215 | 167 | 189 |

PAWTUXET RIVER BASIN

01115275 BEAR TREE BROOK NEAR CLAYVILLE, RI--Continued

WATER TEMPERATURE (DEG. C), OCTOBER 2003 TO SEPTEMBER 2004

| DAY | MAX | OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | | |
|-------|------|---------|------|------|----------|------|-----|----------|------|-----|---------|------|--|
| | | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | |
| 1 | 12.1 | 10.1 | 11.2 | 13.0 | 10.5 | 11.8 | 6.7 | 4.8 | 6.0 | 4.6 | 3.6 | 4.1 | |
| 2 | 12.2 | 10.3 | 11.5 | 12.6 | 11.6 | 12.2 | 4.8 | 1.7 | 3.5 | 4.1 | 2.6 | 3.5 | |
| 3 | 10.6 | 8.8 | 9.7 | 13.7 | 11.7 | 12.8 | 2.3 | 1.1 | 1.7 | 5.9 | 4.1 | 4.8 | |
| 4 | 10.9 | 8.4 | 9.7 | 12.9 | 10.1 | 11.5 | 3.5 | 1.3 | 2.3 | 6.6 | 5.8 | 6.3 | |
| 5 | 10.9 | 9.2 | 10.3 | 11.3 | 9.8 | 10.4 | 2.7 | .9 | 1.8 | 6.0 | 4.6 | 5.0 | |
| 6 | 10.2 | 7.8 | 9.0 | 12.0 | 11.3 | 11.6 | 1.5 | .6 | 1.1 | 4.6 | 2.3 | 3.8 | |
| 7 | 10.1 | 7.1 | 8.6 | 11.4 | 9.6 | 10.8 | 2.5 | 1.3 | 1.9 | 2.3 | 1.1 | 1.5 | |
| 8 | 12.1 | 9.4 | 10.7 | 9.6 | 5.7 | 7.7 | 2.8 | 1.3 | 2.1 | 1.2 | .5 | .9 | |
| 9 | 13.1 | 11.8 | 12.4 | 5.7 | 4.2 | 5.0 | 3.1 | .6 | 2.0 | .7 | .0 | .2 | |
| 10 | 12.4 | 11.5 | 11.9 | 5.7 | 3.4 | 4.6 | 4.3 | 3.0 | 3.8 | .1 | .0 | .0 | |
| 11 | 12.2 | 10.6 | 11.3 | 7.0 | 3.7 | 5.2 | 4.8 | 2.2 | 3.6 | .8 | .0 | .3 | |
| 12 | 12.0 | 11.3 | 11.6 | 9.1 | 7.0 | 7.9 | 3.0 | 2.3 | 2.7 | 2.0 | .6 | 1.4 | |
| 13 | 12.8 | 11.3 | 12.1 | 9.7 | 6.8 | 8.8 | 2.5 | 1.4 | 2.0 | 2.6 | .2 | 1.5 | |
| 14 | 11.9 | 9.7 | 11.0 | 6.8 | 4.6 | 5.2 | 1.9 | -.1 | 1.2 | .2 | -.1 | .1 | |
| 15 | 13.4 | 11.8 | 12.9 | 4.7 | 3.7 | 4.3 | 2.2 | 1.6 | 1.9 | .3 | .0 | .1 | |
| 16 | 11.9 | 10.1 | 10.9 | 6.0 | 3.5 | 4.9 | 2.8 | 1.5 | 2.1 | .1 | .0 | .0 | |
| 17 | 10.8 | 8.8 | 9.9 | 6.6 | 6.0 | 6.4 | 4.9 | 2.3 | 3.8 | 1.2 | .0 | .4 | |
| 18 | 10.7 | 9.0 | 10.1 | 7.4 | 5.8 | 6.6 | 4.6 | 2.9 | 3.4 | 1.8 | 1.2 | 1.5 | |
| 19 | 9.0 | 7.8 | 8.5 | 10.3 | 6.7 | 8.3 | 3.1 | 2.2 | 2.7 | 1.5 | .5 | 1.0 | |
| 20 | 8.9 | 6.6 | 7.7 | 10.6 | 8.4 | 9.8 | 3.2 | 1.9 | 2.6 | 1.0 | .2 | .5 | |
| 21 | 11.8 | 8.0 | 10.4 | 9.0 | 7.2 | 8.2 | 2.7 | 1.5 | 2.2 | 1.4 | .0 | .6 | |
| 22 | 11.3 | 8.7 | 10.0 | 7.8 | 6.2 | 6.9 | 3.9 | 2.3 | 3.1 | 2.2 | .0 | 1.1 | |
| 23 | 8.7 | 6.9 | 7.8 | 6.9 | 5.3 | 6.0 | 5.5 | 3.7 | 4.6 | 1.0 | .0 | .4 | |
| 24 | 7.7 | 6.0 | 6.8 | 7.3 | 4.7 | 6.0 | 7.7 | 4.8 | 6.3 | .7 | .0 | .2 | |
| 25 | 8.2 | 5.0 | 6.7 | 7.5 | 5.0 | 6.6 | 7.7 | 5.7 | 7.2 | .1 | .0 | .0 | |
| 26 | 11.6 | 7.8 | 10.0 | 6.1 | 4.0 | 5.2 | 5.7 | 4.0 | 4.5 | .5 | .0 | .2 | |
| 27 | 13.3 | 11.6 | 12.4 | 7.0 | 5.6 | 6.4 | 4.3 | 3.4 | 3.8 | 1.4 | .4 | .8 | |
| 28 | 12.5 | 11.2 | 11.6 | 10.6 | 6.9 | 8.0 | 4.0 | 2.4 | 3.2 | 1.4 | .0 | .8 | |
| 29 | 13.8 | 11.1 | 12.5 | 10.6 | 6.0 | 8.4 | 4.7 | 3.1 | 3.9 | 1.5 | .4 | .9 | |
| 30 | 11.9 | 9.3 | 10.7 | 6.4 | 5.5 | 5.9 | 6.2 | 4.0 | 5.1 | 1.2 | .2 | .6 | |
| 31 | 11.1 | 8.3 | 9.9 | --- | --- | --- | 5.3 | 4.3 | 4.8 | 1.5 | .3 | .8 | |
| MONTH | 13.8 | 5.0 | 10.3 | 13.7 | 3.4 | 7.8 | 7.7 | -0.1 | 3.3 | 6.6 | -0.1 | 1.4 | |

| DAY | MAX | FEBRUARY | | | MARCH | | | APRIL | | | MAY | | |
|-------|-----|----------|------|------|-------|------|------|-------|------|------|------|------|--|
| | | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | |
| 1 | 1.8 | 0.2 | 0.9 | 6.0 | 2.9 | 4.4 | 5.7 | 4.9 | 5.3 | 16.2 | 11.9 | 14.1 | |
| 2 | 2.6 | .1 | 1.2 | 6.2 | 3.4 | 4.7 | 5.6 | 5.2 | 5.4 | 14.7 | 13.7 | 14.2 | |
| 3 | 2.8 | .7 | 1.7 | 6.4 | 3.5 | 4.9 | 5.8 | 5.1 | 5.5 | 13.8 | 12.6 | 13.2 | |
| 4 | 2.9 | 1.4 | 2.0 | 5.6 | 3.9 | 4.7 | 6.7 | 5.5 | 6.1 | 13.8 | 10.7 | 12.1 | |
| 5 | 2.7 | .9 | 1.8 | 5.5 | 4.0 | 4.7 | 7.1 | 4.3 | 5.6 | 12.4 | 9.4 | 11.3 | |
| 6 | 2.3 | .2 | 1.7 | 6.2 | 4.3 | 5.6 | 7.8 | 3.4 | 5.6 | 14.9 | 10.0 | 12.4 | |
| 7 | 2.2 | 1.1 | 1.6 | 6.1 | 3.0 | 4.6 | 7.6 | 5.1 | 6.3 | 17.1 | 12.0 | 14.3 | |
| 8 | 1.1 | .1 | .7 | 5.3 | 3.2 | 3.9 | 8.9 | 5.2 | 7.2 | 14.6 | 11.1 | 12.9 | |
| 9 | 2.7 | .5 | 1.6 | 3.8 | 2.6 | 3.2 | 9.7 | 6.5 | 8.2 | 12.4 | 10.7 | 11.2 | |
| 10 | 3.8 | 2.2 | 2.9 | 4.8 | 1.7 | 3.3 | 10.0 | 5.8 | 8.0 | 14.2 | 9.7 | 12.0 | |
| 11 | 3.0 | 1.5 | 2.3 | 4.8 | 3.0 | 3.7 | 8.4 | 6.5 | 7.5 | 17.2 | 12.8 | 14.9 | |
| 12 | 2.7 | .5 | 1.7 | 4.9 | 3.1 | 3.9 | 9.5 | 6.5 | 8.0 | 17.4 | 14.1 | 15.9 | |
| 13 | 3.5 | 1.6 | 2.5 | 5.2 | 2.0 | 3.4 | 8.3 | 6.2 | 7.0 | 17.0 | 14.7 | 15.9 | |
| 14 | 3.8 | 1.8 | 2.7 | 4.9 | 1.5 | 3.3 | 9.5 | 7.9 | 9.1 | 15.9 | 12.9 | 14.5 | |
| 15 | 2.5 | .0 | 1.4 | 7.4 | 4.1 | 5.5 | 9.3 | 7.9 | 8.7 | 17.9 | 14.4 | 16.2 | |
| 16 | 1.7 | .0 | .5 | 5.2 | .9 | 3.4 | 10.7 | 5.8 | 8.3 | 17.2 | 14.7 | 15.8 | |
| 17 | 2.3 | .0 | 1.0 | 2.5 | 1.5 | 2.2 | 11.9 | 6.6 | 9.3 | 15.5 | 13.6 | 14.5 | |
| 18 | 2.5 | 1.5 | 1.9 | 3.7 | 2.0 | 2.8 | 13.3 | 9.3 | 11.5 | 15.6 | 14.1 | 14.8 | |
| 19 | 3.4 | 1.0 | 2.1 | 3.8 | 1.8 | 2.9 | 14.9 | 10.1 | 12.5 | 15.3 | 14.0 | 14.8 | |
| 20 | 3.6 | 1.2 | 2.5 | 5.5 | .5 | 3.0 | 15.5 | 11.7 | 13.6 | 14.7 | 12.1 | 13.6 | |
| 21 | 4.2 | 2.8 | 3.4 | 5.2 | 3.3 | 4.2 | 13.2 | 10.0 | 11.3 | 15.0 | 13.3 | 14.1 | |
| 22 | 4.5 | 2.6 | 3.3 | 4.7 | 1.2 | 2.9 | 15.6 | 10.8 | 13.1 | 15.0 | 11.9 | 13.4 | |
| 23 | 4.2 | 1.7 | 2.8 | 5.4 | .8 | 3.0 | 14.5 | 9.9 | 11.8 | 14.3 | 11.5 | 12.8 | |
| 24 | 3.6 | 1.4 | 2.6 | 7.1 | 3.0 | 4.9 | 13.7 | 9.0 | 11.1 | 13.8 | 12.6 | 13.2 | |
| 25 | 3.9 | 1.2 | 2.5 | 7.3 | 5.3 | 6.3 | 11.9 | 8.9 | 10.4 | 13.3 | 12.3 | 12.8 | |
| 26 | 4.2 | 1.2 | 2.6 | 10.7 | 6.5 | 8.4 | 10.0 | 8.7 | 9.2 | 12.3 | 11.4 | 11.6 | |
| 27 | 4.4 | 1.3 | 2.8 | 10.1 | 8.1 | 9.1 | 13.4 | 9.4 | 11.1 | 14.1 | 11.3 | 12.4 | |
| 28 | 5.2 | 1.7 | 3.3 | 8.6 | 5.2 | 7.1 | 12.8 | 9.4 | 11.1 | 13.9 | 12.2 | 12.9 | |
| 29 | 5.2 | 2.2 | 3.8 | 8.8 | 4.4 | 6.3 | 14.0 | 9.0 | 11.5 | 13.8 | 11.9 | 12.8 | |
| 30 | --- | --- | --- | 7.0 | 5.2 | 6.1 | 15.7 | 10.9 | 13.2 | 14.0 | 11.3 | 12.6 | |
| 31 | --- | --- | --- | 6.6 | 5.1 | 6.0 | --- | --- | --- | 13.2 | 11.2 | 12.4 | |
| MONTH | 5.2 | 0.0 | 2.1 | 10.7 | 0.5 | 4.6 | 15.7 | 3.4 | 9.1 | 17.9 | 9.4 | 13.5 | |

PAWTUXET RIVER BASIN

01115280 CORK BROOK AT ROCKLAND SCITUATE RD NEAR CLAYVILLE, RI

LOCATION.--Lat 41°48'14", long 71°39'01", Providence County, Hydrologic Unit 01090004, on left bank 500 ft downstream from bridge on Rockland Scituate Road, and 0.8 mi northeast of Crazy Corners.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: February 2000 to May 2001, October 2001 to current year.

WATER TEMPERATURE: February 2000 to May 2001, October 2001 to current year.

INSTRUMENTATION.--Specific conductance and water temperature water-quality monitor since February 2000.

REMARKS.--Records fair for specific conductance and water temperature. Missing periods are not estimated.

EXTREMES FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE: Maximum recorded, 1,300 $\mu\text{S}/\text{cm}$, Jan. 18, 2004; minimum, 59 $\mu\text{S}/\text{cm}$, July 31, 2002.

WATER TEMPERATURE: Maximum recorded, 24.9°C, Sept. 14, 2002; minimum, -0.3°C, Dec. 30, 2001, Jan. 7, 8, 2002, Mar. 20, 23, 2004.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 1,300 $\mu\text{S}/\text{cm}$, Jan. 18; minimum, 62 $\mu\text{S}/\text{cm}$, Jan. 9.

WATER TEMPERATURE: Maximum recorded, 21.9°C, Aug. 3; minimum, -0.3°C, Mar. 20, 23.

WATER-QUALITY DATA, OCTOBER 2003 TO SEPTEMBER 2004

SPECIFIC CONDUCTANCE (μCM AT 25°C), OCTOBER 2003 TO SEPTEMBER 2004

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|-----|-----|------|-----|-----|------|-----|-----|------|------|-----|------|
| | | | | | | | | | | | | |
| 1 | 165 | 157 | 160 | 110 | 100 | 105 | 123 | 118 | 120 | 126 | 121 | 125 |
| 2 | 163 | 158 | 161 | 113 | 98 | 109 | 126 | 105 | 122 | 137 | 122 | 127 |
| 3 | 163 | 156 | 159 | 111 | 104 | 109 | 121 | 105 | 114 | 136 | 123 | 127 |
| 4 | 174 | 156 | 160 | 112 | 102 | 108 | 128 | 116 | 121 | 123 | 115 | 119 |
| 5 | 179 | 159 | 162 | 110 | 104 | 106 | 129 | 114 | 123 | 148 | 108 | 120 |
| 6 | 173 | 158 | 161 | 109 | 105 | 107 | 127 | 112 | 116 | 132 | 109 | 127 |
| 7 | 170 | 160 | 162 | 110 | 106 | 108 | 133 | 114 | 118 | 132 | 121 | 126 |
| 8 | 168 | 164 | 166 | 113 | 106 | 109 | 122 | 113 | 119 | 130 | 125 | 128 |
| 9 | 172 | 168 | 169 | 116 | 107 | 113 | 127 | 110 | 121 | 133 | 62 | 130 |
| 10 | 170 | 167 | 169 | 117 | 110 | 115 | 127 | 120 | 126 | 133 | 125 | 128 |
| 11 | 169 | 167 | 168 | 118 | 110 | 115 | 139 | 82 | 110 | 128 | 118 | 124 |
| 12 | 183 | 164 | 168 | 114 | 106 | 111 | 120 | 106 | 115 | 130 | 117 | 118 |
| 13 | 185 | 164 | 171 | 114 | 108 | 110 | 120 | 109 | 115 | 119 | 115 | 117 |
| 14 | 170 | 167 | 168 | 116 | 111 | 113 | 118 | 103 | 111 | 124 | 119 | 122 |
| 15 | 170 | 123 | 142 | 119 | 114 | 117 | 148 | 100 | 114 | 121 | 116 | 118 |
| 16 | 148 | 133 | 139 | 120 | 113 | 117 | 149 | 120 | 137 | 119 | 116 | 118 |
| 17 | 170 | 143 | 149 | 117 | 112 | 115 | 148 | 84 | 130 | 118 | 112 | 115 |
| 18 | 174 | 147 | 158 | 115 | 111 | 114 | 109 | 90 | 105 | 1300 | 111 | 140 |
| 19 | 170 | 145 | 155 | 116 | 102 | 114 | 111 | 100 | 108 | 116 | 111 | 113 |
| 20 | 169 | 147 | 154 | 118 | 111 | 115 | 114 | 106 | 112 | 116 | 114 | 115 |
| 21 | 171 | 147 | 157 | 116 | 114 | 115 | 118 | 100 | 114 | 116 | 114 | 115 |
| 22 | 170 | 149 | 156 | 118 | 114 | 116 | 120 | 117 | 119 | 117 | 114 | 115 |
| 23 | 168 | 148 | 151 | 118 | 113 | 115 | 121 | 117 | 119 | 118 | 115 | 116 |
| 24 | 169 | 148 | 152 | 116 | 111 | 114 | 119 | 87 | 109 | 116 | 112 | 114 |
| 25 | 171 | 148 | 152 | 121 | 112 | 116 | 112 | 88 | 104 | 116 | 112 | 114 |
| 26 | 169 | 148 | 150 | 123 | 116 | 119 | 121 | 111 | 118 | 113 | 108 | 111 |
| 27 | 169 | 117 | 133 | 119 | 115 | 118 | 123 | 115 | 122 | 108 | 107 | 108 |
| 28 | 135 | 117 | 128 | 118 | 107 | 115 | 124 | 121 | 122 | 111 | 107 | 109 |
| 29 | 133 | 67 | 96 | 117 | 106 | 114 | 124 | 121 | 123 | 112 | 110 | 111 |
| 30 | 94 | 82 | 89 | 120 | 116 | 118 | 123 | 113 | 121 | 117 | 112 | 114 |
| 31 | 102 | 90 | 97 | --- | --- | --- | 124 | 121 | 122 | 116 | 115 | 115 |
| MONTH | 185 | 67 | 150 | 123 | 98 | 113 | 149 | 82 | 118 | 1300 | 62 | 119 |

PAWTUXET RIVER BASIN

01115280 CORK BROOK AT ROCKLAND SCITUATE RD NEAR CLAYVILLE, RI--Continued

SPECIFIC CONDUCTANCE ($\mu\text{S}/\text{CM}$ AT 25°C), OCTOBER 2003 TO SEPTEMBER 2004

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|
| | | | | | | | | | | | | |
| 1 | 116 | 114 | 116 | 155 | 142 | 150 | 152 | 133 | 142 | 145 | 144 | 144 |
| 2 | 119 | 115 | 117 | 156 | 143 | 150 | 155 | 143 | 150 | 144 | 112 | 140 |
| 3 | 156 | 118 | 121 | 153 | 144 | 150 | 158 | 147 | 156 | 143 | 127 | 138 |
| 4 | 166 | 108 | 130 | 171 | 149 | 153 | 159 | 148 | 156 | 140 | 109 | 131 |
| 5 | 133 | 124 | 129 | 156 | 154 | 154 | 167 | 149 | 158 | 150 | 139 | 145 |
| 6 | 207 | 114 | 144 | 158 | 134 | 145 | 171 | 154 | 166 | 148 | 146 | 147 |
| 7 | 298 | 135 | 185 | 166 | 137 | 156 | 167 | 160 | 163 | 146 | 144 | 145 |
| 8 | 176 | 147 | 159 | 200 | 165 | 171 | 166 | 160 | 163 | 145 | 140 | 143 |
| 9 | 197 | 176 | 184 | 175 | 167 | 172 | 163 | 159 | 161 | 140 | 134 | 139 |
| 10 | 201 | 193 | 198 | 178 | 158 | 170 | 165 | 157 | 161 | 140 | 136 | 138 |
| 11 | 193 | 167 | 183 | 176 | 172 | 173 | 159 | 156 | 158 | 141 | 138 | 139 |
| 12 | 177 | 164 | 171 | 175 | 169 | 173 | 159 | 154 | 157 | 141 | 139 | 140 |
| 13 | 180 | 165 | 174 | 176 | 163 | 170 | 154 | 72 | 129 | 142 | 132 | 140 |
| 14 | 176 | 163 | 171 | 177 | 154 | 169 | 102 | 83 | 94 | 139 | 136 | 138 |
| 15 | 170 | 151 | 162 | 176 | 167 | 172 | 116 | 102 | 111 | --- | --- | --- |
| 16 | 162 | 149 | 156 | 240 | 142 | 164 | 124 | 116 | 121 | --- | --- | --- |
| 17 | 160 | 148 | 154 | 185 | 145 | 161 | 131 | 124 | 127 | --- | --- | --- |
| 18 | 154 | 149 | 152 | 174 | 157 | 165 | 134 | 128 | 131 | --- | --- | --- |
| 19 | 157 | 146 | 153 | 586 | 154 | 174 | 138 | 131 | 134 | --- | --- | --- |
| 20 | 166 | 144 | 154 | 243 | 151 | 167 | 139 | 135 | 137 | --- | --- | --- |
| 21 | 357 | 157 | 165 | 179 | 167 | 172 | 140 | 134 | 138 | --- | --- | --- |
| 22 | 183 | 156 | 163 | 188 | 162 | 177 | 142 | 138 | 140 | --- | --- | --- |
| 23 | 161 | 143 | 155 | 201 | 175 | 189 | 143 | 135 | 139 | --- | --- | --- |
| 24 | 162 | 143 | 156 | 196 | 181 | 188 | 140 | 130 | 136 | --- | --- | --- |
| 25 | 163 | 143 | 156 | 184 | 174 | 179 | 143 | 136 | 139 | --- | --- | --- |
| 26 | 162 | 142 | 154 | 180 | 172 | 176 | 142 | 110 | 131 | --- | --- | --- |
| 27 | 162 | 141 | 154 | 177 | 168 | 173 | 148 | 128 | 139 | --- | --- | --- |
| 28 | 161 | 143 | 153 | 180 | 172 | 174 | 152 | 146 | 149 | --- | --- | --- |
| 29 | 158 | 146 | 152 | 183 | 174 | 179 | 150 | 144 | 147 | 147 | 135 | 141 |
| 30 | --- | --- | --- | 182 | 174 | 179 | 146 | 144 | 145 | 153 | 146 | 149 |
| 31 | --- | --- | --- | 178 | 133 | 163 | --- | --- | --- | --- | --- | --- |
| MONTH | 357 | 108 | 156 | 586 | 133 | 168 | 171 | 72 | 143 | --- | --- | --- |

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|
| | | | | | | | | | | | | |
| 1 | --- | --- | --- | 130 | 120 | 125 | 179 | 173 | 176 | 206 | 188 | 198 |
| 2 | --- | --- | --- | 145 | 116 | 133 | 179 | 164 | 170 | 207 | 198 | 204 |
| 3 | 153 | 146 | 149 | 143 | 132 | 137 | 171 | 164 | 167 | 207 | 201 | 205 |
| 4 | --- | --- | --- | 132 | 124 | 129 | 193 | 171 | 183 | 205 | 196 | 200 |
| 5 | --- | --- | --- | 161 | 101 | 139 | 194 | 128 | 182 | 202 | 196 | 199 |
| 6 | --- | --- | --- | 161 | 157 | 159 | 202 | 190 | 196 | 199 | 195 | 197 |
| 7 | --- | --- | --- | 160 | 154 | 157 | 204 | 199 | 202 | 199 | 197 | 198 |
| 8 | --- | --- | --- | 154 | 150 | 152 | 210 | 198 | 202 | 198 | 115 | 175 |
| 9 | --- | --- | --- | 155 | 148 | 152 | 202 | 193 | 195 | 196 | 173 | 189 |
| 10 | --- | --- | --- | 150 | 144 | 146 | 196 | 188 | 192 | 198 | 192 | 194 |
| 11 | --- | --- | --- | 149 | 141 | 144 | 204 | 188 | 195 | 206 | 196 | 200 |
| 12 | --- | --- | --- | 149 | 141 | 145 | 192 | 96 | 181 | 209 | 199 | 204 |
| 13 | --- | --- | --- | 158 | 126 | 144 | 176 | 109 | 159 | 211 | 206 | 208 |
| 14 | --- | --- | --- | 167 | 155 | 163 | 206 | 175 | 189 | 211 | 205 | 208 |
| 15 | --- | --- | --- | 166 | 163 | 166 | 194 | 93 | 148 | 210 | 204 | 208 |
| 16 | --- | --- | --- | 164 | 157 | 162 | 168 | 110 | 131 | 215 | 197 | 205 |
| 17 | --- | --- | --- | 159 | 155 | 157 | 148 | 99 | 118 | 210 | 206 | 208 |
| 18 | --- | --- | --- | 159 | 150 | 154 | 128 | 121 | 124 | 211 | 107 | 156 |
| 19 | --- | --- | --- | 169 | 142 | 153 | 133 | 127 | 130 | 152 | 139 | 146 |
| 20 | --- | --- | --- | 173 | 158 | 166 | 137 | 133 | 136 | 163 | 152 | 158 |
| 21 | --- | --- | --- | 171 | 162 | 165 | 164 | 95 | 135 | 170 | 163 | 167 |
| 22 | --- | --- | --- | 167 | 162 | 164 | 171 | 144 | 159 | 175 | 169 | 172 |
| 23 | --- | --- | --- | 173 | 165 | 169 | 178 | 171 | 175 | 179 | 172 | 176 |
| 24 | --- | --- | --- | 173 | 132 | 158 | 183 | 174 | 177 | 182 | 176 | 179 |
| 25 | --- | --- | --- | 161 | 149 | 157 | 185 | 179 | 182 | 184 | 179 | 181 |
| 26 | --- | --- | --- | 160 | 153 | 156 | 187 | 184 | 186 | 185 | 181 | 183 |
| 27 | --- | --- | --- | 166 | 153 | 160 | 189 | 185 | 188 | 186 | 184 | 185 |
| 28 | --- | --- | --- | 173 | 142 | 160 | 191 | 187 | 189 | 188 | 139 | 178 |
| 29 | --- | --- | --- | 178 | 170 | 174 | 192 | 189 | 190 | 172 | 124 | 140 |
| 30 | 128 | 120 | 124 | 178 | 167 | 171 | 194 | 188 | 191 | 160 | 142 | 150 |
| 31 | --- | --- | --- | 173 | 164 | 168 | 191 | 170 | 182 | --- | --- | --- |
| MONTH | --- | --- | --- | 178 | 101 | 154 | 210 | 93 | 172 | 215 | 107 | 186 |

PAWTUXET RIVER BASIN

01115280 CORK BROOK AT ROCKLAND SCITUATE RD NEAR CLAYVILLE, RI--Continued

WATER TEMPERATURE (DEG. C), OCTOBER 2003 TO SEPTEMBER 2004

| DAY | MAX | OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | | |
|-------|------|---------|------|------|----------|------|-----|----------|------|-----|---------|------|--|
| | | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | |
| 1 | 13.3 | 11.7 | 12.6 | 13.7 | 11.1 | 12.4 | 6.4 | 3.8 | 5.4 | 4.1 | 2.8 | 3.4 | |
| 2 | 13.4 | 11.2 | 12.6 | 13.7 | 12.5 | 13.0 | 3.8 | .5 | 2.6 | 3.2 | 1.6 | 2.5 | |
| 3 | 11.2 | 9.4 | 10.3 | 15.2 | 12.5 | 13.8 | 1.0 | .2 | .5 | 4.9 | 3.2 | 3.9 | |
| 4 | 11.6 | 9.1 | 10.3 | 13.7 | 10.5 | 12.2 | 1.6 | .2 | .9 | 6.0 | 4.9 | 5.4 | |
| 5 | 11.6 | 10.2 | 11.0 | 11.8 | 10.2 | 10.9 | 1.2 | .1 | .7 | 5.2 | 3.8 | 4.2 | |
| 6 | 10.8 | 8.7 | 9.8 | 12.6 | 11.7 | 12.1 | .3 | .1 | .2 | 3.8 | 1.2 | 2.9 | |
| 7 | 10.4 | 7.7 | 9.3 | 12.1 | 9.8 | 11.2 | .6 | .2 | .4 | 1.2 | .1 | .5 | |
| 8 | 13.2 | 10.0 | 11.6 | 9.8 | 5.6 | 8.0 | 1.0 | .3 | .6 | .2 | .1 | .2 | |
| 9 | 14.6 | 13.0 | 13.8 | 6.4 | 3.9 | 5.2 | 1.8 | .3 | 1.0 | .3 | .1 | .2 | |
| 10 | 13.8 | 12.9 | 13.3 | 6.2 | 3.1 | 4.6 | 3.1 | 1.8 | 2.6 | .3 | .1 | .2 | |
| 11 | 13.3 | 12.0 | 12.7 | 7.0 | 3.6 | 5.3 | 3.6 | 1.7 | 2.8 | .3 | .1 | .2 | |
| 12 | 13.0 | 12.4 | 12.7 | 9.1 | 7.0 | 8.0 | 2.4 | 1.4 | 1.9 | .3 | .1 | .2 | |
| 13 | 14.1 | 12.9 | 13.4 | 10.2 | 6.6 | 9.0 | 1.6 | .4 | 1.0 | .3 | .1 | .2 | |
| 14 | 13.1 | 11.4 | 12.5 | 6.6 | 4.2 | 5.2 | .7 | .1 | .3 | .3 | .1 | .2 | |
| 15 | 14.2 | 12.7 | 13.8 | 4.9 | 3.2 | 3.9 | 1.5 | .3 | 1.0 | .3 | .1 | .3 | |
| 16 | 12.7 | 11.2 | 12.0 | 5.7 | 2.6 | 4.4 | 2.0 | .4 | 1.2 | .3 | .1 | .3 | |
| 17 | 11.6 | 10.2 | 11.0 | 6.0 | 5.5 | 5.8 | 5.2 | 1.4 | 3.2 | .3 | .1 | .2 | |
| 18 | 11.0 | 9.6 | 10.5 | 7.5 | 5.2 | 6.4 | 4.6 | 2.4 | 3.1 | .3 | .1 | .2 | |
| 19 | 9.6 | 8.2 | 8.7 | 10.2 | 6.4 | 8.3 | 2.7 | 1.6 | 2.2 | .3 | .1 | .2 | |
| 20 | 9.2 | 7.0 | 8.1 | 10.6 | 8.3 | 9.8 | 2.9 | 1.4 | 2.1 | .4 | .2 | .3 | |
| 21 | 12.3 | 8.5 | 10.8 | 9.6 | 7.3 | 8.3 | 2.1 | .6 | 1.4 | .4 | .2 | .3 | |
| 22 | 11.9 | 8.6 | 10.2 | 8.6 | 6.3 | 7.3 | 3.6 | 1.5 | 2.5 | .5 | .2 | .4 | |
| 23 | 8.6 | 6.7 | 7.5 | 7.5 | 5.5 | 6.4 | 5.0 | 2.9 | 3.9 | .6 | .3 | .4 | |
| 24 | 7.0 | 5.6 | 6.4 | 7.3 | 4.7 | 6.2 | 7.5 | 4.1 | 5.9 | .4 | .2 | .3 | |
| 25 | 8.0 | 4.7 | 6.5 | 7.5 | 4.5 | 6.5 | 7.4 | 5.2 | 6.7 | .3 | .1 | .3 | |
| 26 | 11.8 | 8.0 | 10 | 5.8 | 3.4 | 4.8 | 5.2 | 3.4 | 4.1 | .3 | .1 | .2 | |
| 27 | 13.4 | 11.8 | 12.7 | 6.9 | 5.0 | 6.1 | 4.2 | 2.6 | 3.3 | .3 | .1 | .2 | |
| 28 | 12.9 | 11.7 | 12.2 | 10.8 | 6.5 | 7.8 | 4.1 | 1.7 | 2.9 | .4 | .2 | .3 | |
| 29 | 14.0 | 11.7 | 12.9 | 10.9 | 5.5 | 8.3 | 4.9 | 2.6 | 3.6 | .5 | .4 | .4 | |
| 30 | 12.4 | 10.1 | 11.4 | 6.6 | 5.2 | 5.7 | 6.1 | 3.5 | 4.6 | .5 | .3 | .4 | |
| 31 | 11.9 | 9.4 | 10.8 | --- | --- | --- | 5.0 | 3.5 | 4.2 | .6 | .3 | .5 | |
| MONTH | 14.6 | 4.7 | 11.0 | 15.2 | 2.6 | 7.9 | 7.5 | 0.1 | 2.5 | 6.0 | 0.1 | 0.9 | |

| DAY | MAX | FEBRUARY | | | MARCH | | | APRIL | | | MAY | | |
|-------|-----|----------|------|------|-------|------|------|-------|------|------|------|------|--|
| | | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | |
| 1 | 0.6 | 0.3 | 0.5 | 5.1 | 1.4 | 2.8 | 5.3 | 4.3 | 4.8 | 18.1 | 11.8 | 14.8 | |
| 2 | .7 | .4 | .6 | 5.1 | 1.9 | 3.1 | 5.0 | 4.5 | 4.8 | 15.7 | 14.0 | 14.7 | |
| 3 | .9 | .2 | .7 | 5.5 | 2.0 | 3.3 | 5.1 | 4.3 | 4.7 | 14.1 | 12.8 | 13.7 | |
| 4 | .3 | .2 | .2 | 4.3 | 2.1 | 3.0 | 6.6 | 4.7 | 5.5 | 14.7 | 10.6 | 12.4 | |
| 5 | 1.1 | .2 | .6 | 3.6 | 2.1 | 2.9 | 7.3 | 3.5 | 5.0 | 13.3 | 9.2 | 11.4 | |
| 6 | 1.0 | .2 | .6 | 4.1 | 2.4 | 3.5 | 8.4 | 2.4 | 5.0 | 15.8 | 9.9 | 12.7 | |
| 7 | .3 | .2 | .2 | 5.4 | 1.5 | 3.2 | 8.0 | 3.9 | 5.6 | 18.4 | 11.9 | 14.8 | |
| 8 | .3 | .0 | .1 | 3.1 | 1.4 | 2.2 | 9.7 | 4.1 | 6.7 | 15.2 | 10.8 | 12.9 | |
| 9 | .9 | .1 | .4 | 2.6 | .9 | 1.7 | 10.4 | 5.5 | 7.8 | 11.8 | 10.1 | 11.0 | |
| 10 | 2.2 | .9 | 1.4 | 4.0 | .0 | 1.8 | 11.5 | 4.6 | 7.7 | 15.8 | 9.8 | 12.6 | |
| 11 | 2.2 | .1 | 1.1 | 4.0 | 1.2 | 2.3 | 8.5 | 5.5 | 7.0 | 18.2 | 12.5 | 15.3 | |
| 12 | 1.1 | .0 | .5 | 4.8 | 1.5 | 2.8 | 10.5 | 5.8 | 7.9 | 18.9 | 14.4 | 16.6 | |
| 13 | 2.2 | .2 | 1.2 | 5.3 | .5 | 2.4 | 7.7 | 6.0 | 6.5 | 17.9 | 13.8 | 16.4 | |
| 14 | 2.5 | .4 | 1.3 | 4.1 | -.2 | 2.0 | 9.2 | 7.7 | 8.8 | 16.6 | 12.3 | 14.3 | |
| 15 | 1.2 | .0 | .5 | 7.3 | 2.5 | 4.4 | 9.2 | 7.3 | 8.3 | 19.7 | 14.4 | 16.9 | |
| 16 | .4 | .0 | .2 | 3.4 | .0 | 1.8 | 11.1 | 5.5 | 8.0 | 17.2 | 14.2 | 16.1 | |
| 17 | .5 | .0 | .2 | .8 | .0 | .4 | 12.8 | 6.4 | 9.3 | 19.8 | 13.3 | 14.8 | |
| 18 | .5 | .1 | .3 | 2.3 | .1 | 1.1 | 15.0 | 9.3 | 11.7 | 16.6 | 13.3 | 14.8 | |
| 19 | 1.0 | -.1 | .5 | 2.3 | -.1 | 1.1 | 16.4 | 9.8 | 12.8 | 16.5 | 12.9 | 15.1 | |
| 20 | 1.4 | -.1 | .8 | 4.3 | -.3 | 1.6 | 17.1 | 11.8 | 13.9 | 20.5 | 11.3 | 14.2 | |
| 21 | 2.0 | 1.1 | 1.5 | 4.2 | 1.2 | 2.5 | 14.0 | 9.4 | 11.3 | 19.1 | 12.4 | 14.5 | |
| 22 | 2.9 | 1.0 | 1.7 | 4.3 | .1 | 1.6 | 17.7 | 10.5 | 13.6 | 14.9 | 10.8 | 13.2 | |
| 23 | 3.0 | .0 | 1.4 | 4.8 | -.3 | 1.7 | 14.2 | 9.6 | 11.6 | 19.9 | 10.5 | 13.4 | |
| 24 | 2.1 | .0 | 1.1 | 6.8 | 1.2 | 3.6 | 15.3 | 8.7 | 11.4 | 14.3 | 11.8 | 12.8 | |
| 25 | 2.6 | -.1 | 1.1 | 6.6 | 3.4 | 4.9 | 12.6 | 7.9 | 10.1 | 16.9 | 10.5 | 12.3 | |
| 26 | 3.0 | -.1 | 1.2 | 10.8 | 4.9 | 7.4 | 9.6 | 8.2 | 8.9 | 11.4 | 9.9 | 10.7 | |
| 27 | 3.2 | -.1 | 1.3 | 9.8 | 7.2 | 8.3 | 14.1 | 9.4 | 11.3 | 13.5 | 11.1 | 12.2 | |
| 28 | 4.1 | .0 | 1.9 | 7.8 | 4.3 | 6.5 | 14.2 | 9.4 | 11.3 | 12.9 | 12.2 | 12.5 | |
| 29 | 4.2 | .8 | 2.3 | 9.6 | 3.2 | 5.9 | 15.9 | 8.6 | 11.8 | 13.0 | 11.8 | 12.5 | |
| 30 | --- | --- | --- | 6.9 | 3.9 | 5.2 | 17.7 | 10.6 | 13.8 | 13.3 | 10.6 | 12.0 | |
| 31 | --- | --- | --- | 5.6 | 4.4 | 5.1 | --- | --- | --- | 14.3 | 10.6 | 12.1 | |
| MONTH | 4.2 | -0.1 | 0.9 | 10.8 | -0.3 | 3.2 | 17.7 | 2.4 | 8.9 | 20.5 | 9.2 | 13.7 | |

PAWTUXET RIVER BASIN

01115280 CORK BROOK AT ROCKLAND SCITUATE RD NEAR CLAYVILLE, RI--Continued

WATER TEMPERATURE (DEG. C), OCTOBER 2003 TO SEPTEMBER 2004

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | | | | | | | | | | | |
| 1 | 11.7 | 10.8 | 11.2 | 17.1 | 14.7 | 15.9 | 21.1 | 20.6 | 20.8 | 19.7 | 18.2 | 19.0 |
| 2 | 13.9 | 11.0 | 12.2 | 17.1 | 15.6 | 16.4 | 21.6 | 20.3 | 20.9 | 18.5 | 17.0 | 17.8 |
| 3 | 13.9 | 12.1 | 12.9 | 17.0 | 14.9 | 16.1 | 21.9 | 20.3 | 21.0 | 18.4 | 15.8 | 17.2 |
| 4 | 14.3 | 11.0 | 12.6 | 17.0 | 14.7 | 16.0 | 21.8 | 20.3 | 20.9 | 19.6 | 17.6 | 18.5 |
| 5 | 17.4 | 11.0 | 12.8 | 16.4 | 15.6 | 15.8 | 20.6 | 17.8 | 18.6 | 18.3 | 15.7 | 17.1 |
| 6 | 11.7 | 10.3 | 11.1 | 16.8 | 15.5 | 16.1 | 18.0 | 16.5 | 17.1 | 16.5 | 14.1 | 15.4 |
| 7 | 14.8 | 9.9 | 12.1 | 17.5 | 15.3 | 16.5 | 16.8 | 14.6 | 15.9 | 17.8 | 15.5 | 16.7 |
| 8 | --- | --- | --- | 17.0 | 16.1 | 16.5 | 17.0 | 14.8 | 16.0 | 18.6 | 17.6 | 18.2 |
| 9 | --- | --- | --- | 17.3 | 16.4 | 16.8 | 17.9 | 15.6 | 16.8 | 19.9 | 18.4 | 19.1 |
| 10 | --- | --- | --- | 17.5 | 15.1 | 16.4 | 18.9 | 16.8 | 17.9 | 19.8 | 17.8 | 18.9 |
| 11 | --- | --- | --- | 17.6 | 15.9 | 16.8 | 19.8 | 18.3 | 18.9 | 17.8 | 16.2 | 17.0 |
| 12 | --- | --- | --- | 16.6 | 15.5 | 16.1 | 20.5 | 18.9 | 19.7 | 16.5 | 13.8 | 15.5 |
| 13 | --- | --- | --- | 16.0 | 15.2 | 15.4 | 20.0 | 19.1 | 19.5 | 17.8 | 16.0 | 16.9 |
| 14 | --- | --- | --- | 15.8 | 15.0 | 15.4 | 20.0 | 18.9 | 19.5 | 16.8 | 15.2 | 16.1 |
| 15 | --- | --- | --- | 17.0 | 15.2 | 16.0 | 19.5 | 17.7 | 18.5 | 15.5 | 13.8 | 14.8 |
| 16 | --- | --- | --- | 17.2 | 15.6 | 16.5 | 17.7 | 17.1 | 17.3 | 16.7 | 15.5 | 16.1 |
| 17 | --- | --- | --- | 18.4 | 16.1 | 17.3 | 17.8 | 16.6 | 17.2 | 18.0 | 16.6 | 17.3 |
| 18 | --- | --- | --- | 18.4 | 17.1 | 17.8 | 18.7 | 16.8 | 17.7 | 17.9 | 15.4 | 16.6 |
| 19 | --- | --- | --- | 18.2 | 17.7 | 17.9 | 19.7 | 18.3 | 18.9 | 15.4 | 13.5 | 14.2 |
| 20 | --- | --- | --- | 19.4 | 17.6 | 18.5 | 20.8 | 18.8 | 19.7 | 14.4 | 12.6 | 13.5 |
| 21 | --- | --- | --- | 19.5 | 17.4 | 18.6 | 20.6 | 18.5 | 20.0 | 15.2 | 13.1 | 14.2 |
| 22 | --- | --- | --- | 19.8 | 17.9 | 18.9 | 18.5 | 16.7 | 17.6 | 16.5 | 14.4 | 15.4 |
| 23 | --- | --- | --- | 20.2 | 18.7 | 19.4 | 18.4 | 15.9 | 17.2 | 17.3 | 15.9 | 16.5 |
| 24 | --- | --- | --- | 19.6 | 17.4 | 18.9 | 18.1 | 16.8 | 17.7 | 16.8 | 15.4 | 16.1 |
| 25 | --- | --- | --- | 17.5 | 16.5 | 17.1 | 17.2 | 15.0 | 16.2 | 16.7 | 14.6 | 15.8 |
| 26 | --- | --- | --- | 17.6 | 15.3 | 16.5 | 16.7 | 13.8 | 15.5 | 17.4 | 15.9 | 16.7 |
| 27 | --- | --- | --- | 16.8 | 15.4 | 16.2 | 18.6 | 16.4 | 17.5 | 16.0 | 14.1 | 15.3 |
| 28 | --- | --- | --- | 16.9 | 16.6 | 16.7 | 20.6 | 18.4 | 19.5 | 16.1 | 15.6 | 15.8 |
| 29 | --- | --- | --- | 18.7 | 16.6 | 17.6 | 21.4 | 19.5 | 20.4 | 15.8 | 13.5 | 14.9 |
| 30 | 16.7 | 14.6 | 15.7 | 19.5 | 17.6 | 18.7 | 21.4 | 20.2 | 20.7 | 14.5 | 12.5 | 13.5 |
| 31 | --- | --- | --- | 21.3 | 19.3 | 20.3 | 21.1 | 19.6 | 20.7 | --- | --- | --- |
| MONTH | --- | --- | --- | 21.3 | 14.7 | 17.1 | 21.9 | 13.8 | 18.6 | 19.9 | 12.5 | 16.3 |

PAWTUXET RIVER BASIN

01115297 WILBUR HOLLOW BROOK AT OLD PLAINFIELD PIKE NEAR CLAYVILLE, RI

LOCATION.--Lat 41°45'53", long 71°38'10", Providence County, Hydrologic Unit 01090004, on left bank 500 ft downstream from bridge on Old Plainfield Pike, and 2.2 mi southeast of Rockland.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: January 2000 to May 2001, October 2001 to current year.

WATER TEMPERATURE: January 2000 to May 2001, October 2001 to current year.

INSTRUMENTATION.--Specific conductance and water temperature water-quality monitor since January 2000.

REMARKS.--Records fair for specific conductance and water temperature. Missing periods are not estimate.

EXTREMES FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE: Maximum recorded, 184 µS/cm, Sept. 17, 2002; minimum, 35 µS/cm, Dec. 16, 17, 2002

WATER TEMPERATURE: Maximum recorded, 30.1°C, July 4, 2002; minimum, -0.2°C, several days during winter periods in water years 2003 and 2004.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 143 µS/cm, Aug. 5; minimum, 37 µS/cm, Dec. 18.

WATER TEMPERATURE: Maximum recorded, 28.1°C, July 22; minimum, -0.2°C, Jan. 28, 30.

WATER-QUALITY DATA, JANUARY TO SEPTEMBER 2000

SPECIFIC CONDUCTANCE (µCM AT 25°C), OCTOBER 2003 TO SEPTEMBER 2004

| DAY | OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | | |
|-------|---------|-----|------|----------|-----|------|----------|-----|------|---------|-----|------|
| | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
| 1 | 69 | 67 | 68 | 49 | 44 | 46 | 60 | 56 | 58 | 57 | 55 | 56 |
| 2 | 68 | 65 | 66 | 61 | 47 | 54 | 57 | 55 | 56 | 56 | 54 | 55 |
| 3 | 67 | 63 | 64 | 53 | 49 | 50 | 60 | 55 | 57 | 59 | 55 | 57 |
| 4 | 64 | 62 | 63 | 53 | 50 | 52 | 62 | 59 | 60 | 62 | 59 | 60 |
| 5 | 65 | 61 | 62 | 53 | 51 | 52 | 64 | 61 | 62 | 63 | 58 | 60 |
| 6 | 62 | 56 | 59 | 55 | 51 | 53 | 65 | 63 | 64 | 63 | 55 | 59 |
| 7 | 59 | 56 | 57 | 58 | 53 | 54 | 64 | 62 | 64 | 56 | 54 | 55 |
| 8 | 60 | 56 | 58 | 55 | 51 | 53 | 64 | 61 | 62 | 63 | 55 | 58 |
| 9 | 59 | 57 | 58 | 52 | 50 | 50 | 62 | 60 | 61 | 66 | 59 | 63 |
| 10 | 57 | 56 | 57 | 51 | 48 | 50 | 62 | 60 | 61 | 71 | 64 | 67 |
| 11 | 58 | 56 | 57 | 51 | 49 | 50 | 67 | 48 | 60 | 73 | 67 | 70 |
| 12 | 58 | 57 | 58 | 51 | 49 | 50 | 48 | 41 | 43 | 73 | 70 | 71 |
| 13 | 61 | 58 | 59 | 53 | 49 | 51 | 44 | 41 | 42 | 72 | 70 | 71 |
| 14 | 63 | 59 | 61 | 56 | 52 | 54 | 46 | 42 | 44 | 72 | 70 | 71 |
| 15 | 72 | 58 | 64 | 56 | 53 | 55 | 52 | 42 | 47 | 72 | 71 | 71 |
| 16 | 72 | 64 | 68 | 55 | 53 | 54 | 42 | 40 | 41 | 73 | 72 | 73 |
| 17 | 67 | 60 | 63 | 54 | 53 | 53 | 52 | 41 | 43 | 73 | 72 | 73 |
| 18 | 60 | 57 | 59 | 54 | 50 | 53 | 52 | 37 | 41 | 73 | 72 | 73 |
| 19 | 58 | 56 | 57 | 55 | 51 | 54 | 41 | 38 | 39 | 73 | 71 | 72 |
| 20 | 57 | 54 | 55 | 57 | 54 | 56 | 43 | 40 | 41 | 72 | 70 | 71 |
| 21 | 59 | 53 | 55 | 59 | 57 | 58 | 45 | 42 | 44 | 71 | 70 | 70 |
| 22 | 57 | 56 | 56 | 60 | 56 | 58 | 48 | 45 | 46 | 71 | 70 | 71 |
| 23 | 58 | 56 | 57 | 58 | 56 | 57 | 50 | 47 | 48 | 71 | 70 | 71 |
| 24 | 58 | 57 | 57 | 57 | 54 | 56 | 52 | 46 | 49 | 72 | 71 | 71 |
| 25 | 58 | 56 | 57 | 58 | 55 | 56 | 54 | 47 | 50 | 72 | 71 | 72 |
| 26 | 60 | 57 | 58 | 59 | 56 | 57 | 50 | 47 | 48 | 73 | 72 | 73 |
| 27 | 64 | 56 | 59 | 59 | 57 | 58 | 50 | 47 | 49 | 74 | 73 | 74 |
| 28 | 66 | 60 | 63 | 58 | 56 | 57 | 53 | 49 | 51 | 75 | 74 | 75 |
| 29 | 61 | 42 | 53 | 59 | 56 | 58 | 54 | 51 | 52 | 75 | 73 | 74 |
| 30 | 44 | 42 | 43 | 62 | 59 | 60 | 56 | 52 | 54 | 73 | 72 | 73 |
| 31 | 45 | 42 | 44 | --- | --- | --- | 57 | 52 | 55 | 73 | 72 | 72 |
| MONTH | 72 | 42 | 59 | 62 | 44 | 54 | 67 | 37 | 51 | 75 | 54 | 68 |

PAWTUXET RIVER BASIN

01115297 WILBUR HOLLOW BROOK AT OLD PLAINFIELD PIKE NEAR CLAYVILLE, RI--Continued

SPECIFIC CONDUCTANCE ($\mu\text{S}/\text{CM}$ AT 25°C), OCTOBER 2003 TO SEPTEMBER 2004

| DAY | MAX | FEBRUARY | | | MAX | MARCH | | | MAX | APRIL | | | MAX | MAY | | |
|-------|-----|----------|------|----|-----|-------|------|-----|-----|-------|------|----|-----|-----|------|--|
| | | MIN | MEAN | | | MIN | MEAN | | | MIN | MEAN | | | MIN | MEAN | |
| 1 | 72 | 71 | 72 | 65 | 61 | 64 | 66 | 52 | 58 | 60 | 57 | 59 | | | | |
| 2 | 72 | 71 | 72 | 61 | 58 | 59 | 52 | 47 | 48 | 61 | 59 | 60 | | | | |
| 3 | 81 | 71 | 72 | 58 | 53 | 56 | 50 | 47 | 48 | 65 | 60 | 63 | | | | |
| 4 | 77 | 72 | 75 | 55 | 52 | 53 | 51 | 50 | 50 | 66 | 59 | 63 | | | | |
| 5 | 72 | 66 | 70 | 55 | 53 | 54 | 53 | 51 | 52 | 59 | 55 | 57 | | | | |
| 6 | 70 | 65 | 67 | 57 | 54 | 55 | 54 | 52 | 53 | 59 | 55 | 57 | | | | |
| 7 | 71 | 57 | 67 | 57 | 52 | 55 | 56 | 53 | 54 | 61 | 58 | 59 | | | | |
| 8 | 58 | 53 | 55 | 53 | 51 | 52 | 60 | 54 | 56 | 63 | 59 | 61 | | | | |
| 9 | 57 | 53 | 55 | 56 | 53 | 54 | 62 | 58 | 60 | 63 | 61 | 62 | | | | |
| 10 | 60 | 56 | 58 | 58 | 54 | 56 | 64 | 60 | 61 | 65 | 61 | 63 | | | | |
| 11 | 62 | 58 | 60 | 60 | 57 | 58 | 63 | 60 | 62 | 66 | 63 | 64 | | | | |
| 12 | --- | --- | --- | 60 | 59 | 59 | 65 | 62 | 63 | 67 | 62 | 65 | | | | |
| 13 | --- | --- | --- | 61 | 59 | 60 | 67 | 56 | 63 | 69 | 62 | 66 | | | | |
| 14 | 66 | 62 | 64 | 60 | 59 | 59 | 56 | 43 | 45 | 67 | 62 | 64 | | | | |
| 15 | 66 | 62 | 64 | 60 | 58 | 59 | 48 | 40 | 45 | 70 | 64 | 67 | | | | |
| 16 | 69 | 63 | 66 | 61 | 59 | 60 | 50 | 45 | 47 | 75 | 68 | 70 | | | | |
| 17 | 71 | 66 | 69 | 61 | 59 | 60 | 55 | 50 | 53 | 75 | 70 | 71 | | | | |
| 18 | 70 | 69 | 70 | 62 | 59 | 60 | 59 | 55 | 57 | 74 | 68 | 70 | | | | |
| 19 | 73 | 69 | 71 | 62 | 61 | 61 | 63 | 58 | 61 | 74 | 70 | 71 | | | | |
| 20 | 72 | 70 | 71 | 65 | 61 | 63 | 67 | 63 | 65 | 74 | 70 | 72 | | | | |
| 21 | 72 | 69 | 70 | 71 | 63 | 66 | 66 | 55 | 60 | 74 | 70 | 72 | | | | |
| 22 | 73 | 68 | 70 | 66 | 59 | 62 | 58 | 55 | 56 | 73 | 71 | 71 | | | | |
| 23 | 71 | 66 | 69 | 60 | 57 | 59 | 62 | 56 | 59 | 75 | 70 | 73 | | | | |
| 24 | 68 | 65 | 66 | 60 | 58 | 59 | 63 | 59 | 61 | 71 | 66 | 68 | | | | |
| 25 | 69 | 64 | 66 | 61 | 58 | 60 | 62 | 56 | 60 | 70 | 68 | 69 | | | | |
| 26 | 70 | 64 | 67 | 64 | 59 | 62 | 63 | 56 | 59 | 70 | 69 | 70 | | | | |
| 27 | 70 | 65 | 68 | 66 | 62 | 64 | 61 | 51 | 56 | 76 | 69 | 72 | | | | |
| 28 | 70 | 64 | 67 | 65 | 63 | 64 | 54 | 52 | 53 | 74 | 69 | 72 | | | | |
| 29 | 69 | 63 | 67 | 65 | 63 | 64 | 56 | 52 | 53 | 71 | 63 | 68 | | | | |
| 30 | --- | --- | --- | 64 | 62 | 63 | 58 | 53 | 55 | 66 | 63 | 65 | | | | |
| 31 | --- | --- | --- | 63 | 61 | 62 | --- | --- | --- | 66 | 62 | 64 | | | | |
| MONTH | --- | --- | --- | 71 | 51 | 59 | 67 | 40 | 56 | 76 | 55 | 66 | | | | |

| DAY | MAX | JUNE | | | MAX | JULY | | | MAX | AUGUST | | | MAX | SEPTEMBER | | |
|-------|-----|------|------|----|-----|------|------|----|-----|--------|------|-----|-----|-----------|------|--|
| | | MIN | MEAN | | | MIN | MEAN | | | MIN | MEAN | | | MIN | MEAN | |
| 1 | 67 | 63 | 65 | 72 | 66 | 69 | 86 | 76 | 79 | 75 | 69 | 73 | | | | |
| 2 | 70 | 67 | 68 | 72 | 65 | 70 | 91 | 64 | 79 | 76 | 74 | 75 | | | | |
| 3 | 70 | 65 | 67 | 73 | 64 | 71 | 112 | 78 | 96 | 76 | 73 | 75 | | | | |
| 4 | 81 | 65 | 67 | 78 | 65 | 73 | 131 | 68 | 98 | 75 | 72 | 74 | | | | |
| 5 | 79 | 65 | 67 | 77 | 72 | 74 | 143 | 78 | 92 | 73 | 70 | 72 | | | | |
| 6 | 80 | 65 | 67 | 78 | 73 | 75 | 95 | 85 | 91 | 74 | 70 | 72 | | | | |
| 7 | 82 | 66 | 68 | 89 | 73 | 78 | 92 | 81 | 86 | 74 | 71 | 73 | | | | |
| 8 | 83 | 66 | 68 | 80 | 77 | 78 | 83 | 78 | 81 | 74 | 65 | 69 | | | | |
| 9 | 80 | 64 | 69 | 79 | 74 | 77 | 93 | 77 | 79 | 68 | 60 | 62 | | | | |
| 10 | 83 | 70 | 70 | 78 | 72 | 76 | 87 | 76 | 79 | 66 | 61 | 64 | | | | |
| 11 | 72 | 69 | 71 | 79 | 69 | 75 | 83 | 80 | 81 | 65 | 63 | 64 | | | | |
| 12 | 70 | 55 | 64 | 78 | 76 | 77 | 83 | 63 | 80 | 67 | 63 | 65 | | | | |
| 13 | 56 | 54 | 55 | 77 | 76 | 76 | 78 | 73 | 75 | 70 | 66 | 68 | | | | |
| 14 | 57 | 55 | 56 | 77 | 75 | 76 | 81 | 74 | 78 | 74 | 70 | 71 | | | | |
| 15 | 62 | 57 | 60 | 80 | 76 | 77 | 81 | 73 | 77 | 73 | 69 | 70 | | | | |
| 16 | 65 | 57 | 62 | 80 | 78 | 78 | 78 | 66 | 70 | 70 | 69 | 69 | | | | |
| 17 | 67 | 62 | 65 | 80 | 64 | 76 | 67 | 66 | 67 | 72 | 69 | 70 | | | | |
| 18 | 71 | 67 | 70 | 81 | 71 | 78 | 68 | 66 | 67 | 73 | 60 | 66 | | | | |
| 19 | 73 | 68 | 71 | 81 | 78 | 80 | 67 | 65 | 66 | 66 | 46 | 53 | | | | |
| 20 | 76 | 72 | 74 | 82 | 55 | 74 | 68 | 54 | 64 | 51 | 47 | 49 | | | | |
| 21 | 77 | 74 | 75 | 81 | 59 | 74 | 70 | 66 | 67 | 52 | 48 | 49 | | | | |
| 22 | 76 | 72 | 75 | 82 | 53 | 72 | 74 | 67 | 70 | 54 | 49 | 51 | | | | |
| 23 | 87 | 67 | 71 | 81 | 61 | 73 | 73 | 67 | 70 | 56 | 51 | 53 | | | | |
| 24 | 68 | 64 | 67 | 83 | 75 | 80 | 70 | 67 | 68 | 57 | 53 | 54 | | | | |
| 25 | 76 | 66 | 67 | 83 | 80 | 82 | 72 | 66 | 68 | 56 | 53 | 54 | | | | |
| 26 | 76 | 67 | 68 | 84 | 78 | 81 | 72 | 67 | 69 | 55 | 53 | 54 | | | | |
| 27 | 77 | 67 | 69 | 83 | 80 | 81 | 71 | 68 | 69 | 56 | 54 | 55 | | | | |
| 28 | 75 | 68 | 69 | 82 | 79 | 80 | 72 | 57 | 67 | 56 | 52 | 55 | | | | |
| 29 | --- | --- | --- | 82 | 76 | 80 | 72 | 54 | 67 | 62 | 48 | 54 | | | | |
| 30 | 69 | 66 | 68 | 81 | 70 | 77 | 73 | 60 | 69 | 48 | 41 | 44 | | | | |
| 31 | --- | --- | --- | 81 | 63 | 75 | 74 | 66 | 71 | --- | --- | --- | | | | |
| MONTH | --- | --- | --- | 89 | 53 | 76 | 143 | 54 | 75 | 76 | 41 | 63 | | | | |

PAWTUXET RIVER BASIN

01115297 WILBUR HOLLOW BROOK AT OLD PLAINFIELD PIKE NEAR CLAYVILLE, RI--Continued

WATER TEMPERATURE (DEG. C), OCTOBER 2003 TO SEPTEMBER 2004

| DAY | OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | | |
|-------|---------|------|------|----------|------|------|----------|------|------|---------|------|------|
| | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
| 1 | 16.5 | 14.6 | 15.2 | 12.5 | 10.2 | 11.4 | 5.1 | 3.9 | 4.6 | 3.0 | 2.5 | 2.8 |
| 2 | 17.6 | 13.7 | 15.1 | 13.7 | 12.1 | 12.8 | 3.9 | 1.8 | 3.1 | 2.5 | 1.4 | 1.8 |
| 3 | 16.3 | 12.0 | 13.6 | 15.1 | 12.8 | 13.8 | 2.1 | 1.2 | 1.6 | 2.4 | 1.4 | 1.8 |
| 4 | 12.6 | 11.4 | 11.8 | 14.1 | 11.6 | 13.0 | 2.1 | 1.1 | 1.6 | 4.1 | 2.4 | 3.3 |
| 5 | 14.1 | 11.1 | 12.1 | 11.6 | 10.8 | 11.0 | 1.5 | 1.1 | 1.4 | 4.1 | 3.4 | 3.7 |
| 6 | 13.7 | 10.2 | 11.3 | 11.6 | 10.8 | 11.2 | 1.3 | .6 | .9 | 3.4 | 1.8 | 2.7 |
| 7 | 13.8 | 9.2 | 10.8 | 11.9 | 10.6 | 11.2 | .6 | .2 | .4 | 1.8 | .5 | .9 |
| 8 | 15.7 | 9.4 | 12.1 | 10.6 | 7.0 | 9.0 | .4 | .1 | .3 | .9 | .2 | .5 |
| 9 | 15.5 | 11.8 | 13.5 | 7.0 | 4.2 | 5.5 | .4 | .1 | .2 | .8 | .1 | .4 |
| 10 | 13.8 | 12.6 | 13.1 | 4.3 | 3.4 | 3.8 | .5 | .2 | .4 | .7 | .1 | .4 |
| 11 | 13.9 | 11.7 | 12.6 | 3.4 | 2.9 | 3.1 | 1.0 | .1 | .4 | .8 | .1 | .4 |
| 12 | 12.9 | 12.3 | 12.6 | 5.4 | 3.2 | 4.1 | .4 | .0 | .2 | .4 | .2 | .2 |
| 13 | 16.0 | 12.2 | 13.7 | 7.2 | 5.2 | 6.3 | .4 | .0 | .2 | .2 | -.1 | .1 |
| 14 | 14.8 | 11.7 | 13.2 | 6.0 | 3.5 | 4.9 | .1 | -.1 | .0 | .1 | -.1 | .0 |
| 15 | 14.5 | 12.9 | 13.6 | 3.7 | 2.7 | 3.2 | .2 | .0 | .1 | .1 | -.1 | .0 |
| 16 | 13.6 | 11.6 | 12.4 | 2.9 | 2.3 | 2.7 | .4 | .0 | .2 | .1 | .0 | .0 |
| 17 | 13.4 | 10.7 | 11.5 | 3.5 | 2.8 | 3.2 | 1.0 | .1 | .4 | .2 | -.1 | .1 |
| 18 | 11.6 | 10.3 | 10.9 | 4.7 | 3.4 | 4.0 | 1.4 | 1.0 | 1.2 | .1 | .0 | .1 |
| 19 | 10.3 | 8.5 | 9.4 | 6.8 | 4.2 | 5.3 | 1.1 | .6 | .8 | .1 | -.1 | .0 |
| 20 | 10.0 | 7.2 | 8.1 | 8.2 | 6.8 | 7.7 | .9 | .4 | .6 | .1 | -.1 | -.1 |
| 21 | 11.0 | 7.5 | 9.1 | 8.2 | 7.3 | 7.7 | .7 | .2 | .5 | .1 | -.1 | -.1 |
| 22 | 10.0 | 8.6 | 9.4 | 7.5 | 6.4 | 7.0 | .9 | .3 | .6 | .1 | -.1 | .0 |
| 23 | 8.6 | 6.9 | 7.8 | 6.4 | 5.3 | 5.8 | 1.8 | .7 | 1.2 | .0 | -.1 | -.1 |
| 24 | 6.9 | 5.7 | 6.4 | 5.6 | 4.4 | 5.0 | 4.7 | 1.8 | 2.8 | .1 | -.1 | -.1 |
| 25 | 7.3 | 4.9 | 6.0 | 5.6 | 4.5 | 5.1 | 6.2 | 4.7 | 5.5 | .0 | -.1 | -.1 |
| 26 | 9.3 | 6.2 | 7.5 | 4.5 | 3.8 | 4.0 | 5.3 | 3.0 | 3.9 | .1 | -.1 | -.1 |
| 27 | 11.7 | 9.3 | 10.8 | 4.9 | 3.8 | 4.4 | 3.0 | 2.0 | 2.4 | .1 | -.1 | .0 |
| 28 | 12.4 | 11.0 | 11.6 | 7.4 | 4.8 | 5.5 | 2.0 | 1.2 | 1.6 | .0 | -.2 | .0 |
| 29 | 13.1 | 11.5 | 12.4 | 7.8 | 5.9 | 7.2 | 2.0 | 1.2 | 1.6 | .1 | -.1 | .0 |
| 30 | 12.4 | 10.4 | 11.4 | 5.9 | 4.8 | 5.4 | 3.0 | 1.9 | 2.4 | .1 | -.2 | .0 |
| 31 | 10.8 | 9.3 | 10.1 | --- | --- | --- | 3.4 | 2.7 | 3.0 | .1 | .0 | .0 |
| MONTH | 17.6 | 4.9 | 11.3 | 15.1 | 2.3 | 6.8 | 6.2 | -0.1 | 1.4 | 4.1 | -0.2 | 0.6 |

| DAY | FEBRUARY | | | MARCH | | | APRIL | | | MAY | | |
|-------|----------|------|------|-------|-----|------|-------|------|------|------|------|------|
| | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
| 1 | 0.2 | -0.1 | 0.0 | 1.3 | 0.2 | 0.7 | 5.7 | 5.0 | 5.2 | 19.4 | 15.6 | 17.5 |
| 2 | .2 | -.1 | .1 | 1.2 | .2 | .6 | 5.2 | 4.7 | 4.9 | 18.3 | 17.4 | 17.9 |
| 3 | .2 | -.1 | .1 | 1.7 | .3 | .9 | 5.0 | 4.5 | 4.7 | 17.4 | 15.8 | 16.6 |
| 4 | .1 | .0 | .1 | 1.3 | .5 | .9 | 6.4 | 4.8 | 5.5 | 16.2 | 13.5 | 15.0 |
| 5 | .2 | -.1 | .0 | 1.2 | .7 | .9 | 7.2 | 4.9 | 6.0 | 14.9 | 12.4 | 13.9 |
| 6 | .1 | -.1 | .0 | 1.7 | 1.1 | 1.4 | 7.7 | 4.1 | 5.9 | 17.2 | 12.8 | 14.8 |
| 7 | .1 | -.1 | .0 | 3.0 | 1.1 | 2.1 | 7.7 | 5.7 | 6.7 | 20.2 | 15.2 | 17.5 |
| 8 | .3 | -.1 | .0 | 2.7 | 1.7 | 2.2 | 9.2 | 6.2 | 7.8 | 19.4 | 15.8 | 17.3 |
| 9 | .3 | -.1 | .1 | 1.7 | 1.1 | 1.3 | 10.5 | 7.8 | 9.1 | 16.4 | 13.9 | 14.8 |
| 10 | .5 | .0 | .2 | 1.9 | .7 | 1.3 | 11.8 | 8.0 | 9.7 | 17.8 | 12.7 | 15.0 |
| 11 | .5 | .0 | .2 | 2.2 | 1.5 | 1.8 | 10.1 | 8.8 | 9.3 | 21.1 | 15.6 | 18.0 |
| 12 | --- | --- | --- | 3.0 | 1.9 | 2.4 | 10.4 | 8.2 | 9.2 | 23.2 | 18.7 | 20.7 |
| 13 | --- | --- | --- | 3.5 | 2.1 | 2.8 | 9.7 | 7.4 | 8.3 | 22.8 | 20.5 | 21.5 |
| 14 | .8 | .1 | .4 | 3.4 | 2.4 | 3.0 | 9.5 | 7.8 | 9.1 | 22.5 | 18.2 | 19.9 |
| 15 | .6 | .1 | .3 | 4.4 | 2.9 | 3.7 | 9.5 | 8.4 | 9.0 | 24.1 | 18.5 | 21.0 |
| 16 | .7 | .0 | .3 | 4.1 | 2.6 | 3.8 | 11.1 | 7.0 | 8.9 | 21.6 | 19.9 | 20.9 |
| 17 | .7 | .0 | .3 | 2.6 | 1.1 | 1.7 | 12.5 | 8.5 | 10.5 | 22.6 | 18.3 | 19.9 |
| 18 | .4 | .2 | .2 | 1.5 | .9 | 1.2 | 15.7 | 11.3 | 13.2 | 20.5 | 17.9 | 19.0 |
| 19 | .5 | .0 | .3 | 1.4 | 1.0 | 1.2 | 16.9 | 12.8 | 14.9 | 20.3 | 18.4 | 19.2 |
| 20 | .4 | .1 | .2 | 2.6 | .6 | 1.6 | 18.6 | 15.1 | 16.7 | 21.7 | 16.8 | 18.8 |
| 21 | .4 | .1 | .3 | 3.3 | 1.9 | 2.5 | 16.9 | 14.0 | 15.1 | 20.0 | 16.8 | 18.2 |
| 22 | .8 | .1 | .4 | 3.6 | 1.5 | 2.6 | 17.9 | 13.7 | 15.6 | 18.4 | 16.3 | 17.6 |
| 23 | .8 | .0 | .4 | 3.5 | 1.6 | 2.6 | 17.1 | 13.1 | 15.2 | 19.5 | 15.3 | 17.1 |
| 24 | .5 | .0 | .3 | 4.7 | 2.8 | 3.7 | 15.4 | 11.6 | 13.4 | 18.0 | 15.9 | 16.7 |
| 25 | .8 | .0 | .4 | 5.6 | 4.5 | 5.1 | 14.3 | 11.9 | 13.1 | 17.3 | 15.6 | 16.3 |
| 26 | .9 | .0 | .5 | 10.7 | 5.6 | 8.0 | 12.5 | 10.7 | 11.2 | 15.8 | 14.1 | 14.7 |
| 27 | 1.0 | .1 | .5 | 10.7 | 9.1 | 9.8 | 14.4 | 10.4 | 12.1 | 17.5 | 13.6 | 15.1 |
| 28 | 1.2 | .2 | .6 | 9.9 | 7.2 | 8.6 | 15.0 | 12.1 | 13.6 | 16.0 | 15.3 | 15.6 |
| 29 | 1.1 | .2 | .6 | 8.8 | 6.0 | 7.4 | 16.1 | 11.5 | 13.7 | 17.1 | 14.6 | 15.7 |
| 30 | --- | --- | --- | 7.7 | 6.4 | 7.0 | 18.1 | 13.7 | 15.9 | 18.7 | 14.2 | 16.1 |
| 31 | --- | --- | --- | 6.7 | 5.7 | 6.3 | --- | --- | --- | 18.3 | 14.5 | 16.1 |
| MONTH | --- | --- | --- | 10.7 | 0.2 | 3.2 | 18.6 | 4.1 | 10.4 | 24.1 | 12.4 | 17.4 |

PAWTUXET RIVER BASIN

01115297 WILBUR HOLLOW BROOK AT OLD PLAINFIELD PIKE NEAR CLAYVILLE, RI--Continued

WATER TEMPERATURE (DEG. C), OCTOBER 2003 TO SEPTEMBER 2004

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | | | | | | | | | | | |
| 1 | 15.7 | 14.2 | 14.8 | 24.8 | 19.4 | 22.0 | 25.2 | 24.0 | 24.6 | 25.2 | 21.5 | 23.1 |
| 2 | 18.3 | 13.7 | 15.5 | 25.1 | 20.5 | 22.6 | 27.7 | 23.3 | 25.3 | 23.6 | 20.1 | 21.6 |
| 3 | 19.9 | 15.8 | 17.4 | 26.0 | 20.2 | 22.8 | 27.9 | 23.8 | 25.7 | 24.4 | 18.8 | 21.1 |
| 4 | 21.0 | 15.9 | 18.0 | 25.9 | 20.4 | 23.0 | 27.9 | 24.1 | 25.8 | 24.0 | 19.4 | 21.5 |
| 5 | 19.9 | 16.3 | 17.7 | 22.7 | 20.8 | 21.1 | 26.0 | 20.8 | 22.6 | 21.4 | 19.3 | 20.5 |
| 6 | 17.2 | 14.9 | 15.9 | 23.7 | 20.1 | 21.8 | 21.6 | 19.7 | 20.5 | 22.5 | 17.8 | 19.7 |
| 7 | 20.0 | 14.3 | 16.5 | 26.4 | 20.3 | 23.0 | 22.2 | 18.5 | 20.1 | 22.8 | 18.1 | 20.2 |
| 8 | 23.1 | 16.4 | 19.2 | 23.8 | 21.3 | 22.4 | 23.5 | 18.0 | 20.3 | 21.9 | 20.0 | 20.8 |
| 9 | 25.5 | 19.0 | 21.9 | 24.7 | 21.1 | 22.7 | 24.7 | 18.2 | 21.0 | 22.9 | 20.8 | 21.8 |
| 10 | 22.6 | 20.6 | 21.8 | 25.4 | 20.6 | 22.9 | 25.3 | 19.3 | 22.1 | 24.0 | 21.1 | 22.1 |
| 11 | 22.3 | 18.3 | 20.0 | 25.5 | 21.0 | 23.0 | 24.2 | 21.1 | 22.3 | 21.8 | 19.4 | 20.4 |
| 12 | 19.9 | 16.6 | 18.1 | 23.2 | 20.8 | 22.0 | 26.0 | 21.5 | 23.4 | 22.2 | 17.7 | 19.4 |
| 13 | 21.3 | 16.6 | 18.6 | 21.4 | 19.3 | 20.0 | 24.0 | 22.6 | 23.3 | 21.1 | 17.7 | 19.2 |
| 14 | 18.7 | 17.1 | 17.9 | 20.3 | 18.8 | 19.5 | 25.6 | 22.0 | 23.5 | 21.6 | 17.6 | 19.1 |
| 15 | 24.4 | 17.8 | 20.3 | 23.6 | 18.8 | 20.7 | 23.3 | 20.4 | 21.7 | 19.1 | 16.7 | 17.9 |
| 16 | 25.9 | 19.8 | 22.2 | 23.1 | 19.4 | 21.4 | 20.4 | 19.3 | 19.8 | 18.9 | 17.4 | 18.0 |
| 17 | 25.5 | 21.3 | 23.1 | 26.7 | 19.9 | 22.9 | 21.2 | 18.7 | 19.7 | 21.5 | 18.1 | 19.5 |
| 18 | 23.4 | 21.8 | 22.6 | 25.6 | 21.7 | 23.6 | 23.6 | 18.9 | 20.8 | 19.9 | 16.3 | 18.2 |
| 19 | 25.0 | 20.8 | 22.4 | 23.6 | 22.4 | 23.0 | 24.0 | 20.9 | 22.2 | 16.3 | 14.6 | 15.4 |
| 20 | 23.0 | 19.0 | 20.8 | 27.9 | 22.0 | 24.5 | 27.3 | 21.6 | 23.8 | 16.5 | 13.7 | 15.0 |
| 21 | 23.6 | 17.8 | 20.3 | 27.4 | 22.3 | 24.7 | 24.1 | 22.2 | 23.3 | 17.1 | 14.2 | 15.6 |
| 22 | 20.7 | 18.4 | 19.7 | 28.1 | 22.5 | 25.1 | 24.0 | 20.2 | 21.8 | 19.3 | 15.4 | 17.1 |
| 23 | 24.4 | 18.9 | 21.2 | 27.2 | 23.4 | 25.1 | 24.6 | 19.0 | 21.2 | 20.5 | 16.7 | 18.3 |
| 24 | 24.5 | 18.9 | 21.4 | 25.3 | 21.8 | 23.5 | 23.6 | 19.7 | 21.3 | 20.7 | 17.1 | 18.6 |
| 25 | 23.6 | 19.4 | 21.3 | 22.7 | 20.7 | 21.5 | 23.7 | 18.6 | 20.5 | 20.7 | 16.6 | 18.3 |
| 26 | 23.1 | 20.2 | 21.2 | 24.9 | 19.5 | 21.8 | 24.0 | 17.4 | 20.0 | 20.5 | 17.7 | 18.9 |
| 27 | 23.7 | 18.4 | 20.8 | 22.4 | 20.1 | 21.3 | 24.1 | 18.8 | 21.1 | 20.5 | 16.6 | 18.3 |
| 28 | 22.7 | 18.4 | 20.5 | 21.3 | 20.0 | 20.4 | 27.0 | 20.6 | 23.3 | 17.8 | 17.2 | 17.5 |
| 29 | 23.6 | 18.9 | 20.9 | 25.1 | 19.8 | 21.9 | 27.7 | 22.0 | 24.5 | 17.2 | 14.2 | 15.8 |
| 30 | 24.4 | 18.9 | 21.4 | 25.9 | 20.8 | 23.3 | 26.8 | 23.0 | 24.7 | 15.1 | 12.7 | 14.0 |
| 31 | --- | --- | --- | 27.0 | 22.6 | 24.6 | 26.0 | 23.4 | 24.5 | --- | --- | --- |
| MONTH | 25.9 | 13.7 | 19.8 | 28.1 | 18.8 | 22.5 | 27.9 | 17.4 | 22.4 | 25.2 | 12.7 | 18.9 |

PAWTUXET RIVER BASIN

01116000 SOUTH BRANCH PAWTUXET RIVER AT WASHINGTON, RI

LOCATION.--Lat 41° 41' 24", long 71° 33' 59", Kent County, Hydrologic Unit 01090004, on right bank 150 ft downstream from highway bridge at Washington and 0.9 mi upstream from outlet of Tiogue Lake.

DRAINAGE AREA.--62.8 mi².

PERIOD OF RECORD.--Discharge: October 1940 to current year.

Water-quality records: Water years 1955–1956, 1963.

REVISED RECORDS.--WDR-MA-RI-03-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 217.76 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for estimated daily discharge, which are poor. Flow regulated by Flat River Reservoir 2 mi upstream, usable capacity, 250,000,000 ft³, and smaller reservoirs. Prior to May 1972, diversion from Carr Pond for municipal supply of Coventry, Warwick, and West Warwick. Satellite gage-height telemeter at station.

AVERAGE DISCHARGE.--64 years (water years 1941–2004), 131 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,980 ft³/s, June 6, 1982, gage height, 5.30 ft; minimum, 5.3 ft³/s, June 6, 1982; minimum daily discharge, 2.8 ft³/s, Aug. 27, 1944.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1936 reached a discharge of 1,810 ft³/s, by computation of flow over dam just upstream.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 986 ft³/s, Apr. 14, gage height, 3.76 ft; minimum discharge, 30 ft³/s, Aug. 4.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1 | 45 | 295 | 150 | 240 | 109 | 82 | 202 | 209 | 139 | 38 | 32 | 72 |
| 2 | 45 | 230 | 148 | 236 | 108 | 84 | 436 | 197 | 151 | 38 | 31 | 70 |
| 3 | 44 | 193 | 147 | 236 | 103 | 85 | 490 | 207 | 143 | 38 | 31 | 69 |
| 4 | 44 | 168 | 143 | 238 | 112 | 85 | 396 | 266 | 129 | 36 | 31 | 69 |
| 5 | 44 | 155 | 103 | 246 | 104 | 85 | 361 | 276 | 113 | 41 | 85 | 69 |
| 6 | 45 | 157 | 101 | 242 | 113 | 98 | 313 | 242 | 101 | 44 | 83 | 69 |
| 7 | 45 | 157 | 101 | 239 | 138 | 95 | 267 | 214 | 101 | 43 | 82 | 69 |
| 8 | 45 | 148 | 101 | 234 | 122 | 91 | 235 | 177 | 99 | 40 | 68 | 74 |
| 9 | 45 | 137 | 99 | e230 | 115 | 89 | 216 | 134 | 92 | 38 | 55 | 51 |
| 10 | 45 | 131 | 98 | 232 | 113 | 88 | 201 | 148 | 82 | 36 | 47 | 42 |
| 11 | 45 | 135 | 132 | 232 | 112 | 91 | 187 | 152 | 74 | 34 | 42 | 39 |
| 12 | 47 | 161 | 141 | 227 | 110 | 126 | 178 | 148 | 68 | 32 | 39 | 37 |
| 13 | 47 | 165 | 125 | 216 | 109 | 127 | 236 | 139 | 62 | 39 | 105 | 36 |
| 14 | 46 | 161 | 119 | 181 | 109 | 127 | 763 | 129 | 59 | 46 | 130 | 36 |
| 15 | 79 | 157 | 239 | 180 | 108 | 127 | 854 | 126 | 58 | 48 | 266 | 36 |
| 16 | 71 | 155 | 357 | e177 | 119 | 127 | 621 | 118 | 58 | 49 | 258 | 37 |
| 17 | 78 | 155 | 336 | e176 | 138 | 129 | 473 | 113 | 56 | 45 | 191 | 37 |
| 18 | 85 | 154 | 502 | e175 | 138 | 128 | 372 | 110 | 55 | 40 | 98 | 79 |
| 19 | 86 | 153 | 522 | 173 | 137 | 128 | 264 | 111 | 75 | 39 | 89 | 72 |
| 20 | 86 | 156 | 411 | 161 | 135 | 128 | 259 | 107 | 77 | 39 | 84 | 63 |
| 21 | 83 | 154 | 340 | 141 | 136 | 142 | 239 | 102 | 68 | 37 | 83 | 75 |
| 22 | 78 | 153 | 298 | 141 | 136 | 138 | 225 | 100 | 60 | 35 | 87 | 73 |
| 23 | 74 | 153 | 274 | 140 | 135 | 133 | 221 | 94 | 56 | 33 | 81 | 65 |
| 24 | 70 | 153 | 267 | e140 | 135 | 132 | 235 | 94 | 51 | 33 | 74 | 58 |
| 25 | 64 | 153 | 300 | e138 | 133 | 132 | 227 | 92 | 48 | 33 | 73 | 54 |
| 26 | 61 | 151 | 314 | 135 | 127 | 132 | 237 | 98 | 48 | 31 | 73 | 50 |
| 27 | 93 | 150 | 283 | 135 | 84 | 132 | 317 | 125 | 50 | 31 | 73 | 74 |
| 28 | 181 | 150 | 258 | 129 | 80 | 130 | 325 | 153 | 46 | 38 | 73 | 180 |
| 29 | 298 | 155 | 245 | 104 | 80 | 129 | 272 | 195 | 43 | 36 | 71 | 252 |
| 30 | 511 | 152 | 242 | e110 | --- | 129 | 232 | 174 | 41 | 33 | 71 | 268 |
| 31 | 409 | --- | 240 | 112 | --- | 145 | --- | 138 | --- | 33 | 74 | --- |
| TOTAL | 3039 | 4847 | 7136 | 5696 | 3398 | 3594 | 9854 | 4688 | 2303 | 1176 | 2680 | 2275 |
| MEAN | 98.0 | 162 | 230 | 184 | 117 | 116 | 328 | 151 | 76.8 | 37.9 | 86.5 | 75.8 |
| MAX | 511 | 295 | 522 | 246 | 138 | 145 | 854 | 276 | 151 | 49 | 266 | 268 |
| MIN | 44 | 131 | 98 | 104 | 80 | 82 | 178 | 92 | 41 | 31 | 31 | 36 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 2004, BY WATER YEAR (WY)

| | | | | | | | | | | | | |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 72.3 | 104 | 158 | 170 | 177 | 223 | 215 | 150 | 113 | 63.5 | 61.2 | 63.6 |
| MAX | 216 | 354 | 422 | 489 | 327 | 434 | 595 | 294 | 444 | 136 | 168 | 240 |
| (WY) | 1956 | 1956 | 1987 | 1979 | 1970 | 1983 | 1983 | 1948 | 1982 | 1998 | 1979 | 1954 |
| MIN | 28.5 | 28.7 | 34.5 | 35.9 | 45.7 | 69.2 | 68.2 | 55.6 | 39.2 | 26.8 | 13.7 | 25.5 |
| (WY) | 1942 | 1966 | 1966 | 1966 | 1966 | 2002 | 1966 | 1992 | 1957 | 1995 | 2002 | 1995 |

SUMMARY STATISTICS FOR 2003 CALENDAR YEAR FOR 2004 WATER YEAR WATER YEARS 1941 - 2004

| | | | |
|--------------------------|-------|--------|------|
| ANNUAL TOTAL | 59964 | 50686 | |
| ANNUAL MEAN | 164 | 138 | 131 |
| HIGHEST ANNUAL MEAN | | | 202 |
| LOWEST ANNUAL MEAN | | | 56.9 |
| HIGHEST DAILY MEAN | 569 | Mar 31 | 854 |
| LOWEST DAILY MEAN | 34 | Feb 9 | 31 |
| ANNUAL SEVEN-DAY MINIMUM | 37 | Feb 5 | 32 |
| MAXIMUM PEAK FLOW | | | 986 |
| MAXIMUM PEAK STAGE | | | 3.76 |
| INSTANTANEOUS LOW FLOW | | | 30 |
| 10 PERCENT EXCEEDS | | | 258 |
| 50 PERCENT EXCEEDS | 297 | | 114 |
| 90 PERCENT EXCEEDS | 49 | | 41 |

e Estimated

PAWTUXET RIVER BASIN

01116500 PAWTUXET RIVER AT CRANSTON, RI

LOCATION.--Lat 41°45'03", long 71°26'44", Providence County, Hydrologic Unit 01090004, on left bank at Cranston, and 0.7 mi upstream from Pocasset River.

DRAINAGE AREA.--200 mi².

PERIOD OF RECORD.--Discharge: December 1939 to current year.

Water-quality records: Water years 1962-2002.

REVISED RECORDS.--WSP 971: 1940-42. WSP 1381: 1940-41(M). WDR-MA-NH-RI-VT-73-1: 1972 (adjusted monthly and yearly figures only).

GAGE.--Water-stage recorder. Datum of gage is 8.00 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for estimated daily discharge, which are poor. Flow regulated by powerplants and by Scituate Reservoir 13 mi upstream, Flat River Reservoir, and other reservoirs, combined usable capacity, about 6,000,000,000 ft³. Diversion from Scituate Reservoir for municipal supply of Providence, East Providence, North Providence, Cranston, Greenville, Johnston, East Smithfield, Smithfield, Warwick, West Warwick, Coventry, East Greenwich, and West Greenwich. Satellite gage-height telemeter at station.

AVERAGE DISCHARGE.--64 years (water years 1941-2004), 348 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,440 ft³/s, June 7, 1982, gage height, 14.5 ft, from floodmark; minimum daily discharge, 22 ft³/s, Sept. 4, 1944.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,090 ft³/s, Apr. 15, gage height, 11.81 ft, minimum discharge, 78 ft³/s, July 31.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|-------|-------|------|------|-------|-------|------|------|------|------|
| 1 | 102 | 654 | 248 | 536 | 221 | 212 | 1030 | 564 | 270 | 112 | 105 | 192 |
| 2 | 104 | 514 | 246 | 513 | 215 | 225 | 1670 | 488 | 269 | 118 | 102 | 162 |
| 3 | 103 | 415 | 241 | 512 | 236 | 230 | 1650 | 529 | 280 | 119 | 98 | 170 |
| 4 | 100 | 347 | 234 | 526 | 357 | 234 | 1300 | 746 | 228 | 107 | 91 | 151 |
| 5 | 92 | 331 | 206 | 680 | 258 | 221 | 1120 | 719 | 216 | 177 | 619 | 140 |
| 6 | 102 | 352 | 201 | 708 | 336 | 289 | 918 | 634 | 212 | 155 | 331 | 148 |
| 7 | 97 | 325 | 196 | e618 | 637 | 262 | 750 | 543 | 213 | 135 | 248 | 151 |
| 8 | 95 | 298 | 188 | 489 | 370 | 251 | 631 | 459 | 198 | 122 | 205 | 203 |
| 9 | 102 | 267 | 185 | 492 | 298 | 243 | 545 | 359 | 187 | 122 | 168 | 302 |
| 10 | 98 | 249 | 187 | 476 | 283 | 238 | 472 | 357 | 191 | 108 | 141 | 169 |
| 11 | 96 | 242 | 479 | 424 | 270 | 242 | 422 | 349 | 167 | 102 | 134 | 127 |
| 12 | 110 | 293 | 686 | 394 | 271 | 258 | 393 | 330 | 161 | 101 | 130 | 109 |
| 13 | 107 | 342 | 330 | 377 | 264 | 259 | 662 | 302 | 152 | 169 | 530 | 109 |
| 14 | 96 | 306 | 268 | 322 | 260 | 255 | 2120 | 276 | 148 | 175 | 528 | 107 |
| 15 | 440 | 276 | 866 | 321 | 243 | 253 | 2970 | 267 | 143 | 146 | 961 | 116 |
| 16 | 231 | 270 | 771 | 327 | 248 | 254 | 2170 | 224 | 141 | 139 | 901 | 114 |
| 17 | 167 | 272 | 764 | 322 | 272 | 263 | 1450 | 233 | 132 | 127 | 671 | 124 |
| 18 | 184 | 277 | 1270 | 329 | 274 | 257 | 1120 | 208 | 134 | 127 | 397 | 638 |
| 19 | 183 | 263 | 1350 | 321 | 269 | 262 | 890 | 217 | 166 | 142 | 272 | 694 |
| 20 | 178 | 295 | 1250 | 309 | 258 | 253 | 762 | 206 | 161 | 110 | 230 | 281 |
| 21 | 166 | 295 | 1060 | 280 | 256 | 346 | 664 | 199 | 148 | 118 | 262 | 221 |
| 22 | 157 | 275 | 899 | 275 | 268 | 327 | 587 | 185 | 135 | 114 | 328 | 202 |
| 23 | 152 | 266 | 805 | 273 | 274 | 292 | 587 | 192 | 117 | 127 | 240 | 175 |
| 24 | 144 | 268 | 778 | 266 | 272 | 283 | 636 | 196 | 104 | 110 | 217 | 160 |
| 25 | 134 | 255 | 967 | 266 | 263 | 280 | 581 | 193 | 107 | 108 | 179 | 121 |
| 26 | 131 | 248 | 1010 | 259 | 265 | 276 | 657 | 197 | 122 | 111 | 177 | 141 |
| 27 | 242 | 252 | 925 | 236 | 232 | 281 | 951 | 268 | 132 | 104 | 165 | 146 |
| 28 | 510 | 245 | 803 | 231 | 206 | 279 | 1000 | 326 | 123 | 195 | 168 | 324 |
| 29 | 917 | 290 | 715 | 223 | 212 | 271 | 847 | 343 | 109 | 138 | 158 | 1160 |
| 30 | 1070 | 256 | 645 | 222 | --- | 265 | 687 | 305 | 113 | 125 | 165 | 866 |
| 31 | 857 | --- | 588 | 217 | --- | 386 | --- | 255 | --- | 102 | 202 | --- |
| TOTAL | 7267 | 9238 | 19361 | 11744 | 8088 | 8247 | 30242 | 10669 | 4979 | 3965 | 9123 | 7723 |
| MEAN | 234 | 308 | 625 | 379 | 279 | 266 | 1008 | 344 | 166 | 128 | 294 | 257 |
| MAX | 1070 | 654 | 1350 | 708 | 637 | 386 | 2970 | 746 | 280 | 195 | 961 | 1160 |
| MIN | 92 | 242 | 185 | 217 | 206 | 212 | 393 | 185 | 104 | 101 | 91 | 107 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2004, BY WATER YEAR (WY)

| | MEAN | MAX | (WY) | MIN | (WY) |
|------|------|------|------|------|------|
| 1940 | 190 | 667 | 1956 | 70.5 | 1958 |
| 1941 | 280 | 1024 | 1956 | 82.6 | 1966 |
| 1942 | 399 | 1344 | 1973 | 94.0 | 1966 |
| 1943 | 450 | 1238 | 1979 | 100 | 1966 |
| 1944 | 474 | 1085 | 1970 | 143 | 2002 |
| 1945 | 589 | 1291 | 1983 | 183 | 2002 |
| 1946 | 603 | 1788 | 1983 | 140 | 1966 |
| 1947 | 390 | 848 | 1998 | 160 | 1965 |
| 1948 | 287 | 1237 | 1982 | 93.0 | 1957 |
| 1949 | 172 | 442 | 1998 | 74.9 | 1957 |
| 1950 | 175 | 438 | 1955 | 57.5 | 2002 |
| 1951 | 179 | 698 | 1954 | 83.2 | 1981 |

SUMMARY STATISTICS FOR 2003 CALENDAR YEAR FOR 2004 WATER YEAR WATER YEARS 1940 - 2004

| | | | | |
|--------------------------|--------|--------|-----|-------------|
| ANNUAL TOTAL | 134875 | 130646 | | |
| ANNUAL MEAN | 370 | 357 | | |
| HIGHEST ANNUAL MEAN | | | 348 | |
| LOWEST ANNUAL MEAN | | | 595 | 1973 |
| HIGHEST DAILY MEAN | | | 126 | 1966 |
| LOWEST DAILY MEAN | | | 44 | Aug 21 2002 |
| ANNUAL SEVEN-DAY MINIMUM | | | 97 | Oct 5 |
| MAXIMUM PEAK FLOW | | 3090 | | Apr 15 |
| MAXIMUM PEAK STAGE | | 11.81 | | Apr 15 |
| INSTANTANEOUS LOW FLOW | | 78 | | Jul 31 |
| 10 PERCENT EXCEEDS | | 728 | | 740 |
| 50 PERCENT EXCEEDS | | 295 | | 240 |
| 90 PERCENT EXCEEDS | | 131 | | 101 |

e Estimated

POTOWOMUT RIVER BASIN

01117000 HUNT RIVER NEAR EAST GREENWICH, RI

LOCATION.--Lat 41° 38' 28", long 71° 26' 45", Washington County, Hydrologic Unit 01090004, on right bank 45 ft upstream from Old Forge Dam in North Kingstown, 1.5 mi south of East Greenwich, and 2.5 mi upstream from mouth.

DRAINAGE AREA.--22.9 mi².

PERIOD OF RECORD.--Discharge: August 1940 to current year. Prior to October 1977, published as "Potowomut River."

Water-quality records: Water years 1977-81.

REVISED RECORDS.--WSP 1621: 1957-58; 1995.

GAGE.--Water-stage recorder. Datum of gage is 5.42 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Flow affected by diversions for supply of East Greenwich, North Kingstown, Warwick, and Quonset Point (formerly U.S. Naval establishments).

AVERAGE DISCHARGE.--64 years (water years 1941-2004), 46.8 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,020 ft³/s, June 6, 1982, gage height, 3.73 ft, from rating curve extended above 440 ft³/s; maximum gage height of 6.78 ft, Aug. 31, 1954 (backwater from hurricane tidal wave); no flow at times in water years 1948, 1960, 1971, 1975-77, 1983, 1986-87, caused by closing of gate at Old Forge Dam.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1915, about 8.5 ft, Sept. 21, 1938 (backwater from hurricane tidal wave).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 393 ft³/s, Apr. 14, gage height, 2.52 ft; minimum discharge, 6.5, Sept. 15, 16.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|------|------|------|------|------|------|------|------|-------|-------|-------|
| 1 | 13 | 59 | 27 | 57 | 24 | 33 | 243 | 69 | 68 | 14 | 8.9 | 11 |
| 2 | 12 | 47 | 25 | 55 | 24 | 36 | 322 | 68 | 67 | 14 | 8.8 | 9.3 |
| 3 | 12 | 40 | 25 | 55 | 28 | 39 | 194 | 88 | 54 | 13 | 8.5 | 8.7 |
| 4 | 12 | 36 | 22 | 56 | 83 | 38 | 140 | 130 | 47 | 11 | 8.1 | 8.6 |
| 5 | 12 | 36 | 23 | 85 | 51 | 37 | 128 | 105 | 41 | 26 | 72 | 8.1 |
| 6 | 12 | 41 | 25 | 91 | 60 | 54 | 106 | 85 | 41 | 29 | 45 | 7.9 |
| 7 | 12 | 38 | 26 | 71 | 181 | 61 | 91 | 74 | 46 | 21 | 26 | 7.9 |
| 8 | 12 | 34 | 25 | 59 | 118 | 48 | 84 | 64 | 39 | 17 | 18 | 8.2 |
| 9 | 11 | 31 | 25 | 48 | 69 | 43 | 76 | 61 | 34 | 15 | 14 | 11 |
| 10 | 10 | 29 | 25 | 39 | 55 | 38 | 71 | 61 | 30 | 13 | 11 | 11 |
| 11 | 9.9 | 29 | 67 | 36 | 51 | 36 | 66 | 58 | 29 | 11 | 10 | 8.5 |
| 12 | 13 | 31 | 140 | 39 | 45 | 34 | 64 | 53 | 26 | 10 | 9.4 | 8.0 |
| 13 | 17 | 40 | 93 | 41 | 41 | 33 | 129 | 50 | 24 | 22 | 17 | 7.7 |
| 14 | 13 | 40 | 62 | 37 | 39 | 30 | 351 | 47 | 24 | 35 | 32 | 7.1 |
| 15 | 67 | 33 | 232 | 35 | 38 | 29 | 249 | 45 | 25 | 24 | 101 | 6.6 |
| 16 | 44 | 30 | 176 | 33 | 33 | 30 | 166 | 43 | 23 | 19 | 86 | 9.6 |
| 17 | 31 | 29 | 127 | 34 | 31 | 32 | 128 | 41 | 21 | 15 | 49 | 9.2 |
| 18 | 32 | 29 | 210 | 37 | 31 | 32 | 110 | 40 | 21 | 13 | 33 | 63 |
| 19 | 29 | 29 | 158 | 38 | 31 | 32 | 102 | 42 | 51 | 13 | 26 | 98 |
| 20 | 27 | 34 | 117 | 34 | 30 | 32 | 95 | 40 | 35 | 12 | 23 | 43 |
| 21 | 24 | 39 | 95 | 32 | 31 | 70 | 86 | 37 | 25 | 11 | 24 | 27 |
| 22 | 24 | 36 | 83 | 30 | 35 | 74 | 82 | 37 | 23 | 9.9 | 42 | 19 |
| 23 | 21 | 32 | 78 | 29 | 34 | 54 | 84 | 40 | 22 | 9.2 | 27 | 15 |
| 24 | 20 | 30 | 77 | 27 | 33 | 45 | 96 | 57 | 19 | 9.2 | 21 | 12 |
| 25 | 17 | 31 | 106 | 24 | 31 | 42 | 87 | 46 | 18 | 10 | 17 | 11 |
| 26 | 17 | 28 | 94 | 24 | 29 | 40 | 98 | 41 | 19 | 9.1 | 14 | 9.9 |
| 27 | 34 | 27 | 78 | 24 | 29 | 41 | 130 | 70 | 23 | 8.5 | 13 | 9.4 |
| 28 | 67 | 26 | 70 | 27 | 29 | 41 | 107 | 110 | 19 | 12 | 12 | 17 |
| 29 | 129 | 32 | 65 | 27 | 30 | 37 | 86 | 119 | 17 | 14 | 11 | 202 |
| 30 | 136 | 29 | 63 | 26 | --- | 35 | 75 | 72 | 15 | 11 | 11 | 157 |
| 31 | 85 | --- | 60 | 25 | --- | 62 | --- | 54 | --- | 9.6 | 12 | --- |
| TOTAL | 974.9 | 1025 | 2499 | 1275 | 1344 | 1288 | 3846 | 1947 | 946 | 460.5 | 810.7 | 831.7 |
| MEAN | 31.4 | 34.2 | 80.6 | 41.1 | 46.3 | 41.5 | 128 | 62.8 | 31.5 | 14.9 | 26.2 | 27.7 |
| MAX | 136 | 59 | 232 | 91 | 181 | 74 | 351 | 130 | 68 | 35 | 101 | 202 |
| MIN | 9.9 | 26 | 22 | 24 | 24 | 29 | 64 | 37 | 15 | 8.5 | 8.1 | 6.6 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2004, BY WATER YEAR (WY)

| | | | | | | | | | | | | |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 18.8 | 36.3 | 53.4 | 62.4 | 69.8 | 88.6 | 84.8 | 61.5 | 39.3 | 18.4 | 16.1 | 14.3 |
| MAX | 70.1 | 108 | 151 | 186 | 122 | 169 | 230 | 114 | 182 | 56.3 | 65.1 | 73.6 |
| (WY) | 1956 | 1956 | 1987 | 1979 | 1970 | 1983 | 1983 | 1989 | 1982 | 1984 | 1946 | 1954 |
| MIN | 1.76 | 8.05 | 5.53 | 7.19 | 17.5 | 30.0 | 25.2 | 23.8 | 10.8 | 5.23 | 3.06 | 1.59 |
| (WY) | 1969 | 1950 | 1966 | 1966 | 1944 | 1981 | 1966 | 1992 | 1957 | 1994 | 1965 | 1968 |

| SUMMARY STATISTICS | FOR 2003 CALENDAR YEAR | FOR 2004 WATER YEAR | WATER YEARS 1940 - 2004 |
|--------------------------|------------------------|---------------------|-------------------------|
| ANNUAL TOTAL | 22327.9 | 17247.8 | |
| ANNUAL MEAN | 61.2 | 47.1 | 46.8 |
| HIGHEST ANNUAL MEAN | | | 81.5 |
| LOWEST ANNUAL MEAN | | | 17.7 |
| HIGHEST DAILY MEAN | 271 | Aug 8 | 861 |
| LOWEST DAILY MEAN | 9.9 | Oct 11 | 0.00 |
| ANNUAL SEVEN-DAY MINIMUM | 11 | Oct 5 | 8.1 |
| MAXIMUM PEAK FLOW | | | 393 |
| MAXIMUM PEAK STAGE | | 2.52 | Apr 14 |
| INSTANTANEOUS LOW FLOW | | 6.5 | Sep 15 |
| 10 PERCENT EXCEEDS | 116 | | 97 |
| 50 PERCENT EXCEEDS | 49 | | 101 |
| 90 PERCENT EXCEEDS | 18 | | 33 |
| | | | 6.4 |

PAWCATUCK RIVER BASIN

01117350 CHIPUXET RIVER AT WEST KINGSTON, RI

LOCATION.--Lat 41° 28' 56", long 71° 33' 06", Washington County, Hydrologic Unit 01090005, on right bank at West Kingston, at downstream side of bridge on State Highway 138, 1.5 mi west of Kingston, and 3.1 mi upstream from Worden Pond.

DRAINAGE AREA.--9.59 mi².

PERIOD OF RECORD.--Discharge: February 1958 to July 1960 in Rhode Island Water Resources Board Geologic Bulletin 13. September 1973 to current year.

Water-quality records: Water years 1974-83.

REVISED RECORDS.--WDR MA-RI-03-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 89.80 ft above National Geodetic Vertical Datum of 1929 (Rhode Island State Board of Public Roads benchmark).

REMARKS.--Records fair. Diversion upstream for supply of University of Rhode Island.

AVERAGE DISCHARGE.--32 years (water years 1959, 1974-2004), 21.2 ft³/s.

EXTREMES FOR PERIOD OF RECORD SINCE 1973.--Maximum discharge, about 250 ft³/s, June 6, 1982; minimum discharge, 0.47 ft³/s, Nov. 6, 7, 1994. Instantaneous maximum and minimum discharges not available prior to Sept. 14, 1973.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 112 ft³/s, Apr. 2, gage height, 6.47 ft; minimum discharge, 0.92 ft³/s, Sept. 7.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004 DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|------|------|------|------|------|------|------|-------|-------|-------|--------|
| 1 | 8.7 | 42 | 14 | 27 | 14 | 16 | 46 | 39 | 48 | 5.6 | 2.3 | 1.2 |
| 2 | 5.6 | 33 | 13 | 27 | 14 | 16 | 102 | 37 | 42 | 3.7 | 2.6 | 1.1 |
| 3 | 1.6 | 26 | 13 | 26 | 15 | 17 | 103 | 37 | 37 | 3.3 | 15 | 1.2 |
| 4 | 1.7 | 23 | 12 | 26 | 20 | 17 | 84 | 42 | 33 | 3.1 | 14 | 6.2 |
| 5 | 2.0 | 21 | 12 | 29 | 25 | 18 | 69 | 44 | 30 | 5.2 | 16 | 7.9 |
| 6 | 3.0 | 22 | 14 | 31 | 30 | 21 | 57 | 42 | 27 | 5.4 | 16 | 1.6 |
| 7 | 4.1 | 23 | 16 | 31 | 50 | 26 | 49 | 39 | 24 | 3.0 | 14 | 0.96 |
| 8 | 6.4 | 23 | 16 | 29 | 65 | 29 | 44 | 35 | 25 | 2.6 | 13 | 1.0 |
| 9 | 9.7 | 21 | 15 | 26 | 57 | 28 | 41 | 33 | 25 | 2.0 | 12 | 1.1 |
| 10 | 9.5 | 19 | 14 | 23 | 44 | 25 | 37 | 32 | 24 | 4.4 | 10 | 1.1 |
| 11 | 8.8 | 18 | 17 | 22 | 36 | 23 | 36 | 31 | 21 | 5.3 | 8.9 | 5.9 |
| 12 | 6.8 | 18 | 32 | 21 | 30 | 21 | 34 | 29 | 18 | 2.0 | 6.4 | 38 |
| 13 | 7.2 | 18 | 41 | 21 | 27 | 20 | 42 | 26 | 16 | 2.4 | 6.7 | 28 |
| 14 | 5.4 | 17 | 37 | 20 | 25 | 19 | 84 | 25 | 16 | 3.4 | 7.9 | 18 |
| 15 | 8.8 | 16 | 59 | 19 | 23 | 18 | 105 | 24 | 17 | 4.5 | 16 | 11 |
| 16 | 16 | 16 | 86 | 19 | 21 | 17 | 91 | 22 | 17 | 7.3 | 21 | 13 |
| 17 | 20 | 16 | 86 | 19 | 20 | 18 | 73 | 18 | 17 | 7.2 | 22 | 10 |
| 18 | 29 | 15 | 75 | 19 | 19 | 18 | 61 | 16 | 17 | 6.4 | 21 | 15 |
| 19 | 25 | 16 | 69 | 19 | 19 | 18 | 53 | 15 | 17 | 6.2 | 18 | 22 |
| 20 | 20 | 17 | 59 | 19 | 18 | 18 | 48 | 16 | 15 | 4.7 | 16 | 23 |
| 21 | 18 | 17 | 48 | 18 | 18 | 21 | 45 | 17 | 13 | 4.4 | 16 | 19 |
| 22 | 17 | 18 | 41 | 17 | 18 | 26 | 43 | 20 | 8.9 | 4.4 | 17 | 15 |
| 23 | 15 | 17 | 37 | 16 | 18 | 28 | 42 | 21 | 6.6 | 2.9 | 16 | 13 |
| 24 | 13 | 16 | 35 | 16 | 17 | 26 | 42 | 20 | 5.2 | 1.7 | 14 | 11 |
| 25 | 12 | 15 | 38 | 16 | 17 | 24 | 42 | 20 | 4.8 | 1.9 | 12 | 9.2 |
| 26 | 12 | 14 | 38 | 15 | 17 | 23 | 42 | 20 | 6.1 | 1.5 | 10 | 5.3 |
| 27 | 14 | 14 | 37 | 14 | 16 | 22 | 46 | 22 | 16 | 1.1 | 8.8 | 2.2 |
| 28 | 17 | 14 | 34 | 15 | 16 | 21 | 48 | 25 | 11 | 1.6 | 6.8 | 2.0 |
| 29 | 30 | 15 | 32 | 15 | 16 | 20 | 44 | 28 | 8.0 | 2.3 | 4.5 | 16 |
| 30 | 55 | 15 | 30 | 15 | --- | 19 | 41 | 28 | 6.4 | 2.6 | 4.2 | 41 |
| 31 | 53 | --- | 29 | 14 | --- | 23 | --- | 31 | --- | 2.5 | 2.5 | --- |
| TOTAL | 455.3 | 575 | 1099 | 644 | 725 | 656 | 1694 | 854 | 572.0 | 114.6 | 370.6 | 340.96 |
| MEAN | 14.7 | 19.2 | 35.5 | 20.8 | 25.0 | 21.2 | 56.5 | 27.5 | 19.1 | 3.70 | 12.0 | 11.4 |
| MAX | 55 | 42 | 86 | 31 | 65 | 29 | 105 | 44 | 48 | 7.3 | 22 | 41 |
| MIN | 1.6 | 14 | 12 | 14 | 14 | 16 | 34 | 15 | 4.8 | 1.1 | 2.3 | 0.96 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1959 - 2004, BY WATER YEAR (WY)

| | | | | | | | | | | | | |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 9.33 | 14.6 | 22.0 | 26.9 | 28.7 | 35.8 | 36.1 | 27.2 | 21.6 | 12.6 | 11.1 | 9.29 |
| MAX | 29.1 | 43.4 | 59.4 | 64.2 | 48.4 | 64.0 | 85.4 | 47.6 | 70.4 | 35.3 | 32.6 | 32.4 |
| (WY) | 1990 | 1990 | 1987 | 1979 | 1998 | 1983 | 1983 | 1998 | 1982 | 1982 | 2003 | 1985 |
| MIN | 2.64 | 3.66 | 5.11 | 3.54 | 8.50 | 9.14 | 12.7 | 11.5 | 7.89 | 3.70 | 1.65 | 1.50 |
| (WY) | 2002 | 2002 | 1981 | 1981 | 2002 | 1981 | 1985 | 1981 | 1976 | 2004 | 1993 | 1993 |

SUMMARY STATISTICS FOR 2003 CALENDAR YEAR FOR 2004 WATER YEAR ^aWATER YEARS 1959 - 2004

| | | | | | | | | | | | | |
|--------------------------|---------|---------|--|-----|--------|--|------|--------|--|------|-------|------|
| ANNUAL TOTAL | 10754.0 | 8100.46 | | | | | | | | | | |
| ANNUAL MEAN | 29.5 | 22.1 | | | | | | | | 21.2 | | |
| HIGHEST ANNUAL MEAN | | | | | | | | | | 32.8 | | 1984 |
| LOWEST ANNUAL MEAN | | | | | | | | | | 6.89 | | 1981 |
| HIGHEST DAILY MEAN | | | | 111 | Aug 10 | | 105 | Apr 15 | | 235 | Jun 6 | 1982 |
| LOWEST DAILY MEAN | | | | 1.6 | Oct 3 | | 0.96 | Sep 7 | | 0.51 | Nov 6 | 1994 |
| ANNUAL SEVEN-DAY MINIMUM | | | | 3.5 | Oct 2 | | 1.8 | Jul 24 | | 0.57 | Nov 3 | 1994 |
| MAXIMUM PEAK FLOW | | | | | | | 112 | Apr 2 | | 250 | Jun 6 | 1982 |
| MAXIMUM PEAK STAGE | | | | | | | 6.47 | Apr 2 | | 6.92 | Apr 1 | 1997 |
| INSTANTANEOUS LOW FLOW | | | | | | | 0.92 | Sep 7 | | 0.47 | Nov 6 | 1994 |
| 10 PERCENT EXCEEDS | | | | 53 | | | 42 | | | 43 | | |
| 50 PERCENT EXCEEDS | | | | 26 | | | 18 | | | 17 | | |
| 90 PERCENT EXCEEDS | | | | 11 | | | 4.2 | | | 5.2 | | |

^a Years of operation not continuous; see Period of Record for actual years of operation.

PAWCATUCK RIVER BASIN

01173545 QUEEN RIVER, 1,400 FT UPSTREAM OF WILLIAM REYNOLDS ROAD, AT EXETER, RI

LOCATION.--Lat 41° 33' 57", long 71° 32' 51", Washington County, Hydrologic Unit 01090005, on left bank 1,400 ft upstream of William Reynolds Road, 0.7 mi upstream from Fisherville Brook, and 0.9 mi south of Exeter.

DRAINAGE AREA.--3.78 mi².

PERIOD OF RECORD.--Discharge: October 1999 to December 2001, July 2002 to December 2004 (discontinued).

REVISED RECORDS.--WDR MA-RI-00-1: (M); WDR MA-RI-03-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 155 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good except those greater than 70 ft³/s which are fair. Flow occasionally affected by upstream withdrawals.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 277 ft³/s, Mar. 22, 2001, gage height, 3.55 ft, minimum discharge, no flow (upstream withdrawals), Nov. 13, 2001, Aug. 26, 27, 28, 2002.

EXTREMES FOR PERIOD OCTOBER 2003 TO DECEMBER 2004.--Maximum discharge, 81 ft³/s, Apr. 14, gage height, 2.90 ft, minimum discharge, 0.30 ft³/s, July 27.

**DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES**

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|-------|-------|-------|-------|------|-------|-------|-------|--------|--------|
| 1 | 2.4 | 7.9 | 5.0 | 10 | 4.8 | 6.0 | 52 | 11 | 9.3 | 1.6 | 0.93 | 1.7 |
| 2 | 2.2 | 6.8 | 4.7 | 10 | 4.6 | 6.3 | 47 | 12 | 9.3 | 1.5 | 1.2 | 1.2 |
| 3 | 2.2 | 6.6 | 4.4 | 10 | 5.4 | 6.4 | 26 | 16 | 7.4 | 1.5 | 0.82 | 1.2 |
| 4 | 2.3 | 6.0 | 4.3 | 10 | 12 | 6.4 | 23 | 23 | 6.5 | 0.83 | 0.83 | 1.1 |
| 5 | 2.3 | 6.8 | 4.6 | 15 | 7.2 | 6.4 | 22 | 15 | 5.8 | 4.2 | 7.9 | 0.45 |
| 6 | 2.0 | 7.8 | 5.4 | 14 | 12 | 10 | 19 | 13 | 6.0 | 4.1 | 4.7 | 0.93 |
| 7 | 1.9 | 6.8 | 5.0 | 11 | 23 | 9.2 | 17 | 12 | 6.8 | 2.7 | 2.6 | 0.96 |
| 8 | 1.7 | 6.0 | 4.8 | 9.2 | 11 | 7.7 | 16 | 11 | 5.7 | 2.1 | 1.8 | 1.1 |
| 9 | 1.7 | 5.6 | 4.6 | 8.3 | 8.4 | 7.1 | 15 | 11 | 4.8 | 1.6 | 1.4 | 1.9 |
| 10 | 2.2 | 5.3 | 4.7 | 7.3 | 8.1 | 6.8 | 14 | 10 | 4.5 | 1.6 | 0.72 | 1.6 |
| 11 | 1.8 | 5.4 | 17 | 6.9 | 7.8 | 6.3 | 13 | 9.7 | 4.0 | 1.3 | 1.4 | 1.2 |
| 12 | 2.6 | 6.0 | 21 | 7.4 | 7.0 | 6.1 | 12 | 8.9 | 3.9 | 1.3 | 1.3 | 0.97 |
| 13 | 2.6 | 7.3 | 12 | 7.6 | 6.6 | 5.8 | 31 | 8.2 | 3.0 | 3.1 | 2.3 | 0.87 |
| 14 | 2.4 | 6.3 | 10 | 7.0 | 6.5 | 5.5 | 59 | 7.6 | 3.8 | 4.4 | 4.0 | 0.68 |
| 15 | 8.8 | 5.8 | 35 | 6.6 | 6.3 | 5.5 | 32 | 7.5 | 4.2 | 3.1 | 14 | 0.34 |
| 16 | 5.7 | 5.6 | 19 | 6.3 | 5.7 | 5.7 | 21 | 7.1 | 3.4 | 2.3 | 9.1 | 1.1 |
| 17 | 4.5 | 5.3 | 19 | 6.1 | 5.4 | 5.8 | 18 | 6.9 | 3.1 | 1.9 | 5.8 | 1.3 |
| 18 | 4.6 | 5.3 | 35 | 6.6 | 5.4 | 5.5 | 18 | 6.9 | 3.8 | 1.6 | 4.4 | 12 |
| 19 | 4.2 | 5.2 | 21 | 6.4 | 5.4 | 5.7 | 17 | 7.4 | 5.3 | 1.7 | 3.4 | 11 |
| 20 | 3.9 | 6.4 | 18 | 6.1 | 5.3 | 5.6 | 16 | 6.7 | 4.2 | 1.6 | 3.0 | 4.2 |
| 21 | 3.6 | 6.5 | 15 | 5.9 | 5.6 | 13 | 15 | 6.1 | 3.4 | 1.1 | 3.8 | 3.0 |
| 22 | 3.8 | 5.6 | 14 | 5.7 | 6.2 | 11 | 14 | 6.1 | 3.6 | 0.93 | 6.8 | 2.4 |
| 23 | 3.5 | 5.2 | 14 | 5.6 | 6.1 | 8.5 | 14 | 7.2 | 3.4 | 0.94 | 4.0 | 1.8 |
| 24 | 3.2 | 5.0 | 15 | 5.4 | 5.8 | 7.9 | 16 | 9.7 | 2.5 | 1.2 | 2.7 | 1.6 |
| 25 | 2.8 | 5.6 | 19 | 5.0 | 5.4 | 7.9 | 14 | 7.2 | 2.5 | 1.4 | 2.2 | 1.6 |
| 26 | 3.4 | 5.2 | 15 | 4.8 | 5.3 | 7.4 | 17 | 6.3 | 2.4 | 1.1 | 1.9 | 1.7 |
| 27 | 6.8 | 5.0 | 13 | 4.9 | 5.2 | 7.9 | 21 | 10 | 3.1 | 0.33 | 1.8 | 1.6 |
| 28 | 11 | 5.0 | 12 | 5.3 | 5.2 | 7.5 | 16 | 13 | 1.8 | 1.5 | 1.8 | 2.7 |
| 29 | 24 | 5.9 | 12 | 5.1 | 5.6 | 6.8 | 13 | 13 | 2.3 | 1.8 | 1.1 | 30 |
| 30 | 18 | 5.3 | 12 | 4.9 | --- | 6.6 | 12 | 8.3 | 1.7 | 1.4 | 1.5 | 14 |
| 31 | 10 | --- | 11 | 4.8 | --- | 14 | --- | 6.8 | --- | 1.2 | 1.8 | --- |
| TOTAL | 152.1 | 178.5 | 406.5 | 229.2 | 208.3 | 228.3 | 640 | 304.6 | 131.5 | 56.93 | 101.00 | 106.20 |
| MEAN | 4.91 | 5.95 | 13.1 | 7.39 | 7.18 | 7.36 | 21.3 | 9.83 | 4.38 | 1.84 | 3.26 | 3.54 |
| MAX | 24 | 7.9 | 35 | 15 | 23 | 14 | 59 | 23 | 9.3 | 4.4 | 14 | 30 |
| MIN | 1.7 | 5.0 | 4.3 | 4.8 | 4.6 | 5.5 | 12 | 6.1 | 1.7 | 0.33 | 0.72 | 0.34 |
| CFSM | 1.30 | 1.57 | 3.47 | 1.96 | 1.90 | 1.95 | 5.64 | 2.60 | 1.16 | 0.49 | 0.86 | 0.94 |
| IN. | 1.50 | 1.76 | 4.00 | 2.26 | 2.05 | 2.25 | 6.30 | 3.00 | 1.29 | 0.56 | 0.99 | 1.05 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2004, BY WATER YEAR (WY)

| | 2000 | 2001 | 2002 | 2003 | 2004 | 2000 | 2001 | 2002 | 2003 | 2004 | | |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 2.90 | 4.65 | 9.85 | 8.43 | 8.80 | 16.8 | 18.8 | 9.69 | 9.87 | 3.28 | 3.21 | 2.49 |
| MAX | 4.91 | 7.10 | 13.1 | 12.2 | 10.2 | 26.9 | 21.3 | 11.5 | 13.5 | 5.46 | 7.45 | 4.03 |
| (WY) | 2004 | 2003 | 2004 | 2003 | 2000 | 2001 | 2004 | 2000 | 2001 | 2003 | 2003 | 2003 |
| MIN | 1.18 | 0.76 | 5.97 | 6.66 | 7.18 | 7.36 | 17.5 | 7.72 | 4.38 | 1.84 | 0.40 | 0.93 |
| (WY) | 2001 | 2002 | 2000 | 2001 | 2004 | 2004 | 2003 | 2001 | 2004 | 2004 | 2002 | 2002 |

SUMMARY STATISTICS

| | FOR 2003 CALENDAR YEAR | FOR 2004 WATER YEAR | WATER YEARS 2000 - 2004 |
|--------------------------|------------------------|---------------------|-------------------------|
| ANNUAL TOTAL | 3564.0 | 2743.13 | |
| ANNUAL MEAN | 9.76 | 7.49 | 8.42 |
| HIGHEST ANNUAL MEAN | | | 9.63 |
| LOWEST ANNUAL MEAN | | | 7.49 |
| HIGHEST DAILY MEAN | 41 | Mar 30 | 126 |
| LOWEST DAILY MEAN | 1.7 | Oct 8 | 0.04 |
| ANNUAL SEVEN-DAY MINIMUM | 1.9 | Oct 5 | 0.09 |
| MAXIMUM PEAK FLOW | | | 81 |
| MAXIMUM PEAK STAGE | | | 2.90 |
| INSTANTANEOUS LOW FLOW | | | 0.30 |
| ANNUAL RUNOFF (CFSM) | 2.58 | 1.98 | 2.23 |
| ANNUAL RUNOFF (INCHES) | 35.07 | 27.00 | 30.27 |
| 10 PERCENT EXCEEDS | 19 | 15 | 17 |
| 50 PERCENT EXCEEDS | 7.5 | 5.7 | 5.9 |
| 90 PERCENT EXCEEDS | 3.2 | 1.5 | 1.6 |

^a Years of operation not continuous; see Period of Record for actual years of operation.

PAWCATUCK RIVER BASIN

011173545 QUEEN RIVER, 1,400 FT UPSTREAM OF WILLIAM REYNOLDS ROAD, AT EXETER, RI--Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1 | 7.5 | 4.0 | 24 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 2 | 5.7 | 3.6 | 25 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 3 | 5.9 | 3.7 | 15 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 4 | 4.8 | 4.1 | 13 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 5 | 4.2 | 12 | 12 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 6 | 3.8 | 7.5 | 11 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 7 | 3.7 | 5.7 | 16 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 8 | 3.4 | 5.1 | 28 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 9 | 3.4 | 4.6 | 17 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 10 | 3.3 | 4.4 | 21 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 11 | 3.2 | 4.3 | 28 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 12 | 2.9 | 4.9 | 19 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 13 | 2.7 | 11 | 17 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 14 | 2.9 | 8.0 | e15 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 15 | 3.4 | 6.4 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 16 | 9.4 | 6.4 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 17 | 7.1 | 6.2 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 18 | 5.0 | 5.8 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 19 | 8.5 | 5.6 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 20 | 9.1 | 5.2 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 21 | 6.1 | 6.3 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 22 | 5.1 | 6.0 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 23 | 4.8 | 5.3 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 24 | 4.5 | 5.4 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 25 | 4.4 | 12 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 26 | 4.2 | 13 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 27 | 4.1 | 8.7 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 28 | 4.0 | 9.6 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 29 | 3.9 | 19 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 30 | 4.0 | 12 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 31 | 4.1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| TOTAL | 149.1 | 215.8 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| MEAN | 4.81 | 7.19 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| MAX | 9.4 | 19 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| MIN | 2.7 | 3.6 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| CFSM | 1.27 | 1.90 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| IN. | 1.47 | 2.12 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2005, BY WATER YEAR (WY)

| | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 3.22 | 5.07 | 9.85 | 8.43 | 8.80 | 16.8 | 18.8 | 9.69 | 9.87 | 3.28 | 3.21 | 2.49 |
| MAX | 4.91 | 7.19 | 13.1 | 12.2 | 10.2 | 26.9 | 21.3 | 11.5 | 13.5 | 5.46 | 7.45 | 4.03 |
| (WY) | 2004 | 2005 | 2004 | 2003 | 2000 | 2001 | 2004 | 2000 | 2001 | 2003 | 2003 | 2003 |
| MIN | 1.18 | 0.76 | 5.97 | 6.66 | 7.18 | 7.36 | 17.5 | 7.72 | 4.38 | 1.84 | 0.40 | 0.93 |
| (WY) | 2001 | 2002 | 2000 | 2001 | 2004 | 2004 | 2003 | 2001 | 2004 | 2004 | 2002 | 2002 |

SUMMARY STATISTICS

^aWATER YEARS 2000 - 2005

| | |
|--------------------------|-------|
| ANNUAL MEAN | 8.42 |
| HIGHEST ANNUAL MEAN | 9.63 |
| LOWEST ANNUAL MEAN | 7.49 |
| HIGHEST DAILY MEAN | 126 |
| LOWEST DAILY MEAN | 0.04 |
| ANNUAL SEVEN-DAY MINIMUM | 0.09 |
| MAXIMUM PEAK FLOW | 277 |
| MAXIMUM PEAK STAGE | 3.55 |
| INSTANTANEOUS LOW FLOW | 0.00 |
| ANNUAL RUNOFF (CFSM) | 2.23 |
| ANNUAL RUNOFF (INCHES) | 30.27 |
| 10 PERCENT EXCEEDS | 17 |
| 50 PERCENT EXCEEDS | 5.9 |
| 90 PERCENT EXCEEDS | 1.6 |

^a Years of operation not continuous; see Period of Record for actual years of operation.

e Estimated

PAWCATUCK RIVER BASIN

413550071342901 CLIMATOLOGICAL STATION NEAR EXETER, RI

LOCATION.--Lat 41° 35'50", long 71° 34'29", Washington County, Hydrologic Unit 01090005, 0.6 mi north of Fisherville Brook bridge on Pardon Joslin Road, 2.3 mi northwest of Exeter.

PERIOD OF RECORD.--

Air Temperature: October 2002 to December 2004 (discontinued).

Precipitation: October 2002 to December 2004 (discontinued).

GAGE.--Air temperature and precipitation recorder. Datum of gage is 265 ft above National Geodetic Vertical Datum of 1929 (from topographic map).

REMARKS.--Air temperature records good. Precipitation records good except those for the period December through March, which are fair. Extremes for period of record are for those values reported.

EXTREMES FOR THE PERIOD OCTOBER 2002 TO SEPTEMBER 2003.--

Air Temperature: Maximum recorded, 33.9 °C, June 25; minimum, -24.6°C, Feb. 14.

Precipitation: Maximum daily total, 1.80 in., Aug. 8; minimum, 0.00 in., many days during the year.

TEMPERATURE, AIR, DEGREES CELSIUS WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|---------|------|------|----------|------|------|----------|-------|------|---------|-------|-------|
| | OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | | |
| 1 | 17.8 | 2.2 | 9.4 | 24.2 | 12.3 | 16.8 | 10.5 | -1.1 | 6.0 | 5.9 | -2.2 | 3.0 |
| 2 | 16.9 | 3.7 | 10.4 | 19.8 | 11.9 | 14.8 | 1.5 | -8.8 | -2.5 | 2.3 | -4.3 | -0.5 |
| 3 | 14.3 | .3 | 6.1 | 25.5 | 11.9 | 17.2 | -2.1 | -10.2 | -6.8 | 9.3 | 1.0 | 5.1 |
| 4 | 16.0 | .2 | 8.8 | 13.0 | 6.2 | 9.3 | 4.9 | -8.4 | -2.7 | 10.0 | 3.2 | 7.2 |
| 5 | 14.5 | 1.6 | 9.0 | 15.9 | 6.2 | 11.0 | -1.8 | -8.8 | -4.6 | 3.2 | .8 | 1.7 |
| 6 | 14.8 | -1.1 | 5.7 | 16.3 | 9.9 | 13.7 | -.7 | -4.1 | -2.6 | 2.1 | -6.7 | -0.5 |
| 7 | 16.3 | -2.0 | 6.7 | 13.7 | 3.5 | 9.1 | -1.1 | -4.2 | -3.1 | -5.6 | -9.3 | -7.5 |
| 8 | 21.6 | 4.1 | 14.9 | 6.6 | -5.2 | 2.9 | 2.3 | -9.5 | -3.3 | -5.5 | -11.6 | -8.7 |
| 9 | 23.6 | 10.0 | 16.9 | 4.3 | -9.4 | -2.9 | 4.1 | -12.8 | -4.3 | -10.7 | -17.3 | -13.8 |
| 10 | 17.4 | 9.7 | 13.1 | 8.5 | -8.3 | -1.3 | 6.0 | -1.8 | 2.4 | -10.6 | -19.6 | -15.6 |
| 11 | 18.7 | 10.1 | 13.2 | 10.8 | -6.5 | 2.7 | 11.6 | 3.8 | 8.6 | -3.5 | -18.8 | -10.8 |
| 12 | 14.6 | 12.2 | 13.4 | 12.8 | 7.3 | 10.5 | 5.0 | -2.4 | 1.9 | .5 | -4.3 | -1.9 |
| 13 | 20.7 | 6.3 | 14.5 | 14.6 | 3.3 | 10.1 | -.6 | -7.5 | -3.7 | 4.7 | -11.1 | -2.3 |
| 14 | 17.3 | 3.2 | 11.2 | 4.6 | .3 | 2.4 | 4.2 | -7.8 | -4.2 | -11.1 | -18.6 | -15.0 |
| 15 | 17.2 | 10.2 | 15.2 | 6.0 | -.9 | 1.9 | 4.9 | -1.8 | 1.3 | -11.7 | -21.5 | -16.2 |
| 16 | 16.6 | 3.1 | 9.7 | 7.6 | -5.6 | 2.2 | 6.6 | -5.0 | -.5 | -11.3 | -22.2 | -16.5 |
| 17 | 14.6 | -.4 | 7.5 | 6.3 | 2.2 | 4.1 | 12.9 | -2.9 | 8.6 | 1.5 | -12.2 | -5.2 |
| 18 | 11.8 | -.8 | 6.6 | 12.2 | -1.0 | 4.7 | 4.2 | -.6 | 1.4 | 1.0 | -3.7 | -0.6 |
| 19 | 5.4 | -.9 | 2.2 | 16.5 | 3.0 | 12.6 | 3.6 | -3.9 | -.7 | -3.7 | -9.2 | -6.5 |
| 20 | 12.3 | -3.1 | 3.9 | 16.9 | 5.9 | 10.5 | 4.2 | -7.2 | -1.9 | -5.2 | -12.4 | -8.3 |
| 21 | 18.9 | 3.4 | 14.8 | 13.4 | 1.0 | 6.9 | 2.5 | -7.1 | -1.7 | -2.3 | -14.2 | -8.4 |
| 22 | 11.7 | 3.6 | 6.8 | 13.6 | -1.3 | 4.1 | 12.0 | -1.3 | 4.6 | 1.9 | -16.3 | -4.4 |
| 23 | 5.0 | -1.0 | 2.6 | 11.9 | -2.2 | 2.8 | 12.0 | .4 | 6.8 | -5.7 | -12.6 | -9.6 |
| 24 | 7.3 | -3.4 | 1.8 | 10.1 | -2.9 | 4.3 | 14.8 | 7.0 | 12.1 | -7.7 | -15.6 | -11.7 |
| 25 | 12.7 | -4.8 | 4.3 | 10.2 | -3.8 | 4.0 | 10.8 | .5 | 6.7 | -8.6 | -22.8 | -14.8 |
| 26 | 16.6 | 7.4 | 14.7 | 8.1 | -5.3 | 1.7 | 3.5 | -1.1 | 1.5 | -7.9 | -15.2 | -11.0 |
| 27 | 18.2 | 13.2 | 16.4 | 12.9 | -.9 | 5.9 | 9.7 | -3.9 | 2.4 | -5.0 | -9.8 | -7.2 |
| 28 | 15.8 | 7.5 | 11.3 | 16.8 | 5.3 | 10.6 | 11.8 | -6.3 | .8 | -3.2 | -8.0 | -5.3 |
| 29 | 19.9 | 10.0 | 13.7 | 17.0 | 1.9 | 7.6 | 14.1 | -1.5 | 6.1 | -3.8 | -9.7 | -6.0 |
| 30 | 14.9 | 1.9 | 8.3 | 8.9 | -1.8 | 3.5 | 11.9 | 4.5 | 7.5 | -4.0 | -11.8 | -8.6 |
| 31 | 17.7 | .5 | 9.6 | --- | --- | --- | 9.4 | 2.6 | 4.9 | -3.1 | -10.8 | -7.2 |
| MONTH | 23.6 | -4.8 | 9.8 | 25.5 | -9.4 | 6.8 | 14.8 | -12.8 | 1.3 | 10.0 | -22.8 | -6.7 |

PAWCATUCK RIVER BASIN

413550071342901 CLIMATOLOGICAL STATION NEAR EXETER, RI--Continued

TEMPERATURE, AIR, DEGREES CELSIUS WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

| DAY | OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | | |
|-------|---------|------|------|----------|------|------|----------|-------|------|---------|-----|------|
| | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
| 1 | 21.4 | 9.7 | 14.7 | 14.6 | 1.7 | 10.3 | 13.4 | 2.8 | 9.2 | --- | --- | --- |
| 2 | 19.9 | 9.0 | 14.8 | 13.6 | -.8 | 6.9 | 8.4 | -3.4 | 3.3 | --- | --- | --- |
| 3 | 18.4 | 5.5 | 13.5 | 14.2 | 1.0 | 10.6 | 7.6 | -4.9 | .6 | --- | --- | --- |
| 4 | 19.4 | 1.8 | 10.9 | 11.6 | -3.6 | 4.7 | 4.5 | -3.6 | .2 | --- | --- | --- |
| 5 | 14.2 | .7 | 9.7 | 11.0 | 5.9 | 8.9 | 11.6 | -2.9 | 5.9 | --- | --- | --- |
| 6 | 16.3 | -1.9 | 6.6 | 14.0 | 4.5 | 9.3 | .1 | -5.0 | -2.3 | --- | --- | --- |
| 7 | 22.8 | 2.8 | 11.8 | 17.8 | .7 | 10.7 | 6.4 | .1 | 3.7 | --- | --- | --- |
| 8 | 22.5 | 5.0 | 13.2 | 12.7 | -.2 | 7.4 | 14.1 | 4.8 | 8.4 | --- | --- | --- |
| 9 | 21.3 | 8.3 | 14.6 | 4.0 | -7.4 | -1.4 | 7.0 | -2.4 | 3.3 | --- | --- | --- |
| 10 | 18.2 | 11.6 | 14.9 | 5.3 | -9.3 | -2.4 | 7.0 | 4.5 | 5.5 | --- | --- | --- |
| 11 | 16.5 | 7.6 | 12.0 | 13.2 | 1.5 | 6.9 | 9.9 | 6.6 | 8.1 | --- | --- | --- |
| 12 | 17.2 | 5.2 | 10.8 | 6.4 | .6 | 3.5 | 7.2 | -1.4 | 3.3 | --- | --- | --- |
| 13 | 21.5 | 3.5 | 11.0 | 3.0 | -4.0 | -.8 | 7.6 | .2 | 4.0 | --- | --- | --- |
| 14 | 14.6 | 5.7 | 10.9 | 6.8 | -8.0 | -.3 | 1.0 | -9.0 | -2.1 | --- | --- | --- |
| 15 | 16.2 | 12.2 | 14.0 | 13.0 | -2.5 | 2.9 | -2.0 | -10.5 | -6.8 | --- | --- | --- |
| 16 | 15.9 | 9.2 | 13.1 | 10.5 | -3.4 | 2.1 | 5.0 | -12.0 | -3.1 | --- | --- | --- |
| 17 | 12.3 | 4.7 | 8.3 | 12.4 | -3.8 | 3.4 | 6.9 | -4.4 | 2.7 | --- | --- | --- |
| 18 | 14.9 | 2.4 | 8.1 | 17.1 | 1.8 | 9.2 | 3.0 | -10.0 | -2.9 | --- | --- | --- |
| 19 | 9.5 | 5.9 | 8.1 | 17.0 | .2 | 10.3 | 6.9 | -5.0 | .5 | --- | --- | --- |
| 20 | 12.1 | 7.2 | 9.5 | 9.6 | -1.9 | 4.0 | .9 | -15.5 | -8.1 | --- | --- | --- |
| 21 | 10.8 | 3.5 | 7.5 | 7.2 | 5.0 | 6.1 | 1.0 | -16.4 | -7.8 | --- | --- | --- |
| 22 | 10.2 | 6.7 | 8.3 | 10.7 | 2.0 | 7.4 | 10.5 | -8.8 | .5 | --- | --- | --- |
| 23 | 9.8 | 5.4 | 7.8 | 11.8 | -2.0 | 4.4 | 14.9 | .3 | 10.4 | --- | --- | --- |
| 24 | 10.4 | 7.2 | 8.6 | 14.0 | -.7 | 6.9 | 10.6 | -3.6 | .7 | --- | --- | --- |
| 25 | 10.6 | 3.4 | 8.1 | 15.0 | 2.0 | 12.0 | .7 | -8.8 | -4.4 | --- | --- | --- |
| 26 | 13.8 | -1.0 | 5.3 | 4.9 | -4.7 | .1 | -2.1 | -7.0 | -4.2 | --- | --- | --- |
| 27 | 14.5 | -.4 | 6.1 | 9.2 | -6.0 | 2.6 | -3.6 | -11.8 | -6.6 | --- | --- | --- |
| 28 | 11.9 | -1.9 | 5.2 | 13.4 | 7.5 | 10.5 | -1.0 | -14.0 | -6.9 | --- | --- | --- |
| 29 | 13.9 | -2.2 | 6.7 | 10.2 | -2.0 | 3.7 | 6.9 | -2.1 | 1.6 | --- | --- | --- |
| 30 | 14.7 | 6.1 | 11.5 | 10.1 | -2.1 | 3.2 | 5.8 | -5.4 | .1 | --- | --- | --- |
| 31 | 22.3 | 9.5 | 16.4 | --- | --- | --- | 8.7 | -5.4 | 2.7 | --- | --- | --- |
| MONTH | 22.8 | -2.2 | 10.4 | 17.8 | -9.3 | 5.4 | 14.9 | -16.4 | 0.6 | --- | --- | --- |

PAWCATUCK RIVER BASIN

413550071342901 CLIMATOLOGICAL STATION NEAR EXETER, RI--Continued

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY SUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------------|-------------|------|----------|------|------|------|------|------|------|------|------|------|
| 1 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.02 | 1.80 | 0.00 | 0.56 | 0.00 | 0.03 | 0.00 |
| 2 | .06 | .01 | .00 | .02 | .03 | .00 | .03 | .36 | .09 | .05 | .00 | .00 |
| 3 | .00 | .00 | .00 | .10 | .55 | .00 | .11 | .49 | .03 | .00 | .00 | .00 |
| 4 | .10 | .05 | .00 | .27 | .07 | .00 | .21 | .25 | .00 | .00 | .11 | .07 |
| 5 | .01 | .31 | .25 | .57 | .00 | .06 | .01 | .00 | .00 | .60 | 1.55 | .00 |
| 6 | .00 | .10 | .53 | .06 | 1.38 | .57 | .00 | .00 | .19 | .01 | .01 | .00 |
| 7 | .00 | .01 | .11 | .00 | .22 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 8 | .00 | .00 | .08 | .00 | .00 | .04 | .00 | .00 | .00 | .00 | .00 | .08 |
| 9 | .00 | .00 | .00 | .00 | .00 | .04 | .00 | .11 | .00 | .00 | .00 | .37 |
| 10 | .00 | .00 | .00 | .00 | .00 | .02 | .00 | .00 | .00 | .00 | .00 | .00 |
| 11 | .00 | .17 | .94 | .00 | .01 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 12 | .46 | .04 | .04 | .16 | .00 | .04 | .10 | .00 | .00 | .03 | .89 | .00 |
| 13 | .00 | .29 | .00 | .03 | .02 | .00 | 2.49 | .00 | .00 | .76 | .37 | .00 |
| 14 | .00 | .00 | 1.24 | .00 | .00 | .00 | .44 | .00 | .06 | .02 | .01 | .00 |
| 15 | 1.44 | .00 | .52 | .03 | .00 | .02 | .02 | .00 | .00 | .01 | 1.38 | .14 |
| 16 | .00 | .00 | .08 | .02 | .00 | .46 | .00 | .00 | .00 | .00 | .23 | .18 |
| 17 | .08 | .03 | .88 | .08 | .00 | .04 | .00 | .00 | .01 | .00 | .00 | .00 |
| 18 | .32 | .00 | .02 | .27 | .00 | .08 | .00 | .00 | .19 | .00 | .00 | 2.37 |
| 19 | .19 | .01 | .01 | .06 | .05 | .25 | .00 | .13 | .30 | .05 | .00 | .00 |
| 20 | .00 | .36 | .00 | .00 | .00 | .11 | .00 | .00 | .00 | .00 | .00 | .00 |
| 21 | .06 | .03 | .00 | .00 | .03 | .47 | .00 | .03 | .00 | .00 | .69 | .00 |
| 22 | .13 | .00 | .00 | .00 | .04 | .00 | .00 | .00 | .06 | .00 | .01 | .00 |
| 23 | .01 | .01 | .00 | .00 | .00 | .00 | .15 | .78 | .00 | .00 | .00 | .00 |
| 24 | .00 | .00 | .49 | .00 | .00 | .02 | .28 | .01 | .00 | .20 | .00 | .00 |
| 25 | .01 | .16 | .07 | .00 | .00 | .00 | .03 | .01 | .00 | .01 | .00 | .00 |
| 26 | .19 | .00 | .00 | .00 | .00 | .00 | .67 | .03 | .24 | .00 | .00 | .02 |
| 27 | 1.31 | .00 | .04 | .00 | .00 | .12 | .16 | .51 | .00 | .04 | .00 | .00 |
| 28 | .10 | .11 | .02 | .43 | .06 | .00 | .01 | .73 | .00 | .62 | .00 | 1.08 |
| 29 | 1.70 | .08 | .01 | .06 | .00 | .00 | .00 | .00 | .03 | .01 | .00 | 1.88 |
| 30 | .00 | .00 | .02 | .02 | --- | .00 | .00 | .00 | .00 | .00 | .02 | .02 |
| 31 | .00 | --- | .01 | .02 | --- | 1.77 | --- | .01 | --- | .00 | .06 | --- |
| TOTAL | 6.17 | 1.77 | 5.36 | 2.20 | 2.47 | 4.13 | 6.51 | 3.45 | 1.76 | 2.41 | 5.36 | 6.21 |
| MAX | 1.70 | 0.36 | 1.24 | 0.57 | 1.38 | 1.77 | 2.49 | 0.78 | 0.56 | 0.76 | 1.55 | 2.37 |
| CAL YR 2003 | TOTAL 50.35 | | MAX 1.80 | | | | | | | | | |
| WTR YR 2004 | TOTAL 47.80 | | MAX 2.49 | | | | | | | | | |

PAWCATUCK RIVER BASIN

01117370 QUEEN RIVER AT LIBERTY ROAD AT LIBERTY, RI

LOCATION.--Lat 41° 32' 20", long 71° 34' 09", Washington County, Hydrologic Unit 01090005, on left bank 2ft downstream from bridge on Liberty Road, at Liberty, RI.

DRAINAGE AREA.--19.6 mi².

PERIOD OF RECORD.--Discharge: October 1998 to current year.

REVISED RECORDS.--WDR MA-RI-03-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 120 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records fair except those for estimated daily discharges and discharges greater than 500 ft³/s, which are poor.

AVERAGE DISCHARGE.--6 years (water years 1999--2004), 34.9 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 779 ft³/s, Mar. 22, 2001, gage height, 5.55 ft³/s; minimum discharge, 1.6 ft³/s, Aug. 4, 1999.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 245 ft³/s, Apr. 14, gage height, 4.16 ft; minimum discharge, 3.1 ft³/s, Sept. 14, 15.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1 | 14 | 39 | 25 | 46 | 25 | 27 | 142 | 51 | 35 | 10 | 11 | 8.7 |
| 2 | 13 | 34 | 23 | 44 | 24 | 29 | 217 | 50 | 39 | 9.3 | 7.5 | 7.4 |
| 3 | 12 | 33 | 21 | 44 | 25 | 30 | 142 | 62 | 32 | 9.7 | 6.2 | 7.0 |
| 4 | 13 | 31 | 22 | 45 | 43 | 29 | 103 | 87 | 29 | 8.4 | 5.4 | 7.0 |
| 5 | 14 | 32 | 22 | 57 | 34 | 29 | 91 | 70 | 27 | 16 | 29 | 5.8 |
| 6 | 13 | 37 | 24 | 61 | 36 | 40 | 77 | 58 | 26 | 21 | 26 | 5.4 |
| 7 | 12 | 35 | 26 | 49 | 90 | 42 | 68 | 52 | 28 | 14 | 17 | 4.9 |
| 8 | 12 | 31 | 24 | 42 | e59 | 34 | 63 | 47 | 26 | 12 | 14 | 5.1 |
| 9 | 12 | 29 | 23 | 38 | 45 | 32 | 59 | 45 | 23 | 11 | 9.8 | 8.1 |
| 10 | 11 | 28 | 24 | 34 | 39 | 30 | 55 | 45 | 22 | 9.6 | 7.8 | 7.8 |
| 11 | 12 | 28 | 45 | 33 | 37 | 29 | 52 | 43 | 20 | 8.7 | 11 | 5.9 |
| 12 | 14 | 30 | 97 | 35 | 34 | 28 | 51 | 40 | 19 | 8.1 | 10 | 5.3 |
| 13 | 19 | 34 | 58 | 35 | 32 | 27 | 82 | 37 | 17 | 16 | 19 | 5.4 |
| 14 | 18 | 33 | 42 | 33 | 31 | 26 | 220 | 35 | 20 | 22 | 22 | 3.5 |
| 15 | 35 | 29 | 114 | 31 | 31 | 26 | 186 | 35 | 21 | 17 | 47 | 3.2 |
| 16 | 35 | 28 | 98 | 31 | 28 | 26 | 121 | 34 | 19 | 13 | 51 | 5.6 |
| 17 | 25 | 28 | 75 | 31 | 27 | 28 | 90 | 32 | 17 | 11 | 29 | 6.5 |
| 18 | 26 | 28 | 139 | 32 | 27 | 26 | 78 | 32 | 18 | 9.5 | 22 | 31 |
| 19 | 24 | 28 | 110 | 32 | 27 | 27 | 72 | 34 | 23 | 9.5 | 19 | 54 |
| 20 | 23 | 30 | 83 | 31 | 27 | 27 | 68 | 31 | 20 | 9.2 | 17 | 22 |
| 21 | 22 | 32 | 71 | 29 | 27 | 45 | 63 | 29 | 17 | 7.7 | 17 | 15 |
| 22 | 22 | 29 | 63 | 29 | 29 | 48 | 60 | 29 | 17 | 6.7 | 28 | 11 |
| 23 | 21 | 27 | 60 | 28 | 29 | 36 | 60 | 28 | 16 | 6.3 | 21 | 9.2 |
| 24 | 20 | 26 | 60 | 27 | 27 | 33 | 67 | 34 | 14 | 6.9 | 16 | 7.6 |
| 25 | 19 | 28 | 79 | 26 | 26 | 32 | 60 | 30 | 13 | 8.5 | 14 | 6.5 |
| 26 | 19 | 27 | 70 | 25 | 25 | 32 | 65 | 28 | 13 | 7.1 | 12 | 6.0 |
| 27 | 28 | 26 | 60 | 25 | 25 | 33 | 87 | 38 | 15 | 5.8 | 12 | 6.6 |
| 28 | 48 | 26 | 54 | 27 | 25 | 32 | 71 | 46 | 12 | 8.4 | 11 | 8.5 |
| 29 | 74 | 28 | 52 | 26 | 26 | 30 | 59 | 55 | 12 | 12 | 9.1 | 93 |
| 30 | 90 | 26 | 51 | 26 | --- | 29 | 54 | 37 | 11 | 8.9 | 9.0 | 81 |
| 31 | 53 | --- | 49 | 25 | --- | 41 | --- | 30 | --- | 7.7 | 10 | --- |

| | | | | | | | | | | | | |
|-------|------|------|------|------|------|------|------|------|------|-------|-------|-------|
| TOTAL | 773 | 900 | 1764 | 1077 | 960 | 983 | 2683 | 1304 | 621 | 331.0 | 539.8 | 454.0 |
| MEAN | 24.9 | 30.0 | 56.9 | 34.7 | 33.1 | 31.7 | 89.4 | 42.1 | 20.7 | 10.7 | 17.4 | 15.1 |
| MAX | 90 | 39 | 139 | 61 | 90 | 48 | 220 | 87 | 39 | 22 | 51 | 93 |
| MIN | 11 | 26 | 21 | 25 | 24 | 26 | 51 | 28 | 11 | 5.8 | 5.4 | 3.2 |
| CFSM | 1.27 | 1.53 | 2.90 | 1.77 | 1.69 | 1.62 | 4.56 | 2.15 | 1.06 | 0.54 | 0.89 | 0.77 |
| IN. | 1.47 | 1.71 | 3.35 | 2.04 | 1.82 | 1.87 | 5.09 | 2.47 | 1.18 | 0.63 | 1.02 | 0.86 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2004, BY WATER YEAR (WY)

| | | | | | | | | | | | | |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 15.5 | 21.9 | 32.8 | 38.4 | 43.6 | 70.6 | 69.6 | 42.8 | 38.1 | 15.6 | 15.8 | 14.6 |
| MAX | 25.5 | 32.8 | 57.8 | 64.7 | 78.6 | 124 | 89.4 | 51.0 | 58.5 | 29.3 | 34.4 | 21.3 |
| (WY) | 2000 | 2003 | 2003 | 2003 | 1999 | 2001 | 2004 | 2000 | 2003 | 2003 | 2003 | 2003 |
| MIN | 7.50 | 4.71 | 8.53 | 13.3 | 14.2 | 28.4 | 34.6 | 34.2 | 16.0 | 5.70 | 3.78 | 9.56 |
| (WY) | 2001 | 2002 | 2002 | 2002 | 2002 | 2002 | 2002 | 1999 | 1999 | 1999 | 1999 | 2001 |

SUMMARY STATISTICS

| | FOR 2003 CALENDAR YEAR | | FOR 2004 WATER YEAR | | WATER YEARS 1999 - 2004 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|-------------|
| ANNUAL TOTAL | 17577 | | 12389.8 | | | |
| ANNUAL MEAN | 48.2 | | 33.9 | | 34.9 | |
| HIGHEST ANNUAL MEAN | | | | | 47.6 | |
| LOWEST ANNUAL MEAN | | | | | 18.1 | |
| HIGHEST DAILY MEAN | 183 | Mar 31 | 220 | Apr 14 | 458 | Mar 23 2001 |
| LOWEST DAILY MEAN | 11 | Oct 10 | 3.2 | Sep 15 | 1.7 | Aug 7 1999 |
| ANNUAL SEVEN-DAY MINIMUM | 12 | Oct 5 | 5.1 | Sep 11 | 1.9 | Aug 1 1999 |
| MAXIMUM PEAK FLOW | | | 245 | Apr 14 | 779 | Mar 22 2001 |
| MAXIMUM PEAK STAGE | | | 4.16 | Apr 14 | 5.55 | Mar 22 2001 |
| INSTANTANEOUS LOW FLOW | | | 3.1 | Sep 14 | 1.6 | Aug 4 1999 |
| ANNUAL RUNOFF (CFSM) | 2.46 | | 1.73 | | 1.78 | |
| ANNUAL RUNOFF (INCHES) | 33.36 | | 23.52 | | 24.17 | |
| 10 PERCENT EXCEEDS | 89 | | 64 | | 72 | |
| 50 PERCENT EXCEEDS | 39 | | 28 | | 26 | |
| 90 PERCENT EXCEEDS | 19 | | 8.6 | | 6.6 | |

e Estimated

PAWCATUCK RIVER BASIN

0117410 USQUEPAUG RIVER AT RT. 138, AT USQUEPAUG, RI

LOCATION.--Lat 41° 30' 09", long 71° 36' 30", Washington County, Hydrologic Unit 01090005, on right bank on upstream side of bridge on State Route 138, 700 ft downstream from Glen Rock Reservoir, and 0.1 mi south of Usquepaug.

DRAINAGE AREA.--32.8 mi².

PERIOD OF RECORD.--Discharge: July 1999 to December 2001, July 2002 to December 2004 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 110 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow occasionally affected by upstream withdrawals.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 584 ft³/s, Mar. 23, 2001, gage height, 6.71 ft; minimum discharge, 4.2 ft³/s, Aug. 5, 1999.

**DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES**

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1 | 23 | 79 | 39 | 84 | 42 | 49 | 287 | 97 | 67 | 20 | 16 | 16 |
| 2 | 23 | 63 | 36 | 81 | 41 | 52 | 379 | 94 | 76 | 19 | 15 | 15 |
| 3 | 22 | 57 | 33 | 80 | 42 | 55 | 297 | 112 | 65 | 20 | 13 | 14 |
| 4 | 23 | 52 | 32 | 81 | 77 | 53 | 219 | 160 | 57 | 19 | 12 | 14 |
| 5 | 23 | 52 | 34 | 102 | 66 | 53 | 181 | 140 | 51 | 25 | 41 | 13 |
| 6 | 22 | 65 | 40 | 112 | 68 | 74 | 150 | 113 | 51 | 38 | 45 | 12 |
| 7 | 21 | 63 | 43 | 94 | 179 | 84 | 131 | 100 | 55 | 25 | 25 | 12 |
| 8 | 20 | 54 | 41 | 78 | 139 | 66 | 120 | 91 | 49 | 21 | 20 | 13 |
| 9 | 19 | 48 | 38 | 71 | 92 | 60 | 112 | 87 | 43 | 20 | 16 | 16 |
| 10 | 20 | 45 | 38 | 61 | 77 | 56 | 106 | 85 | 39 | 18 | 14 | 16 |
| 11 | 19 | 44 | 84 | 59 | 73 | 52 | 100 | 81 | 37 | 17 | 13 | 15 |
| 12 | 21 | 50 | 167 | 64 | 66 | 51 | 96 | 77 | 34 | 16 | 14 | 13 |
| 13 | 25 | 57 | 121 | 67 | 62 | 49 | 159 | 72 | 32 | 25 | 28 | 13 |
| 14 | 25 | 58 | 85 | 63 | 60 | 46 | 379 | 68 | 35 | 37 | 39 | 12 |
| 15 | 53 | 50 | 204 | 59 | 58 | 46 | 356 | 67 | 42 | 28 | 82 | 11 |
| 16 | 58 | 46 | 201 | e58 | 51 | 46 | 249 | 64 | 35 | 23 | 101 | 15 |
| 17 | 38 | 45 | 146 | 58 | 48 | 50 | 184 | 62 | 31 | 20 | 62 | 16 |
| 18 | 38 | 43 | 245 | 60 | 48 | 47 | 151 | 61 | 31 | 18 | 40 | 62 |
| 19 | 36 | 44 | 219 | 60 | 48 | 48 | 136 | 63 | 40 | 17 | 31 | 108 |
| 20 | 33 | 51 | 155 | 56 | 47 | 47 | 127 | 60 | 37 | 17 | 27 | 56 |
| 21 | 30 | 54 | 128 | 53 | 47 | 85 | 118 | 56 | 30 | 16 | 29 | 31 |
| 22 | 29 | 49 | 115 | 51 | 52 | 95 | 112 | 56 | 29 | 14 | 55 | 25 |
| 23 | 28 | 43 | 109 | 50 | 52 | 72 | 110 | 55 | 29 | 13 | 38 | 21 |
| 24 | 26 | 42 | 109 | 47 | 49 | 63 | 125 | 59 | 26 | 14 | 27 | 19 |
| 25 | 25 | 44 | 136 | e44 | 46 | 61 | 117 | 58 | 24 | 16 | 22 | 18 |
| 26 | 25 | 43 | 130 | 43 | 44 | 61 | 121 | 52 | 24 | 14 | 20 | 17 |
| 27 | 42 | 40 | 111 | 43 | 43 | 62 | 162 | 72 | 25 | 13 | 19 | 17 |
| 28 | 82 | 40 | 100 | 47 | 43 | 60 | 142 | 84 | 24 | 15 | 18 | 20 |
| 29 | 140 | 44 | 94 | 46 | 46 | 55 | 114 | 102 | 23 | 18 | 17 | 147 |
| 30 | 169 | 42 | 92 | 45 | --- | 52 | 104 | 76 | 21 | 16 | 16 | 169 |
| 31 | 117 | --- | 89 | 43 | --- | 78 | --- | 60 | --- | 14 | 17 | --- |
| TOTAL | 1275 | 1507 | 3214 | 1960 | 1806 | 1828 | 5144 | 2484 | 1162 | 606 | 932 | 946 |
| MEAN | 41.1 | 50.2 | 104 | 63.2 | 62.3 | 59.0 | 171 | 80.1 | 38.7 | 19.5 | 30.1 | 31.5 |
| MAX | 169 | 79 | 245 | 112 | 179 | 95 | 379 | 160 | 76 | 38 | 101 | 169 |
| MIN | 19 | 40 | 32 | 43 | 41 | 46 | 96 | 52 | 21 | 13 | 12 | 11 |
| CFSM | 1.26 | 1.53 | 3.17 | 1.93 | 1.90 | 1.80 | 5.24 | 2.45 | 1.18 | 0.60 | 0.92 | 0.96 |
| IN. | 1.45 | 1.71 | 3.65 | 2.23 | 2.05 | 2.08 | 5.84 | 2.82 | 1.32 | 0.69 | 1.06 | 1.07 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2004, BY WATER YEAR (WY)

| | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 |
|------|------|------|------|------|------|------|
| MEAN | 28.2 | 41.5 | 79.8 | 68.1 | 72.6 | 126 |
| MAX | 46.6 | 56.8 | 104 | 98.9 | 82.2 | 186 |
| (WY) | 2000 | 2000 | 2004 | 2003 | 2000 | 2001 |
| MIN | 13.9 | 12.1 | 54.0 | 51.5 | 62.3 | 59.0 |
| (WY) | 2001 | 2002 | 2000 | 2001 | 2004 | 2000 |

SUMMARY STATISTICS FOR 2003 CALENDAR YEAR FOR 2004 WATER YEAR ^aWATER YEARS 1999 - 2004

| | | | | | | | |
|--------------------------|-------|--------|------|--------|-------|--------|------|
| ANNUAL TOTAL | 29279 | 22864 | | | | | |
| ANNUAL MEAN | 80.2 | 62.5 | | | | | |
| HIGHEST ANNUAL MEAN | | 69.9 | | | | | |
| LOWEST ANNUAL MEAN | | 78.5 | | | | | |
| HIGHEST DAILY MEAN | 257 | Mar 31 | 379 | Apr 2 | 540 | Mar 23 | 2001 |
| LOWEST DAILY MEAN | 19 | Oct 9 | 11 | Sep 15 | 4.4 | Aug 5 | 1999 |
| ANNUAL SEVEN-DAY MINIMUM | 20 | Oct 6 | 13 | Sep 2 | 4.8 | Aug 1 | 1999 |
| MAXIMUM PEAK FLOW | | | 409 | Apr 14 | 584 | Mar 23 | 2001 |
| MAXIMUM PEAK STAGE | | | 5.58 | Apr 14 | 6.71 | Mar 23 | 2001 |
| INSTANTANEOUS LOW FLOW | | | 11 | Aug 4 | 4.2 | Aug 5 | 1999 |
| ANNUAL RUNOFF (CFSM) | 2.45 | 1.91 | | | 2.13 | | |
| ANNUAL RUNOFF (INCHES) | 33.26 | 25.97 | | | 28.99 | | |
| 10 PERCENT EXCEEDS | 150 | 122 | | | 139 | | |
| 50 PERCENT EXCEEDS | 63 | 49 | | | 53 | | |
| 90 PERCENT EXCEEDS | 28 | 16 | | | 18 | | |

^a Years of operation not continuous; see Period of Record for actual years of operation.
^c Estimated

PAWCATUCK RIVER BASIN

01117410 USQUEPAUG RIVER AT RT. 138, AT USQUEPAUG, RI--Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1 | 89 | 35 | 136 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 2 | 56 | 33 | 211 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 3 | 52 | 32 | 156 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 4 | 43 | 33 | 113 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 5 | 37 | 92 | 101 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 6 | 33 | 79 | 94 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 7 | 31 | 58 | 103 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 8 | 30 | 50 | 179 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 9 | 29 | 43 | 161 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 10 | 28 | 40 | 145 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 11 | 27 | 39 | 196 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 12 | 26 | 42 | 179 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 13 | 25 | 83 | 139 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 14 | 25 | 79 | 119 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 15 | 28 | 63 | e109 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 16 | 81 | 59 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 17 | 81 | 55 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 18 | 57 | 52 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 19 | 72 | 49 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 20 | 93 | 48 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 21 | 69 | 52 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 22 | 55 | 51 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 23 | 49 | 47 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 24 | 45 | 46 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 25 | 43 | 75 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 26 | 40 | 97 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 27 | 38 | 78 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 28 | 36 | 71 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 29 | 36 | 122 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 30 | 35 | 107 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 31 | 37 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| TOTAL | 1426 | 1810 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| MEAN | 46.0 | 60.3 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| MAX | 93 | 122 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| MIN | 25 | 32 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| CFSM | 1.40 | 1.84 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| IN. | 1.62 | 2.06 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2005, BY WATER YEAR (WY)

| | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 |
|------|------|------|------|------|------|------|------|
| MEAN | 31.2 | 44.6 | 79.8 | 68.1 | 72.6 | 126 | 152 |
| MAX | 46.6 | 60.3 | 104 | 98.9 | 82.2 | 186 | 171 |
| (WY) | 2000 | 2005 | 2004 | 2003 | 2000 | 2001 | 2004 |
| MIN | 13.9 | 12.1 | 54.0 | 51.5 | 62.3 | 59.0 | 133 |
| (WY) | 2001 | 2002 | 2000 | 2001 | 2004 | 2004 | 2000 |

SUMMARY STATISTICS

^aWATER YEARS 1999 - 2005

| | |
|--------------------------|-------|
| ANNUAL MEAN | 69.9 |
| HIGHEST ANNUAL MEAN | 78.5 |
| LOWEST ANNUAL MEAN | 62.5 |
| HIGHEST DAILY MEAN | 540 |
| LOWEST DAILY MEAN | 4.4 |
| ANNUAL SEVEN-DAY MINIMUM | 4.8 |
| MAXIMUM PEAK FLOW | 584 |
| MAXIMUM PEAK STAGE | 6.71 |
| INSTANTANEOUS LOW FLOW | 4.2 |
| ANNUAL RUNOFF (CFSM) | 2.13 |
| ANNUAL RUNOFF (INCHES) | 28.99 |
| 10 PERCENT EXCEEDS | 139 |
| 50 PERCENT EXCEEDS | 53 |
| 90 PERCENT EXCEEDS | 18 |

^a Years of operation not continuous; see Period of Record for actual years of operation.

e Estimated

PAWCATUCK RIVER BASIN

01117424 CHICKASHEEN BROOK AT WEST KINGSTON, RI

LOCATION.--Lat. 41° 28' 51", long 71° 34' 26", Washington County, Hydrologic Unit 01090005, at bridge on Liberty Lane, 1.0 mi west of West Kingston, RI.

DRAINAGE AREA.--4.82 mi².

PERIOD OF RECORD.--Discharge: October 2002 to December 2004 (discontinued). Discharge measurements made in water years 1959-60, 1991-92, 2002.

GAGE.--Water-stage recorder. Datum of gage is 95 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair except those for estimated daily discharges, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 69 ft³/s, Mar. 2, 2003, gage height, 2.43 ft; minimum discharge 0.73 ft³/s, Oct. 9, 10, 11, 2002.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|-------|-------|-------|-------|------|-------|-------|------|-------|-------|
| 1 | 2.5 | 8.7 | 6.1 | 13 | 5.6 | 6.5 | 31 | 13 | 6.0 | 2.3 | 1.8 | 2.0 |
| 2 | 2.6 | 11 | 10 | 13 | 5.5 | 6.5 | 35 | 13 | 5.5 | 2.2 | 1.8 | 2.0 |
| 3 | 3.8 | 8.6 | 4.9 | 13 | 6.0 | 6.6 | 33 | 14 | 5.1 | 2.2 | 1.7 | 2.0 |
| 4 | 2.7 | 7.0 | 4.6 | 13 | 9.8 | 6.7 | 31 | 18 | 5.0 | 2.2 | 1.8 | 1.9 |
| 5 | 2.4 | 6.5 | 4.7 | 16 | 10 | 6.7 | 29 | 16 | 4.7 | 2.5 | 3.3 | 1.8 |
| 6 | 2.4 | 8.8 | 5.3 | 15 | 13 | 9.3 | 26 | 14 | 4.6 | 2.6 | 2.8 | 2.7 |
| 7 | 2.3 | 8.9 | 5.7 | 13 | 31 | 9.3 | 23 | 13 | 4.4 | 2.5 | 2.5 | 3.0 |
| 8 | 4.2 | 7.7 | 5.5 | 12 | 19 | 8.8 | 20 | 12 | 4.1 | 2.3 | 2.3 | 2.6 |
| 9 | 5.5 | 7.0 | 5.1 | 12 | 16 | 8.3 | 18 | 11 | 3.7 | 2.1 | 2.1 | 3.0 |
| 10 | 2.7 | 6.4 | 5.2 | e10 | 13 | 7.9 | 17 | 11 | 3.4 | 2.1 | 2.0 | 2.7 |
| 11 | 2.3 | 5.4 | 11 | e9.2 | 12 | 7.5 | 15 | 9.9 | 3.2 | 3.5 | 1.8 | 2.3 |
| 12 | 2.3 | 5.8 | 14 | e9.5 | 11 | 7.3 | 14 | 9.3 | 3.1 | 3.7 | 1.7 | 2.0 |
| 13 | 2.3 | 6.2 | 11 | 9.8 | 10 | 7.0 | 25 | 8.7 | 3.1 | 4.2 | 2.0 | 1.8 |
| 14 | 2.2 | 5.3 | 10 | 9.5 | 9.7 | 6.7 | 42 | 8.1 | 3.4 | 3.8 | 2.3 | 1.7 |
| 15 | 4.4 | 4.9 | 30 | 9.4 | 9.1 | 6.6 | 40 | 7.7 | 3.6 | 3.1 | 8.4 | 1.6 |
| 16 | 3.1 | 4.8 | 25 | 9.9 | 8.9 | 6.4 | 38 | 7.0 | 3.4 | 2.6 | 6.6 | 2.3 |
| 17 | 2.7 | 4.2 | 24 | 10 | 8.4 | 6.6 | 34 | 6.4 | 3.1 | 2.3 | 5.4 | 2.4 |
| 18 | 3.1 | 4.0 | 28 | 8.4 | 8.1 | 6.8 | 30 | 6.3 | 3.2 | 2.2 | 4.4 | 8.0 |
| 19 | 2.9 | 3.5 | 26 | 8.0 | 7.8 | 6.9 | 27 | 6.3 | 3.5 | 2.2 | 5.4 | 6.8 |
| 20 | 4.3 | 4.0 | 24 | 7.5 | 7.5 | 7.0 | 24 | 5.9 | 3.4 | 2.1 | 5.4 | 5.2 |
| 21 | 6.7 | 4.1 | 22 | 7.1 | 7.5 | 9.8 | 22 | 5.7 | 3.3 | 2.0 | 5.4 | 4.3 |
| 22 | 3.2 | 8.4 | 20 | 6.9 | 7.4 | 9.4 | 20 | 5.5 | 3.2 | 2.3 | 5.5 | 3.6 |
| 23 | 2.8 | 10 | 19 | 6.6 | 7.2 | 8.8 | 18 | 5.4 | 3.1 | 2.3 | 4.3 | 3.1 |
| 24 | 2.7 | 5.4 | 20 | 6.6 | 6.9 | 8.5 | 19 | 5.3 | 3.0 | 2.1 | 3.5 | 2.8 |
| 25 | 2.6 | 4.7 | 21 | 6.4 | 6.8 | 8.5 | 17 | 5.1 | 2.9 | 2.0 | 2.9 | 2.5 |
| 26 | 2.4 | 4.6 | 20 | 6.3 | 6.5 | 8.3 | 18 | 5.0 | 2.8 | 1.9 | 2.8 | 2.2 |
| 27 | 7.5 | 4.7 | 18 | 6.0 | 6.4 | 8.1 | 20 | 6.4 | 2.6 | 1.9 | 2.6 | 2.1 |
| 28 | 14 | 4.6 | 17 | e6.1 | 6.3 | 7.9 | 18 | 7.6 | 2.5 | 2.1 | 2.3 | 2.6 |
| 29 | 16 | 4.9 | 16 | 6.2 | 6.3 | 7.6 | 16 | 7.2 | 2.5 | 2.1 | 2.1 | 1.6 |
| 30 | 14 | 4.4 | 15 | 6.1 | --- | 7.3 | 15 | 6.1 | 2.4 | 1.9 | 1.9 | 1.7 |
| 31 | 9.7 | --- | 14 | 5.8 | --- | 13 | --- | 5.4 | --- | 1.9 | 2.1 | --- |
| TOTAL | 142.3 | 184.5 | 462.1 | 291.3 | 282.7 | 242.6 | 735 | 275.3 | 107.8 | 75.2 | 100.9 | 114.0 |
| MEAN | 4.59 | 6.15 | 14.9 | 9.40 | 9.75 | 7.83 | 24.5 | 8.88 | 3.59 | 2.43 | 3.25 | 3.80 |
| MAX | 16 | 11 | 30 | 16 | 31 | 13 | 42 | 18 | 6.0 | 4.2 | 8.4 | 1.7 |
| MIN | 2.2 | 3.5 | 4.6 | 5.8 | 5.5 | 6.4 | 14 | 5.0 | 2.4 | 1.9 | 1.7 | 1.6 |
| CFSM | 0.95 | 1.28 | 3.09 | 1.95 | 2.02 | 1.62 | 5.08 | 1.84 | 0.75 | 0.50 | 0.68 | 0.79 |
| IN. | 1.10 | 1.42 | 3.57 | 2.25 | 2.18 | 1.87 | 5.67 | 2.12 | 0.83 | 0.58 | 0.78 | 0.88 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2003 - 2004, BY WATER YEAR (WY)

| | 2003 | 2004 | 2004 | 2003 | 2004 | 2004 | 2003 | 2004 | 2004 | 2004 | 2004 | 2004 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 3.70 | 6.04 | 14.9 | 12.3 | 8.86 | 13.6 | 22.9 | 10.7 | 8.63 | 4.47 | 6.19 | 4.53 |
| MAX | 4.59 | 6.15 | 14.9 | 15.1 | 9.75 | 19.4 | 24.5 | 12.6 | 13.7 | 6.51 | 9.12 | 5.26 |
| (WY) | 2004 | 2004 | 2004 | 2003 | 2004 | 2003 | 2004 | 2003 | 2003 | 2003 | 2003 | 2003 |
| MIN | 2.81 | 5.94 | 14.8 | 9.40 | 7.94 | 7.83 | 21.2 | 8.88 | 3.59 | 2.43 | 3.25 | 3.80 |
| (WY) | 2003 | 2003 | 2003 | 2004 | 2003 | 2004 | 2003 | 2004 | 2004 | 2004 | 2004 | 2004 |

SUMMARY STATISTICS

| | FOR 2003 CALENDAR YEAR | | FOR 2004 WATER YEAR | | WATER YEARS 2003 - 2004 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|-------------|
| ANNUAL TOTAL | 4160.4 | | 3013.7 | | | |
| ANNUAL MEAN | 11.4 | | 8.23 | | 9.73 | |
| HIGHEST ANNUAL MEAN | | | | | 11.2 | |
| LOWEST ANNUAL MEAN | | | | | 8.23 | |
| HIGHEST DAILY MEAN | 36 | Mar 3 | 42 | Apr 14 | 42 | Apr 14 2004 |
| LOWEST DAILY MEAN | 2.2 | Oct 14 | 1.6 | Sep 15 | 0.74 | Oct 9 2002 |
| ANNUAL SEVEN-DAY MINIMUM | 2.7 | Oct 1 | 1.9 | Jul 29 | 0.77 | Oct 5 2002 |
| MAXIMUM PEAK FLOW | | | 46 | | 69 | |
| MAXIMUM PEAK STAGE | | | 2.20 | | 2.43 | |
| INSTANTANEOUS LOW FLOW | | | 1.5 | | 0.73 | |
| ANNUAL RUNOFF (CFSM) | 2.36 | | 1.71 | | 2.02 | |
| ANNUAL RUNOFF (INCHES) | 32.11 | | 23.26 | | 27.42 | |
| 10 PERCENT EXCEEDS | 21 | | 18 | | 20 | |
| 50 PERCENT EXCEEDS | 9.9 | | 6.1 | | 7.3 | |
| 90 PERCENT EXCEEDS | 4.0 | | 2.2 | | 2.3 | |

e Estimated

PAWCATUCK RIVER BASIN

01117424 CHICKASHEEN BROOK AT WEST KINGSTON, RI--Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1 | 13 | 3.3 | 17 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 2 | 8.8 | 3.4 | 19 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 3 | 6.5 | 3.7 | 17 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 4 | 4.6 | 4.3 | 15 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 5 | 4.2 | 9.8 | 14 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 6 | 9.4 | 6.6 | 13 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 7 | 7.2 | 7.1 | 15 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 8 | 5.7 | 9.4 | 19 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 9 | 3.8 | 11 | 17 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 10 | 2.9 | 9.2 | 19 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 11 | 2.8 | 7.9 | 22 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 12 | 2.6 | 7.9 | 21 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 13 | 2.7 | 10 | 19 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 14 | 2.6 | 8.3 | e18 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 15 | 4.3 | 8.1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 16 | 8.2 | 8.0 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 17 | 5.2 | 7.8 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 18 | 4.0 | 7.6 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 19 | 6.1 | 7.5 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 20 | 10 | 7.3 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 21 | 10 | 7.6 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 22 | 8.5 | 7.4 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 23 | 7.2 | 7.1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 24 | 6.3 | 7.4 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 25 | 5.6 | 9.4 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 26 | 5.2 | 9.4 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 27 | 4.7 | 9.2 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 28 | 4.2 | 10 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 29 | 3.8 | 12 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 30 | 3.8 | 11 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 31 | 3.5 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| TOTAL | 177.4 | 238.7 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| MEAN | 5.72 | 7.96 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| MAX | 13 | 12 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| MIN | 2.6 | 3.3 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| CFSM | 1.19 | 1.65 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| IN. | 1.37 | 1.84 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2003 - 2005, BY WATER YEAR (WY)

| | 2003 | 2004 | 2005 | 2003 | 2004 | 2005 | 2003 | 2004 | 2005 | 2003 | 2004 | 2005 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 4.37 | 6.68 | 14.9 | 12.3 | 8.86 | 13.6 | 22.9 | 10.7 | 8.63 | 4.47 | 6.19 | 4.53 |
| MAX | 5.72 | 7.96 | 14.9 | 15.1 | 9.75 | 19.4 | 24.5 | 12.6 | 13.7 | 6.51 | 9.12 | 5.26 |
| (WY) | 2005 | 2005 | 2004 | 2003 | 2004 | 2003 | 2004 | 2003 | 2003 | 2003 | 2003 | 2003 |
| MIN | 2.81 | 5.94 | 14.8 | 9.40 | 7.94 | 7.83 | 21.2 | 8.88 | 3.59 | 2.43 | 3.25 | 3.80 |
| (WY) | 2003 | 2003 | 2003 | 2004 | 2003 | 2004 | 2003 | 2004 | 2004 | 2004 | 2004 | 2004 |

SUMMARY STATISTICS

WATER YEARS 2003 - 2005

| | |
|--------------------------|-----------------|
| ANNUAL MEAN | 9.73 |
| HIGHEST ANNUAL MEAN | 11.2 2003 |
| LOWEST ANNUAL MEAN | 8.23 2004 |
| HIGHEST DAILY MEAN | 42 Apr 14 2004 |
| LOWEST DAILY MEAN | 0.74 Oct 9 2002 |
| ANNUAL SEVEN-DAY MINIMUM | 0.77 Oct 5 2002 |
| MAXIMUM PEAK FLOW | 69 Mar 2 2003 |
| MAXIMUM PEAK STAGE | 2.43 Mar 2 2003 |
| INSTANTANEOUS LOW FLOW | 0.73 Oct 9 2002 |
| ANNUAL RUNOFF (CFSM) | 2.02 |
| ANNUAL RUNOFF (INCHES) | 27.42 |
| 10 PERCENT EXCEEDS | 20 |
| 50 PERCENT EXCEEDS | 7.3 |
| 90 PERCENT EXCEEDS | 2.3 |

e Estimated

PAWCATUCK RIVER BASIN

01117430 PAWCATUCK RIVER AT KENYON, RI

LOCATION.--Lat. 41° 26' 46", long 71° 37' 18", Washington County, Hydrologic Unit 01090005, at bridge on State Route 2, 0.2 mi east of Kenyon.

DRAINAGE AREA.--72.7 mi².

PERIOD OF RECORD.--Discharge: November 1957 to July 1960, August 2002 to December 2004 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 85 ft above National Geodetic Vertical Datum of 1929, from topographic map. During the period of November 1957 to July 1960, gage was located 0.3 mi downstream, 400 ft upstream from Pasquiset Brook, at datum 81.91 ft above National Geodetic Vertical Datum 1929, data are considered comparable to those from the current gage location.

REMARKS.--Records good except those for estimated daily discharges, which are fair.

EXTREMES FOR PERIOD OF RECORD.-- Maximum discharge, 638 ft³/s, Apr. 16, 2004, gage height 3.36 ft: minimum discharge, 9.4 ft³/s, Aug. 29, 2002; maximum daily discharge, 639 ft³/s, Apr. 9, 1958 (no instantaneous values available during November 1957 to July 1960); minimum daily discharge, 11 ft³/s, Sept. 12, 13, 2002.DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|------|------|------|------|-------|------|------|------|------|------|
| 1 | 54 | 196 | 94 | 195 | 99 | 129 | 319 | 241 | 132 | 54 | 39 | 49 |
| 2 | 54 | 155 | 92 | 188 | 99 | 133 | 501 | 224 | 144 | 52 | 39 | 45 |
| 3 | 58 | 133 | 89 | 182 | 101 | 136 | 580 | 226 | 144 | 50 | 35 | 42 |
| 4 | 57 | 124 | 85 | 181 | 124 | 138 | 569 | 266 | 133 | 49 | 33 | 41 |
| 5 | 56 | 122 | 83 | 202 | 142 | 137 | 504 | 287 | 122 | 52 | 56 | 40 |
| 6 | 55 | 139 | 81 | 219 | 150 | 156 | 430 | 278 | 117 | 68 | 84 | 39 |
| 7 | 54 | 147 | 82 | 215 | 268 | 180 | 377 | 247 | 118 | 68 | 71 | 40 |
| 8 | 51 | 138 | 86 | 198 | 316 | 172 | 336 | 219 | 116 | 57 | 53 | 41 |
| 9 | 50 | 125 | 86 | 162 | 251 | 155 | 302 | 200 | 109 | 52 | 46 | 41 |
| 10 | 52 | 117 | 90 | 138 | 205 | 147 | 273 | 191 | 100 | 48 | 40 | 42 |
| 11 | 49 | 113 | 120 | 137 | 189 | 141 | 250 | 185 | 93 | 44 | 38 | 39 |
| 12 | 48 | 116 | 182 | 137 | 178 | 134 | 234 | 177 | 87 | 44 | 37 | 37 |
| 13 | 48 | 121 | 214 | 141 | 169 | 128 | 281 | 168 | 83 | 59 | 53 | 36 |
| 14 | 47 | 122 | 192 | 126 | 165 | 125 | 457 | 158 | 81 | 82 | 78 | 37 |
| 15 | 71 | 117 | 263 | e121 | 160 | 123 | 600 | 150 | 90 | 77 | 134 | 37 |
| 16 | 88 | 111 | 319 | e118 | 150 | 121 | 621 | 144 | 87 | 64 | 174 | 48 |
| 17 | 85 | 109 | 355 | e117 | 142 | 122 | 554 | 138 | 79 | 55 | 163 | 49 |
| 18 | 78 | 106 | 385 | 125 | 138 | 122 | 471 | 134 | 76 | 50 | 118 | 80 |
| 19 | 75 | 105 | 407 | 126 | 136 | 119 | 399 | 135 | 90 | 48 | 88 | 149 |
| 20 | 74 | 110 | 404 | 124 | 133 | 120 | 346 | 132 | 88 | 48 | 78 | 159 |
| 21 | 69 | 114 | 355 | 118 | 132 | 145 | 313 | 125 | 78 | 46 | 78 | 110 |
| 22 | 68 | 113 | 315 | 114 | 136 | 179 | 288 | 120 | 72 | 42 | 102 | 76 |
| 23 | 64 | 109 | 285 | 112 | 137 | 176 | 268 | 117 | 73 | 40 | 105 | 62 |
| 24 | 61 | 108 | 269 | 105 | 133 | 154 | 272 | 117 | 67 | 39 | 83 | 57 |
| 25 | 62 | 107 | 276 | 99 | 128 | 146 | 268 | 118 | 63 | 41 | 68 | 51 |
| 26 | 62 | 105 | 278 | 100 | 125 | 143 | 273 | 114 | 62 | 40 | 60 | 48 |
| 27 | 71 | 102 | 270 | 98 | 122 | 144 | 289 | 125 | 61 | 37 | 54 | 45 |
| 28 | 102 | 100 | 248 | 100 | 122 | 143 | 303 | 151 | 64 | 41 | 52 | 47 |
| 29 | 174 | 98 | 228 | 102 | 125 | 137 | 291 | 169 | 59 | 45 | 50 | 150 |
| 30 | 206 | 97 | 214 | 100 | --- | 131 | 260 | 166 | 57 | 44 | 47 | 216 |
| 31 | 224 | --- | 205 | 99 | --- | 154 | --- | 140 | --- | 40 | 50 | --- |
| TOTAL | 2367 | 3579 | 6652 | 4299 | 4475 | 4390 | 11229 | 5362 | 2745 | 1576 | 2206 | 1953 |
| MEAN | 76.4 | 119 | 215 | 139 | 154 | 142 | 374 | 173 | 91.5 | 50.8 | 71.2 | 65.1 |
| MAX | 224 | 196 | 407 | 219 | 316 | 180 | 621 | 287 | 144 | 82 | 174 | 216 |
| MIN | 47 | 97 | 81 | 98 | 99 | 119 | 234 | 114 | 57 | 37 | 33 | 36 |
| CFSM | 1.05 | 1.64 | 2.95 | 1.91 | 2.12 | 1.95 | 5.15 | 2.38 | 1.26 | 0.70 | 0.98 | 0.90 |
| IN. | 1.21 | 1.83 | 3.40 | 2.20 | 2.29 | 2.25 | 5.75 | 2.74 | 1.40 | 0.81 | 1.13 | 1.00 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 2004, BY WATER YEAR (WY)

| | 1958 | 1959 | 2000 | 1958 | 1959 | 2000 | 1958 | 1959 | 2000 | 1958 | 1959 | 2000 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 76.6 | 115 | 164 | 184 | 177 | 268 | 325 | 194 | 137 | 88.8 | 81.1 | 58.8 |
| MAX | 136 | 148 | 215 | 294 | 262 | 352 | 396 | 316 | 218 | 115 | 123 | 85.9 |
| (WY) | 1959 | 1959 | 2004 | 1958 | 1960 | 1958 | 1958 | 1958 | 2003 | 1959 | 2003 | 1958 |
| MIN | 45.7 | 79.8 | 101 | 121 | 130 | 142 | 255 | 140 | 86.8 | 50.8 | 55.0 | 23.1 |
| (WY) | 1960 | 1960 | 1958 | 1959 | 2003 | 2004 | 1959 | 1959 | 1960 | 2004 | 1959 | 2002 |

SUMMARY STATISTICS FOR 2003 CALENDAR YEAR FOR 2004 WATER YEAR ^aWATER YEARS 1958 - 2004

| | | | | |
|--------------------------|-------|--------|-------|--------|
| ANNUAL TOTAL | 62409 | 50833 | | |
| ANNUAL MEAN | 171 | 139 | 150 | |
| HIGHEST ANNUAL MEAN | | | 166 | 2003 |
| LOWEST ANNUAL MEAN | | | 139 | 2004 |
| HIGHEST DAILY MEAN | 468 | Apr 1 | 621 | Apr 16 |
| LOWEST DAILY MEAN | 47 | Oct 14 | 33 | Aug 4 |
| ANNUAL SEVEN-DAY MINIMUM | 49 | Oct 8 | 38 | Sep 9 |
| MAXIMUM PEAK FLOW | | | 638 | Apr 16 |
| MAXIMUM PEAK STAGE | | | 3.36 | Apr 16 |
| INSTANTANEOUS LOW FLOW | | | 32 | Aug 4 |
| ANNUAL RUNOFF (CFSM) | 2.35 | | 1.91 | |
| ANNUAL RUNOFF (INCHES) | 31.93 | | 26.01 | |
| 10 PERCENT EXCEEDS | 307 | | 273 | |
| 50 PERCENT EXCEEDS | 135 | | 118 | |
| 90 PERCENT EXCEEDS | 71 | | 47 | |

^a Years of operation not continuous; see Period of Record for actual years of operation.

e Estimated

PAWCATUCK RIVER BASIN

01117430 PAWCATUCK RIVER AT KENYON, RI--Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1 | 230 | 84 | 228 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 2 | 186 | 81 | 262 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 3 | 135 | 78 | 298 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 4 | 118 | 80 | 287 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 5 | 107 | 119 | 250 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 6 | 99 | 144 | 223 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 7 | 96 | 137 | 226 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 8 | 94 | 116 | 273 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 9 | 88 | 108 | 301 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 10 | 79 | 102 | 328 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 11 | 73 | 100 | 346 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 12 | 67 | 101 | 350 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 13 | 64 | 132 | 338 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 14 | 62 | 156 | 305 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 15 | 65 | 150 | e269 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 16 | 107 | 136 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 17 | 132 | 128 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 18 | 130 | 125 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 19 | 127 | 121 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 20 | 144 | 116 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 21 | 154 | 119 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 22 | 138 | 119 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 23 | 123 | 117 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 24 | 115 | 114 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 25 | 109 | 131 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 26 | 105 | 155 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 27 | 100 | 165 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 28 | 96 | 158 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 29 | 92 | 179 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 30 | 90 | 200 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 31 | 87 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| TOTAL | 3412 | 3771 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| MEAN | 110 | 126 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| MAX | 230 | 200 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| MIN | 62 | 78 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| CFSM | 1.51 | 1.73 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| IN. | 1.75 | 1.93 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 2005, BY WATER YEAR (WY)

| | 1958 | 1959 | 2000 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 83.3 | 117 | 164 | 184 | 177 | 268 | 325 | 194 | 137 | 88.8 | 81.1 | 58.8 |
| MAX | 136 | 148 | 215 | 294 | 262 | 352 | 396 | 316 | 218 | 115 | 123 | 85.9 |
| (WY) | 1959 | 1959 | 2004 | 1958 | 1960 | 1958 | 1958 | 1958 | 2003 | 1959 | 2003 | 1958 |
| MIN | 45.7 | 79.8 | 101 | 121 | 130 | 142 | 255 | 140 | 86.8 | 50.8 | 55.0 | 23.1 |
| (WY) | 1960 | 1960 | 1958 | 1959 | 2003 | 2004 | 1959 | 1959 | 1960 | 2004 | 1959 | 2002 |

SUMMARY STATISTICS

^aWATER YEARS 1958 - 2005

| | |
|--------------------------|-------|
| ANNUAL MEAN | 150 |
| HIGHEST ANNUAL MEAN | 166 |
| LOWEST ANNUAL MEAN | 139 |
| HIGHEST DAILY MEAN | 639 |
| LOWEST DAILY MEAN | 11 |
| ANNUAL SEVEN-DAY MINIMUM | 13 |
| MAXIMUM PEAK FLOW | 638 |
| MAXIMUM PEAK STAGE | 3.36 |
| INSTANTANEOUS LOW FLOW | 9.4 |
| ANNUAL RUNOFF (CFSM) | 2.07 |
| ANNUAL RUNOFF (INCHES) | 28.08 |
| 10 PERCENT EXCEEDS | 289 |
| 50 PERCENT EXCEEDS | 125 |
| 90 PERCENT EXCEEDS | 49 |

^a Years of operation not continuous; see Period of Record for actual years of operation.

e Estimated

PAWCATUCK RIVER BASIN

01117468 BEAVER RIVER NEAR USQUEPAUG, RI

LOCATION.--Lat 41°29'33", long 71°37'43", Washington County, Hydrologic Unit 01090005, on right bank 10 ft downstream from Beaver River Bridge on State Highway 138 in Richmond, 1.2 mi southwest of Usquepaug, 3.3 mi north of Kenyon, and 3.6 mi upstream from mouth.

DRAINAGE AREA.--8.87 mi².

PERIOD OF RECORD.--Discharge: December 1974 to current year.

Water-quality records: Water years 1979-83.

REVISED RECORDS.--WDR MA-RI-79-1: 1978. WDR MA-RI-81-1: 1978-80 (P).

GAGE.--Water-stage recorder. Datum of gage is 107.68 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for estimated daily discharges which are poor.

AVERAGE DISCHARGE.--29 years (water years 1976-2004), 21.1 ft³/s, 32.25 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 370 ft³/s, June 6, 1982, gage height, 3.83 ft; minimum discharge, 1.1 ft³/s, Sept. 7, 1993.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 116 ft³/s, Apr. 14, gage height, 2.91 ft; minimum discharge, 3.8 ft³/s, Aug. 4, 10-12, Sept. 14, 15.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|------|------|------|------|------|------|------|-------|-------|-------|-------|
| 1 | 5.6 | 30 | 16 | 29 | e14 | 17 | 69 | 30 | 21 | 6.6 | 4.9 | 5.5 |
| 2 | 5.5 | 26 | 15 | 28 | e14 | 18 | 85 | 29 | 21 | 6.4 | 4.7 | 5.1 |
| 3 | 5.4 | 24 | 13 | 28 | 14 | 18 | 60 | 33 | 19 | 6.2 | 4.4 | 4.8 |
| 4 | 5.8 | 22 | 13 | 28 | 22 | 18 | 51 | 42 | 18 | 6.0 | 4.2 | 4.6 |
| 5 | 6.1 | 22 | 13 | 37 | 20 | 18 | 48 | 36 | 17 | 8.9 | 12 | 5.1 |
| 6 | 6.1 | 25 | 14 | 36 | 22 | 25 | 43 | 32 | 16 | 9.6 | 11 | 4.9 |
| 7 | 6.0 | 23 | 16 | 30 | 45 | 26 | 39 | 30 | 17 | 7.9 | 8.0 | 4.8 |
| 8 | 6.1 | 20 | 17 | 26 | 36 | 23 | 37 | 30 | 17 | 6.8 | 5.8 | 5.3 |
| 9 | 6.1 | 22 | 16 | e23 | 27 | 21 | 35 | 28 | 16 | 6.2 | 4.9 | 6.0 |
| 10 | 5.9 | 20 | 14 | e22 | 25 | 20 | 33 | 27 | 14 | 5.8 | 4.3 | 5.7 |
| 11 | 5.6 | 18 | 31 | e21 | 24 | 19 | 32 | 26 | 12 | 5.5 | 4.1 | 5.1 |
| 12 | 5.8 | 22 | 49 | 22 | 22 | 18 | 31 | 26 | 11 | 5.5 | 4.2 | 4.6 |
| 13 | 5.9 | 23 | 37 | 22 | 21 | 17 | 49 | 24 | 11 | 7.8 | 18 | 5.0 |
| 14 | 5.6 | 21 | 30 | e21 | 20 | 16 | 102 | 23 | 12 | 9.6 | 17 | 4.1 |
| 15 | 16 | 19 | 55 | 21 | e19 | 16 | 75 | 22 | 13 | 8.4 | 28 | 3.9 |
| 16 | 14 | 19 | 46 | 23 | e18 | 16 | 56 | 22 | 11 | 7.0 | 24 | 5.0 |
| 17 | 9.7 | 18 | 41 | 23 | 17 | 16 | 52 | 21 | 9.9 | 6.1 | 18 | 5.3 |
| 18 | 10 | 16 | 70 | 21 | 17 | 16 | 46 | 21 | 9.9 | 5.7 | 13 | 20 |
| 19 | 9.8 | 16 | 55 | 21 | 17 | 16 | 40 | 21 | 12 | 5.7 | 9.3 | 24 |
| 20 | 9.2 | 18 | 45 | 20 | 16 | 17 | 37 | 21 | 11 | 5.5 | 8.3 | 16 |
| 21 | 9.0 | 19 | 41 | 19 | 17 | 29 | 35 | 22 | 9.6 | 5.2 | 10 | 10 |
| 22 | 9.0 | 17 | 40 | e18 | 18 | 27 | 34 | 22 | 11 | 4.9 | 17 | 7.7 |
| 23 | 8.7 | 19 | 39 | e17 | 17 | 23 | 35 | 20 | 9.5 | 4.7 | 16 | 5.9 |
| 24 | 8.8 | 17 | 39 | e16 | 17 | 21 | 38 | 19 | 8.6 | 4.8 | 9.5 | 5.3 |
| 25 | 8.5 | 20 | 47 | e16 | 16 | 20 | 34 | 19 | 8.0 | 5.1 | 7.3 | 5.1 |
| 26 | 9.0 | 22 | 42 | 16 | 16 | 20 | 37 | 19 | 7.8 | 4.7 | 6.4 | 4.8 |
| 27 | 15 | 19 | 37 | 15 | 16 | 20 | 46 | 22 | 7.8 | 4.4 | 6.1 | 5.2 |
| 28 | 24 | 17 | 34 | 16 | 15 | 19 | 38 | 26 | 7.5 | 5.5 | 5.9 | 6.2 |
| 29 | 46 | 18 | 33 | 16 | 16 | 18 | 37 | 26 | 7.5 | 6.2 | 5.5 | 39 |
| 30 | 49 | 16 | 32 | 15 | --- | 18 | 32 | 21 | 7.0 | 5.5 | 5.4 | 35 |
| 31 | 32 | --- | 32 | 15 | --- | 27 | --- | 19 | --- | 4.9 | 5.7 | --- |
| TOTAL | 369.2 | 608 | 1022 | 681 | 578 | 613 | 1386 | 779 | 373.1 | 193.1 | 302.9 | 269.0 |
| MEAN | 11.9 | 20.3 | 33.0 | 22.0 | 19.9 | 19.8 | 46.2 | 25.1 | 12.4 | 6.23 | 9.77 | 8.97 |
| MAX | 49 | 30 | 70 | 37 | 45 | 29 | 102 | 42 | 21 | 9.6 | 28 | 39 |
| MIN | 5.4 | 16 | 13 | 15 | 14 | 16 | 31 | 19 | 7.0 | 4.4 | 4.1 | 3.9 |
| CFSM | 1.34 | 2.28 | 3.72 | 2.48 | 2.25 | 2.23 | 5.21 | 2.83 | 1.40 | 0.70 | 1.10 | 1.01 |
| IN. | 1.55 | 2.55 | 4.29 | 2.86 | 2.42 | 2.57 | 5.81 | 3.27 | 1.56 | 0.81 | 1.27 | 1.13 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 2004, BY WATER YEAR (WY)

| | 1975 | 1976 | 1977 | 1978 | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--|
| MEAN | 8.76 | 16.1 | 24.2 | 27.7 | 27.7 | 36.0 | 37.6 | 27.8 | 21.6 | 10.2 | 8.16 | 6.97 | | | | | | | | | | |
| MAX | 25.5 | 43.5 | 60.8 | 74.0 | 46.2 | 62.9 | 102 | 48.3 | 82.1 | 23.9 | 16.4 | 25.2 | | | | | | | | | | |
| (WY) | 1990 | 1990 | 1987 | 1979 | 1982 | 1983 | 1983 | 1979 | 1982 | 1998 | 1989 | 1985 | | | | | | | | | | |
| MIN | 3.01 | 4.26 | 4.43 | 3.17 | 7.97 | 15.6 | 13.9 | 13.7 | 9.02 | 3.70 | 2.21 | 1.90 | | | | | | | | | | |
| (WY) | 1995 | 2002 | 1981 | 1981 | 2002 | 2002 | 1985 | 1981 | 1994 | 1994 | 1993 | 1980 | | | | | | | | | | |

| SUMMARY STATISTICS | FOR 2003 CALENDAR YEAR | FOR 2004 WATER YEAR | WATER YEARS 1975 - 2004 |
|--------------------------|------------------------|---------------------|-------------------------|
| ANNUAL TOTAL | 9133.5 | 7174.3 | |
| ANNUAL MEAN | 25.0 | 19.6 | 21.1 |
| HIGHEST ANNUAL MEAN | | | 30.4 |
| LOWEST ANNUAL MEAN | | | 8.67 |
| HIGHEST DAILY MEAN | 75 | Mar 30 | 324 |
| LOWEST DAILY MEAN | 5.4 | Oct 3 | 1.2 |
| ANNUAL SEVEN-DAY MINIMUM | 5.7 | Sep 27 | 1.3 |
| MAXIMUM PEAK FLOW | | | 370 |
| MAXIMUM PEAK STAGE | | | 2.91 |
| INSTANTANEOUS LOW FLOW | | | 3.8 |
| ANNUAL RUNOFF (CFSM) | 2.82 | 2.21 | 1.1 |
| ANNUAL RUNOFF (INCHES) | 38.31 | 30.09 | 2.37 |
| 10 PERCENT EXCEEDS | 46 | 37 | 32.25 |
| 50 PERCENT EXCEEDS | 21 | 17 | 16 |
| 90 PERCENT EXCEEDS | 7.7 | 5.5 | 4.3 |

e Estimated

PAWCATUCK RIVER BASIN

01117471 BEAVER RIVER, SHANNOCK HILL ROAD, NEAR SHANNOCK, RI

LOCATION.--Lat. 41° 27' 51", long 71° 37' 42", Washington County, Hydrologic Unit 01090005, at bridge on Shannock Hill Road, 1.2 mi northeast of Shannock, RI.

DRAINAGE AREA.--11.2 mi².

PERIOD OF RECORD.--Discharge: October 2002 to December 2004 (discontinued). Discharge measurements made in water years 1966-67, 1974-76, 1991, 1997.

Water-quality records: Water years 1968, 1976.

GAGE.--Water-stage recorder. Elevation of gage is 90 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are fair.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 111 ft³/s, Apr. 14, 2004, gage height, 2.98 ft; minimum discharge, 1.2 ft³/s, Aug. 4, 2004.

**DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES**

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|------|------|------|------|------|------|------|-------|-------|-------|-------|
| 1 | 8.6 | e30 | 16 | 33 | 15 | 18 | 70 | 41 | 23 | 7.2 | 5.6 | 7.5 |
| 2 | 8.7 | e27 | 16 | 32 | 15 | 19 | 96 | 38 | 24 | 6.8 | 5.1 | 6.9 |
| 3 | e8.5 | e25 | 15 | 31 | 15 | 20 | 79 | 43 | 22 | 7.2 | 4.6 | 6.6 |
| 4 | e8.6 | e23 | 15 | 32 | 26 | 20 | 67 | 58 | 20 | 7.4 | 3.1 | 6.1 |
| 5 | e8.6 | 23 | 15 | 40 | 24 | 20 | 61 | 52 | 18 | 9.5 | 11 | 6.3 |
| 6 | e8.6 | 28 | 16 | 44 | 28 | 27 | 55 | 44 | 18 | 12 | 12 | 6.7 |
| 7 | e8.3 | 27 | 18 | 37 | 71 | 31 | 50 | 40 | 18 | 9.9 | 9.7 | 6.4 |
| 8 | e8.5 | 24 | 19 | 31 | 52 | 25 | 46 | 38 | 18 | 8.8 | 7.3 | 6.8 |
| 9 | e8.6 | 22 | 19 | 27 | 33 | 23 | 44 | 37 | 18 | 7.4 | 6.3 | 6.9 |
| 10 | e8.3 | 23 | 17 | 24 | 28 | 21 | 41 | 34 | 15 | 6.9 | 5.8 | 7.4 |
| 11 | e8.0 | 20 | 29 | 24 | 27 | 19 | 38 | 33 | 13 | 6.4 | 5.5 | 7.0 |
| 12 | e7.7 | 22 | 59 | 24 | 24 | 19 | 37 | 31 | 12 | 7.1 | 5.5 | 6.4 |
| 13 | e8.3 | 24 | 49 | 24 | 22 | 18 | 52 | 29 | 12 | 9.7 | 15 | 6.5 |
| 14 | e7.9 | 23 | 37 | 24 | 22 | 17 | 100 | 27 | 13 | 12 | 19 | 5.3 |
| 15 | e18 | 21 | 63 | 22 | 22 | 17 | 98 | 26 | 14 | 10 | 35 | 4.5 |
| 16 | e16 | 20 | 64 | 23 | 20 | 16 | 79 | 26 | 13 | 9.0 | 35 | 7.4 |
| 17 | e12 | 19 | 53 | 24 | 19 | 17 | 69 | 24 | 12 | 7.9 | 23 | 7.3 |
| 18 | e13 | 18 | 72 | 25 | 18 | 17 | 65 | 24 | 12 | 7.4 | 16 | 20 |
| 19 | e12 | 18 | 73 | 23 | 18 | 18 | 58 | 24 | 13 | 6.1 | 12 | 36 |
| 20 | e11 | 19 | 59 | 21 | 18 | 18 | 54 | 24 | 13 | 6.0 | 11 | 22 |
| 21 | e11 | 20 | 51 | 20 | 18 | 29 | 51 | 24 | 11 | 6.1 | 11 | 15 |
| 22 | e11 | 19 | 48 | 19 | 19 | 33 | 48 | 25 | 12 | 5.0 | 19 | 11 |
| 23 | e11 | 18 | 46 | 19 | 19 | 26 | 48 | 22 | 11 | 4.5 | 17 | 9.0 |
| 24 | e11 | 19 | 46 | 17 | 18 | 22 | 54 | 21 | 9.9 | 4.4 | 13 | 8.0 |
| 25 | e11 | 19 | 55 | 17 | 18 | 21 | 50 | 20 | 9.6 | 5.6 | 10 | 7.7 |
| 26 | e11 | 22 | 53 | 17 | 17 | 20 | 49 | 20 | 9.4 | 6.2 | 8.4 | 7.1 |
| 27 | e18 | 21 | 46 | 17 | 17 | 21 | 62 | 26 | 9.2 | 5.9 | 7.8 | 7.1 |
| 28 | e31 | 19 | 40 | 17 | 17 | 20 | 57 | 29 | 8.2 | 6.5 | 7.7 | 7.7 |
| 29 | e55 | 18 | 37 | 17 | 17 | 19 | 50 | 33 | 8.5 | 7.4 | 7.5 | 46 |
| 30 | e58 | 17 | 36 | 16 | --- | 18 | 46 | 26 | 7.9 | 6.7 | 7.2 | 54 |
| 31 | e40 | --- | 36 | 16 | --- | 26 | --- | 22 | --- | 5.9 | 7.7 | --- |
| TOTAL | 467.2 | 648 | 1218 | 757 | 677 | 655 | 1774 | 961 | 417.7 | 228.9 | 363.8 | 362.6 |
| MEAN | 15.1 | 21.6 | 39.3 | 24.4 | 23.3 | 21.1 | 59.1 | 31.0 | 13.9 | 7.38 | 11.7 | 12.1 |
| MAX | 58 | 30 | 73 | 44 | 71 | 33 | 100 | 58 | 24 | 12 | 35 | 54 |
| MIN | 7.7 | 17 | 15 | 16 | 15 | 16 | 37 | 20 | 7.9 | 4.4 | 3.1 | 4.5 |
| CFSM | 1.35 | 1.93 | 3.51 | 2.18 | 2.08 | 1.89 | 5.28 | 2.77 | 1.24 | 0.66 | 1.05 | 1.08 |
| IN. | 1.55 | 2.15 | 4.05 | 2.51 | 2.25 | 2.18 | 5.89 | 3.19 | 1.39 | 0.76 | 1.21 | 1.20 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2003 - 2004, BY WATER YEAR (WY)

| | 2003 | 2004 | 2003 | 2004 | 2003 | 2004 | 2003 | 2004 | 2003 | 2004 | 2003 | 2004 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 12.0 | 20.4 | 36.5 | 30.1 | 23.6 | 33.9 | 54.7 | 32.3 | 23.9 | 12.7 | 15.2 | 12.1 |
| MAX | 15.1 | 21.6 | 39.3 | 35.9 | 23.9 | 46.6 | 59.1 | 33.6 | 33.8 | 18.0 | 18.6 | 12.2 |
| (WY) | 2004 | 2004 | 2004 | 2003 | 2003 | 2003 | 2004 | 2003 | 2003 | 2003 | 2003 | 2003 |
| MIN | 8.99 | 19.1 | 33.8 | 24.4 | 23.3 | 21.1 | 50.3 | 31.0 | 13.9 | 7.38 | 11.7 | 12.1 |
| (WY) | 2003 | 2003 | 2003 | 2004 | 2004 | 2004 | 2003 | 2004 | 2004 | 2004 | 2004 | 2004 |

SUMMARY STATISTICS

| | FOR 2003 CALENDAR YEAR | FOR 2004 WATER YEAR | FOR 2003 WATER YEAR | FOR 2004 WATER YEAR |
|--------------------------|------------------------|---------------------|---------------------|---------------------|
| ANNUAL TOTAL | 10625.2 | 8530.2 | | |
| ANNUAL MEAN | 29.1 | 23.3 | 25.6 | 27.9 |
| HIGHEST ANNUAL MEAN | | | | 2003 |
| LOWEST ANNUAL MEAN | | | 23.3 | 2004 |
| HIGHEST DAILY MEAN | 88 | Mar 31 | 100 | Apr 14 2004 |
| LOWEST DAILY MEAN | 7.7 | Oct 12 | 3.1 | Aug 4 2004 |
| ANNUAL SEVEN-DAY MINIMUM | 8.2 | Oct 8 | 5.4 | Jul 19 2002 |
| MAXIMUM PEAK FLOW | | | 111 | Apr 14 2004 |
| MAXIMUM PEAK STAGE | | | 2.98 | Apr 14 2004 |
| INSTANTANEOUS LOW FLOW | | | 1.2 | Aug 4 2004 |
| ANNUAL RUNOFF (CFSM) | 2.60 | 2.08 | 2.29 | 2.29 |
| ANNUAL RUNOFF (INCHES) | 35.29 | 28.33 | 31.07 | 31.07 |
| 10 PERCENT EXCEEDS | 53 | 50 | 50 | 50 |
| 50 PERCENT EXCEEDS | 24 | 19 | 21 | 21 |
| 90 PERCENT EXCEEDS | 11 | 7.1 | 7.5 | 7.5 |

e Estimated

PAWCATUCK RIVER BASIN

01117471 BEAVER RIVER, SHANNOCK HILL ROAD, NEAR SHANNOCK, RI--Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1 | 35 | 14 | 51 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 2 | 20 | 13 | 72 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 3 | 17 | 13 | 61 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 4 | 16 | 13 | 52 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 5 | 14 | 33 | 47 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 6 | 14 | 35 | 44 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 7 | 12 | 30 | 47 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 8 | 11 | 23 | e61 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 9 | 11 | 20 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 10 | 10 | 18 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 11 | 11 | 17 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 12 | 10 | 17 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 13 | 9.7 | 30 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 14 | 9.8 | 34 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 15 | 11 | 29 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 16 | 27 | 26 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 17 | 29 | 23 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 18 | 22 | 22 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 19 | 26 | 21 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 20 | 37 | 20 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 21 | 29 | 21 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 22 | 23 | 21 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 23 | 18 | 20 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 24 | 19 | 19 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 25 | 19 | 27 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 26 | 16 | 36 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 27 | 14 | 35 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 28 | 14 | 32 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 29 | 13 | 48 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 30 | 14 | 49 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 31 | 14 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| TOTAL | 545.5 | 759 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| MEAN | 17.6 | 25.3 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| MAX | 37 | 49 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| MIN | 9.7 | 13 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| CFSM | 1.57 | 2.26 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| IN. | 1.81 | 2.52 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2003 - 2005, BY WATER YEAR (WY)

| | 2003 | 2004 | 2005 | 2003 | 2004 | 2005 | 2003 | 2004 | 2005 | 2003 | 2004 | 2005 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 13.9 | 22.0 | 36.5 | 30.1 | 23.6 | 33.9 | 54.7 | 32.3 | 23.9 | 12.7 | 15.2 | 12.1 |
| MAX | 17.6 | 25.3 | 39.3 | 35.9 | 23.9 | 46.6 | 59.1 | 33.6 | 33.8 | 18.0 | 18.6 | 12.2 |
| (WY) | 2005 | 2005 | 2004 | 2003 | 2003 | 2003 | 2004 | 2003 | 2003 | 2003 | 2003 | 2003 |
| MIN | 8.99 | 19.1 | 33.8 | 24.4 | 23.3 | 21.1 | 50.3 | 31.0 | 13.9 | 7.38 | 11.7 | 12.1 |
| (WY) | 2003 | 2003 | 2003 | 2004 | 2004 | 2004 | 2003 | 2004 | 2004 | 2004 | 2004 | 2004 |

SUMMARY STATISTICS

WATER YEARS 2003 - 2005

| | |
|--------------------------|-------|
| ANNUAL MEAN | 25.6 |
| HIGHEST ANNUAL MEAN | 27.9 |
| LOWEST ANNUAL MEAN | 23.3 |
| HIGHEST DAILY MEAN | 100 |
| LOWEST DAILY MEAN | 3.1 |
| ANNUAL SEVEN-DAY MINIMUM | 4.8 |
| MAXIMUM PEAK FLOW | 111 |
| MAXIMUM PEAK STAGE | 2.98 |
| INSTANTANEOUS LOW FLOW | 1.2 |
| ANNUAL RUNOFF (CFSM) | 2.29 |
| ANNUAL RUNOFF (INCHES) | 31.07 |
| 10 PERCENT EXCEEDS | 50 |
| 50 PERCENT EXCEEDS | 21 |
| 90 PERCENT EXCEEDS | 7.5 |

e Estimated

PAWCATUCK RIVER BASIN

01117500 PAWCATUCK RIVER AT WOOD RIVER JUNCTION, RI

LOCATION.--Lat 41°26'42", long 71°40'53", Washington County, Hydrologic Unit 01090005, on right bank 10 ft downstream from bridge on Alton-Carolina Road, 0.8 mi northeast of Wood River Junction, 1.5 mi southwest of Carolina, and 2.9 mi upstream from Wood River.

DRAINAGE AREA.--100 mi².

PERIOD OF RECORD.--October 1940 to current year. October and November 1940, monthly discharge only, published in WSP 1301. Prior to October 1943, published as Charles River at Wood River Junction.

REVISED RECORDS.--WSP 1051: Drainage area. WSP 1201: 1948.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 43.86 ft above National Geodetic Vertical Datum of 1929. Prior to June 19, 1984, at site 10 ft upstream at same datum. Satellite gage-height telemeter at station.

REMARKS.--Records good. Occasional regulation by fish hatchery on White Brook. Prior to 1972, occasional regulation at low flow by powerplant and mills upstream; regulation greater prior to 1969. Annual mean discharge for period of record shown in summary statistics does not include the 1941 water year.

AVERAGE DISCHARGE.--63 years (water years 1941--2004), 195 ft³/s, 26.56 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,860 ft³/s, June 7, 1982, gage height, 8.75 ft; minimum discharge, 7.4 ft³/s, Oct. 10, 1947; minimum daily discharge, 15 ft³/s, Oct. 11, 1947.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 826 ft³/s, Apr. 16, gage height, 5.01 ft; minimum discharge, 45 ft³/s, Sept. 15.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|------|------|------|------|-------|------|------|------|------|------|
| 1 | 81 | 271 | 130 | 265 | 131 | 169 | 435 | 351 | 200 | 80 | 57 | 70 |
| 2 | 80 | 219 | 126 | 249 | 130 | 175 | 670 | 330 | 210 | 77 | 57 | 65 |
| 3 | 81 | 186 | 121 | 242 | 133 | 181 | 752 | 331 | 212 | 76 | 54 | 61 |
| 4 | 80 | 172 | 116 | 241 | 171 | 184 | 736 | 382 | 196 | 76 | 50 | 59 |
| 5 | 80 | 167 | 115 | 277 | 184 | 183 | 665 | 395 | 180 | 82 | 80 | 58 |
| 6 | 78 | 190 | 115 | 303 | 209 | 216 | 567 | 386 | 173 | 100 | 108 | 56 |
| 7 | 75 | 202 | 118 | 295 | 374 | 253 | 491 | 358 | 172 | 98 | 99 | 55 |
| 8 | 74 | 189 | 123 | 254 | 376 | 246 | 442 | 326 | 167 | 85 | 77 | 59 |
| 9 | 73 | 171 | 122 | 217 | 350 | 218 | 407 | 301 | 159 | 78 | 66 | 61 |
| 10 | 73 | 163 | 127 | 182 | 287 | 203 | 377 | 285 | 147 | 72 | 60 | 61 |
| 11 | 71 | 156 | 172 | 172 | 257 | 193 | 354 | 275 | 136 | 67 | 56 | 58 |
| 12 | 71 | 158 | 263 | 175 | 240 | 185 | 338 | 264 | 129 | 66 | 55 | 55 |
| 13 | 74 | 167 | 302 | 183 | 223 | 177 | 388 | 252 | 123 | 87 | 83 | 52 |
| 14 | 73 | 165 | 271 | 167 | 216 | 169 | 626 | 237 | 122 | 114 | 115 | 51 |
| 15 | 104 | 157 | 369 | 163 | 211 | 166 | 795 | 226 | 131 | 108 | 188 | 47 |
| 16 | 119 | 150 | 421 | 157 | 196 | 164 | 811 | 218 | 127 | 94 | 244 | 61 |
| 17 | 120 | 145 | 446 | 156 | 185 | 165 | 735 | 211 | 120 | 82 | 220 | 66 |
| 18 | 112 | 142 | 512 | 162 | 181 | 165 | 634 | 205 | 118 | 75 | 161 | 117 |
| 19 | 106 | 139 | 535 | 165 | 178 | 165 | 542 | 206 | 136 | 72 | 121 | 195 |
| 20 | 103 | 147 | 526 | 162 | 176 | 164 | 469 | 202 | 131 | 68 | 106 | 196 |
| 21 | 98 | 153 | 462 | 155 | 175 | 206 | 429 | 192 | 119 | 65 | 103 | 143 |
| 22 | 102 | 151 | 412 | 151 | 179 | 253 | 401 | 189 | 110 | 62 | 133 | 103 |
| 23 | 98 | 145 | 381 | 150 | 182 | 249 | 381 | 183 | 111 | 58 | 135 | 86 |
| 24 | 92 | 144 | 363 | 140 | 177 | 217 | 386 | 181 | 103 | 56 | 114 | 77 |
| 25 | 87 | 143 | 377 | 130 | 171 | 203 | 379 | 180 | 97 | 59 | 93 | 72 |
| 26 | 85 | 142 | 378 | 129 | 166 | 197 | 383 | 176 | 95 | 57 | 83 | 68 |
| 27 | 101 | 139 | 367 | 129 | 163 | 197 | 406 | 192 | 92 | 57 | 77 | 66 |
| 28 | 144 | 135 | 343 | 132 | 161 | 195 | 415 | 222 | 92 | 60 | 74 | 70 |
| 29 | 244 | 135 | 312 | 135 | 163 | 188 | 401 | 251 | 89 | 65 | 71 | 215 |
| 30 | 309 | 131 | 293 | 134 | --- | 180 | 374 | 242 | 84 | 62 | 68 | 305 |
| 31 | 313 | --- | 279 | 132 | --- | 213 | --- | 211 | --- | 59 | 70 | --- |
| TOTAL | 3401 | 4874 | 8997 | 5704 | 5945 | 6039 | 15189 | 7960 | 4081 | 2317 | 3078 | 2708 |
| MEAN | 110 | 162 | 290 | 184 | 205 | 195 | 506 | 257 | 136 | 74.7 | 99.3 | 90.3 |
| MAX | 313 | 271 | 535 | 303 | 376 | 253 | 811 | 395 | 212 | 114 | 244 | 305 |
| MIN | 71 | 131 | 115 | 129 | 130 | 164 | 338 | 176 | 84 | 56 | 50 | 47 |
| CFSM | 1.10 | 1.62 | 2.90 | 1.84 | 2.05 | 1.95 | 5.06 | 2.57 | 1.36 | 0.75 | 0.99 | 0.90 |
| IN. | 1.27 | 1.81 | 3.35 | 2.12 | 2.21 | 2.25 | 5.65 | 2.96 | 1.52 | 0.86 | 1.15 | 1.01 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 2004, BY WATER YEAR (WY)

| | | | | | | | | | | | | |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 87.9 | 142 | 208 | 242 | 270 | 346 | 341 | 254 | 186 | 99.8 | 85.8 | 79.2 |
| MAX | 332 | 471 | 543 | 655 | 453 | 598 | 908 | 464 | 718 | 249 | 275 | 374 |
| (WY) | 1956 | 1956 | 1987 | 1979 | 1970 | 1953 | 1983 | 1983 | 1982 | 1984 | 1946 | 1954 |
| MIN | 31.1 | 42.2 | 49.8 | 51.8 | 89.5 | 145 | 124 | 130 | 82.3 | 38.2 | 28.8 | 29.5 |
| (WY) | 1950 | 1966 | 1966 | 1981 | 2002 | 1981 | 1985 | 1981 | 1957 | 1957 | 1999 | 1980 |

| SUMMARY STATISTICS | FOR 2003 CALENDAR YEAR | FOR 2004 WATER YEAR | WATER YEARS 1941 - 2004 |
|--------------------------|------------------------|---------------------|-------------------------|
| ANNUAL TOTAL | 90338 | 70293 | |
| ANNUAL MEAN | 248 | 192 | 195 |
| HIGHEST ANNUAL MEAN | | | 311 |
| LOWEST ANNUAL MEAN | | | 84.4 |
| HIGHEST DAILY MEAN | 649 | Apr 1 | 811 |
| LOWEST DAILY MEAN | 71 | Oct 11 | 47 |
| ANNUAL SEVEN-DAY MINIMUM | 73 | Oct 8 | 55 |
| MAXIMUM PEAK FLOW | | | 826 |
| MAXIMUM PEAK STAGE | | 5.01 | Apr 16 |
| INSTANTANEOUS LOW FLOW | | 45 | Sep 15 |
| ANNUAL RUNOFF (CFSM) | 2.48 | 1.92 | 1.95 |
| ANNUAL RUNOFF (INCHES) | 33.61 | 26.15 | 26.56 |
| 10 PERCENT EXCEEDS | 431 | 380 | 397 |
| 50 PERCENT EXCEEDS | 199 | 163 | 155 |
| 90 PERCENT EXCEEDS | 103 | 66 | 50 |

PAWCATUCK RIVER BASIN

01117600 MEADOW BROOK NEAR CAROLINA, RI

LOCATION.--Lat 41° 27' 59", long 71° 41' 26", Washington County, Hydrologic Unit 01090005, at culvert on Pine Hill Road, 1.5 mi northwest of Carolina.

DRAINAGE AREA.--5.53 mi².

PERIOD OF RECORD.--Discharge: June 1965 to September 1974, August 2002 to December 2004 (discontinued). Discharge measurements made in water year 1977.

GAGE.--Water-stage recorder. Elevation of gage is 75 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to August 2002, at site 50 ft upstream of culvert at different datum.

REMARKS.--Records good except those for estimated daily discharge, which are fair.

AVERAGE DISCHARGE.--11 years (water years 1966--74, 2003--04), 10.0 ft³/s.EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 164 ft³/s, Mar. 18, 1968, gage height 6.07 ft (different datum), from rating curve extended above 84 ft³/s; minimum discharge, 0.07 ft³/s, Sept. 12, 13, 1965.DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|-------|-------|-------|-------|------|-------|-------|-------|--------|--------|
| 1 | 1.8 | 17 | 6.1 | 14 | 6.6 | 8.9 | 44 | 16 | 9.2 | 1.2 | 0.89 | 1.2 |
| 2 | 1.8 | 15 | 5.9 | 13 | 6.5 | 9.3 | 62 | 15 | 10 | 1.2 | 0.90 | 1.1 |
| 3 | 1.8 | 13 | 5.4 | 13 | 6.9 | 9.5 | 45 | 18 | 8.8 | 1.1 | 0.78 | 1.1 |
| 4 | 1.8 | 12 | 5.2 | 13 | 12 | 9.6 | 35 | 25 | 7.5 | 0.98 | 0.75 | 1.0 |
| 5 | 1.8 | 12 | 5.2 | 18 | 11 | 9.6 | 32 | 22 | 6.6 | 2.3 | 3.4 | 1.2 |
| 6 | 1.6 | 12 | 5.2 | 20 | 12 | 14 | 28 | 17 | 6.4 | 3.5 | 2.5 | 1.0 |
| 7 | 1.5 | 9.2 | 5.3 | 15 | 32 | 15 | 24 | 15 | 6.3 | 1.8 | 1.4 | 0.90 |
| 8 | 1.5 | 7.2 | 6.0 | 13 | 28 | 12 | 22 | 14 | 5.8 | 1.3 | 1.0 | 1.0 |
| 9 | 1.5 | 6.3 | 5.8 | 11 | 17 | 11 | 20 | 13 | 5.2 | 1.1 | 0.90 | 1.1 |
| 10 | 1.5 | 5.9 | 6.1 | 9.4 | 15 | 9.7 | 19 | 13 | 4.8 | 0.96 | 0.79 | 0.91 |
| 11 | 1.5 | 5.9 | 13 | 8.7 | 14 | 9.1 | 18 | 13 | 4.3 | 0.87 | 0.73 | 0.74 |
| 12 | 1.4 | 6.4 | 27 | 9.5 | 12 | 8.7 | 17 | 12 | 3.9 | 0.82 | 0.77 | 0.74 |
| 13 | 1.4 | 7.2 | 21 | 10 | 12 | 8.4 | 28 | 11 | 3.6 | 2.5 | 3.6 | 0.74 |
| 14 | 1.3 | 7.3 | 12 | 10 | 11 | 8.1 | 71 | 10 | 4.0 | 3.6 | 6.2 | 0.72 |
| 15 | 4.8 | 6.9 | 29 | 8.7 | 11 | 7.9 | 61 | 9.5 | 5.3 | 2.4 | 13 | 0.72 |
| 16 | 5.1 | 6.7 | 33 | 8.2 | 9.8 | 8.0 | 41 | 9.0 | 4.4 | 1.9 | 17 | 1.00 |
| 17 | 3.6 | 6.7 | 25 | 7.9 | 9.4 | 8.2 | 31 | 8.6 | 3.7 | 1.6 | 9.2 | 0.99 |
| 18 | 4.2 | 6.6 | 38 | 8.4 | 8.9 | 8.2 | 28 | 8.5 | 3.7 | 1.4 | 5.6 | 7.7 |
| 19 | 4.2 | 6.5 | 36 | 8.6 | 8.9 | 8.4 | 26 | 8.7 | 4.9 | 1.4 | 4.0 | 16 |
| 20 | 3.9 | 7.4 | 27 | 8.3 | 8.7 | 8.5 | 23 | 8.4 | 3.6 | 1.3 | 3.4 | 7.5 |
| 21 | 3.2 | 7.7 | 22 | 7.8 | 8.8 | 15 | 21 | 7.9 | 2.9 | 1.1 | 3.7 | 4.2 |
| 22 | 3.0 | 17 | 19 | 7.5 | 9.4 | 17 | 19 | 7.7 | 2.8 | 1.0 | 8.4 | 3.0 |
| 23 | 2.8 | 21 | 18 | 7.4 | 9.3 | 13 | 19 | 7.5 | 3.0 | 0.99 | 6.3 | 2.2 |
| 24 | 2.5 | 9.9 | 19 | 6.9 | 8.8 | 11 | 22 | 7.5 | 2.4 | 1.0 | 3.7 | 1.9 |
| 25 | 2.3 | 8.2 | 24 | 6.3 | 8.3 | 11 | 20 | 7.1 | 2.1 | 1.1 | 2.6 | 1.6 |
| 26 | 2.2 | 7.5 | 24 | 6.1 | 8.1 | 10 | 21 | 6.8 | 2.0 | 0.95 | 2.2 | 1.4 |
| 27 | 4.3 | 6.9 | 19 | 6.4 | 8.0 | 10 | 28 | 9.9 | 1.9 | 0.84 | 2.0 | 1.3 |
| 28 | 7.6 | 6.6 | 17 | 6.6 | 8.0 | 10 | 24 | 13 | 1.6 | 1.0 | 1.7 | 2.0 |
| 29 | 16 | 6.8 | 16 | 6.8 | 8.3 | 9.4 | 19 | 16 | 1.6 | 1.1 | 1.4 | 21 |
| 30 | 24 | 6.6 | 15 | 6.7 | --- | 8.7 | 17 | 10 | 1.4 | 0.96 | 1.2 | 27 |
| 31 | 21 | --- | 15 | 6.6 | --- | 14 | --- | 8.0 | --- | 0.86 | 1.3 | --- |
| TOTAL | 136.9 | 275.4 | 525.2 | 302.8 | 329.7 | 321.2 | 885 | 368.1 | 133.7 | 44.13 | 111.31 | 112.96 |
| MEAN | 4.42 | 9.18 | 16.9 | 9.77 | 11.4 | 10.4 | 29.5 | 11.9 | 4.46 | 1.42 | 3.59 | 3.77 |
| MAX | 24 | 21 | 38 | 20 | 32 | 17 | 71 | 25 | 10 | 3.6 | 17 | 27 |
| MIN | 1.3 | 5.9 | 5.2 | 6.1 | 6.5 | 7.9 | 17 | 6.8 | 1.4 | 0.82 | 0.73 | 0.72 |
| CFSM | 0.80 | 1.66 | 3.06 | 1.77 | 2.06 | 1.87 | 5.33 | 2.15 | 0.81 | 0.26 | 0.65 | 0.68 |
| IN. | 0.92 | 1.85 | 3.53 | 2.04 | 2.22 | 2.16 | 5.95 | 2.48 | 0.90 | 0.30 | 0.75 | 0.76 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 2004, BY WATER YEAR (WY)

| | | | | | | | | | | | | |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 2.17 | 6.49 | 13.8 | 11.7 | 13.9 | 20.0 | 19.6 | 14.5 | 9.63 | 3.92 | 2.50 | 1.77 |
| MAX | 4.42 | 19.3 | 28.3 | 19.9 | 23.0 | 34.7 | 29.5 | 26.6 | 26.9 | 11.1 | 7.30 | 3.97 |
| (WY) | 2004 | 1973 | 1973 | 1974 | 1970 | 1968 | 2004 | 1972 | 1972 | 1972 | 2003 | 2003 |
| MIN | 0.31 | 0.32 | 0.40 | 0.80 | 5.19 | 10.4 | 5.76 | 8.81 | 4.46 | 1.26 | 0.46 | 0.18 |
| (WY) | 1969 | 1966 | 1966 | 1966 | 1967 | 2004 | 1966 | 1974 | 2004 | 1965 | 1966 | 1965 |

SUMMARY STATISTICS

| | FOR 2003 CALENDAR YEAR | | FOR 2004 WATER YEAR | | WATER YEARS 1965 - 2004 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|-------------|
| ANNUAL TOTAL | 4605.8 | | 3546.40 | | | |
| ANNUAL MEAN | 12.6 | | 9.69 | | 10.0 | |
| HIGHEST ANNUAL MEAN | | | | | 14.1 | |
| LOWEST ANNUAL MEAN | | | | | 4.19 | |
| HIGHEST DAILY MEAN | 42 | Mar 31 | 71 | Apr 14 | 151 | Mar 18 1968 |
| LOWEST DAILY MEAN | 1.3 | Oct 14 | 0.72 | Sep 14 | 0.07 | Sep 12 1965 |
| ANNUAL SEVEN-DAY MINIMUM | 1.4 | Oct 8 | 0.80 | Sep 10 | 0.09 | Sep 24 1965 |
| MAXIMUM PEAK FLOW | | | 78 | | 164 | Mar 18 1968 |
| MAXIMUM PEAK STAGE | | | 2.57 | | 6.07 | Mar 18 1968 |
| INSTANTANEOUS LOW FLOW | | | 0.68 | | 0.07 | Sep 12 1965 |
| ANNUAL RUNOFF (CFSM) | 2.28 | | 1.75 | | 1.82 | |
| ANNUAL RUNOFF (INCHES) | 30.98 | | 23.86 | | 24.66 | |
| 10 PERCENT EXCEEDS | 25 | | 21 | | 23 | |
| 50 PERCENT EXCEEDS | 9.7 | | 7.6 | | 7.2 | |
| 90 PERCENT EXCEEDS | 2.8 | | 1.1 | | 0.62 | |

^a Years of operation not continuous; see Period of Record for actual years of operation.

PAWCATUCK RIVER BASIN

01117600 MEADOW BROOK NEAR CAROLINA, RI--Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1 | 13 | 4.6 | 23 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 2 | 8.5 | 4.4 | 37 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 3 | 7.3 | 4.2 | 30 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 4 | 6.4 | 4.5 | 23 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 5 | 5.5 | 12 | 20 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 6 | 4.7 | 13 | 18 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 7 | 4.2 | 9.5 | 19 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 8 | 3.9 | 7.7 | 29 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 9 | 3.7 | 6.8 | 29 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 10 | 3.4 | 6.2 | 26 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 11 | 3.1 | 5.8 | 31 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 12 | 2.7 | 6.2 | 29 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 13 | 2.4 | 12 | 25 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 14 | 2.3 | 12 | 22 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 15 | 2.6 | 10 | e20 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 16 | 8.0 | 9.2 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 17 | 10 | 8.5 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 18 | 7.9 | 8.1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 19 | 9.4 | 7.8 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 20 | 14 | 7.3 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 21 | 11 | 7.9 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 22 | 8.8 | 7.8 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 23 | 7.5 | 7.4 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 24 | 6.7 | 7.3 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 25 | 6.2 | 10 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 26 | 5.8 | 14 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 27 | 5.4 | 12 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 28 | 5.2 | 12 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 29 | 4.9 | 25 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 30 | 4.8 | 25 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 31 | 4.9 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| TOTAL | 194.2 | 288.2 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| MEAN | 6.26 | 9.61 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| MAX | 14 | 25 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| MIN | 2.3 | 4.2 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| CFSM | 1.13 | 1.74 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| IN. | 1.31 | 1.94 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |

| STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 2005, BY WATER YEAR (WY) | | | | | | | | | | | | |
|---|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 2.51 | 6.75 | 13.8 | 11.7 | 13.9 | 20.0 | 19.6 | 14.5 | 9.63 | 3.92 | 2.50 | 1.77 |
| MAX | 6.26 | 19.3 | 28.3 | 19.9 | 23.0 | 34.7 | 29.5 | 26.6 | 26.9 | 11.1 | 7.30 | 3.97 |
| (WY) | 2005 | 1973 | 1973 | 1974 | 1970 | 1968 | 2004 | 1972 | 1972 | 1972 | 2003 | 2003 |
| MIN | 0.31 | 0.32 | 0.40 | 0.80 | 5.19 | 10.4 | 5.76 | 8.81 | 4.46 | 1.26 | 0.46 | 0.18 |
| (WY) | 1969 | 1966 | 1966 | 1966 | 1967 | 2004 | 1966 | 1974 | 2004 | 1965 | 1966 | 1965 |

| SUMMARY STATISTICS | | ^a WATER YEARS 1965 - 2005 | |
|--------------------------|--|--------------------------------------|-------------|
| ANNUAL MEAN | | 10.0 | |
| HIGHEST ANNUAL MEAN | | 14.1 | 1973 |
| LOWEST ANNUAL MEAN | | 4.19 | 1966 |
| HIGHEST DAILY MEAN | | 151 | Mar 18 1968 |
| LOWEST DAILY MEAN | | 0.07 | Sep 12 1965 |
| ANNUAL SEVEN-DAY MINIMUM | | 0.09 | Sep 24 1965 |
| MAXIMUM PEAK FLOW | | 164 | Mar 18 1968 |
| MAXIMUM PEAK STAGE | | 6.07 | Mar 18 1968 |
| INSTANTANEOUS LOW FLOW | | 0.07 | Sep 12 1965 |
| ANNUAL RUNOFF (CFSM) | | 1.82 | |
| ANNUAL RUNOFF (INCHES) | | 24.66 | |
| 10 PERCENT EXCEEDS | | 23 | |
| 50 PERCENT EXCEEDS | | 7.2 | |
| 90 PERCENT EXCEEDS | | 0.62 | |

^a Years of operation not continuous; see Period of Record for actual years of operation.
e Estimated

PAWCATUCK RIVER BASIN

01117800 WOOD RIVER NEAR ARCADIA, RI

LOCATION.--Lat 41° 34' 26", long 71° 43' 16", Washington County, Hydrologic Unit 01090005, on left bank at upstream side of bridge on Ten Rod Road, 1.8 mi northwest of Arcadia, and 4.5 mi north of Hope Valley.

DRAINAGE AREA.--35.2 mi².

PERIOD OF RECORD.--Discharge: January 1964 to September 1981, October 1982 to current year.

Water-quality records: Water years 1967-74.

GAGE.--Water-stage recorder. Datum of gage is 118.20 ft above National Geodetic Vertical Datum of 1929 (Rhode Island State Board of Public Roads benchmark). Prior to Oct. 1, 1985, datum erroneously published as 137.97 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records good.

AVERAGE DISCHARGE.--39 years (water years 1965-81, 1983-2004), 75.6 ft³/s, 29.19 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 896 ft³/s, Mar. 18, 1968, gage height, 8.64 ft; minimum discharge, 4.1 ft³/s, Sept. 1, 1995.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 6, 1982, reached a discharge of 1,010 ft³/s, gage height, 8.97 ft.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 607 ft³/s, Apr. 14, gage height, 7.24 ft; minimum discharge, 13 ft³/s, Sept. 4-8.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1 | 24 | 173 | 57 | 111 | 53 | 62 | 232 | 134 | 86 | 24 | 16 | 16 |
| 2 | 25 | 139 | 55 | 107 | 52 | 70 | 316 | 131 | 83 | 24 | 16 | 15 |
| 3 | 23 | 117 | 51 | 107 | 54 | 78 | 249 | 145 | 75 | 25 | 15 | 14 |
| 4 | 23 | 98 | 48 | 107 | 74 | 79 | 199 | 173 | 66 | 27 | 14 | 14 |
| 5 | 23 | 89 | 47 | 135 | 68 | 78 | 187 | 156 | 59 | 30 | 66 | 13 |
| 6 | 22 | 93 | 53 | 140 | 78 | 107 | 163 | 141 | 55 | 31 | 48 | 13 |
| 7 | 21 | 89 | 54 | 128 | 142 | 119 | 146 | 127 | 55 | 26 | 35 | 13 |
| 8 | 21 | 82 | 51 | 109 | 125 | 109 | 132 | 112 | 50 | 24 | 28 | 22 |
| 9 | 21 | 70 | 50 | 93 | 109 | 97 | 121 | 107 | 46 | 23 | 23 | 26 |
| 10 | 20 | 66 | 50 | 80 | 101 | 86 | 114 | 103 | 43 | 21 | 19 | 23 |
| 11 | 20 | 64 | 110 | 75 | 92 | 80 | 107 | 98 | 41 | 20 | 17 | 23 |
| 12 | 20 | 67 | 188 | 78 | 81 | 75 | 102 | 91 | 40 | 19 | 17 | 27 |
| 13 | 21 | 76 | 166 | 77 | 74 | 71 | 178 | 82 | 38 | 27 | 23 | 19 |
| 14 | 20 | 73 | 138 | 71 | 70 | 66 | 560 | 76 | 37 | 31 | 23 | 17 |
| 15 | 64 | 70 | 188 | 68 | 65 | 63 | 471 | 83 | 37 | 27 | 54 | 15 |
| 16 | 59 | 63 | 172 | 66 | 62 | 64 | 331 | 76 | 34 | 24 | 47 | 17 |
| 17 | 53 | 61 | 175 | 68 | 58 | 65 | 246 | 69 | 32 | 22 | 38 | 17 |
| 18 | 49 | 59 | 303 | 69 | 57 | 62 | 206 | 66 | 37 | 20 | 32 | 64 |
| 19 | 40 | 56 | 263 | 69 | 56 | 63 | 186 | 68 | 47 | 20 | 30 | 80 |
| 20 | 38 | 64 | 204 | 67 | 55 | 62 | 170 | 64 | 40 | 19 | 27 | 54 |
| 21 | 37 | 65 | 169 | 65 | 55 | 103 | 157 | 65 | 36 | 18 | 28 | 44 |
| 22 | 45 | 61 | 152 | 63 | 58 | 113 | 150 | 63 | 34 | 18 | 36 | 35 |
| 23 | 41 | 60 | 140 | 62 | 59 | 99 | 148 | 61 | 33 | 18 | 30 | 29 |
| 24 | 36 | 56 | 147 | 58 | 58 | 88 | 154 | 61 | 31 | 17 | 26 | 24 |
| 25 | 32 | 57 | 194 | 55 | 56 | 82 | 145 | 59 | 30 | 17 | 23 | 21 |
| 26 | 30 | 54 | 186 | 56 | 54 | 79 | 163 | 57 | 29 | 16 | 20 | 19 |
| 27 | 54 | 53 | 165 | 55 | 53 | 80 | 197 | 72 | 28 | 15 | 19 | 18 |
| 28 | 97 | 52 | 147 | 58 | 53 | 78 | 179 | 95 | 27 | 18 | 18 | 23 |
| 29 | 232 | 66 | 134 | 57 | 56 | 75 | 159 | 102 | 26 | 19 | 17 | 127 |
| 30 | 319 | 61 | 129 | 55 | --- | 71 | 145 | 79 | 25 | 17 | 16 | 112 |
| 31 | 238 | --- | 120 | 54 | --- | 94 | --- | 73 | --- | 16 | 17 | --- |
| TOTAL | 1768 | 2254 | 4106 | 2463 | 2028 | 2518 | 6013 | 2889 | 1300 | 673 | 838 | 954 |
| MEAN | 57.0 | 75.1 | 132 | 79.5 | 69.9 | 81.2 | 200 | 93.2 | 43.3 | 21.7 | 27.0 | 31.8 |
| MAX | 319 | 173 | 303 | 140 | 142 | 119 | 560 | 173 | 86 | 31 | 66 | 127 |
| MIN | 20 | 52 | 47 | 54 | 52 | 62 | 102 | 57 | 25 | 15 | 14 | 13 |
| CFSM | 1.62 | 2.13 | 3.76 | 2.26 | 1.99 | 2.31 | 5.69 | 2.65 | 1.23 | 0.62 | 0.77 | 0.90 |
| IN. | 1.87 | 2.38 | 4.34 | 2.60 | 2.14 | 2.66 | 6.35 | 3.05 | 1.37 | 0.71 | 0.89 | 1.01 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 2004, BY WATER YEAR (WY)

| | | | | | | | | | | | | |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 35.8 | 63.3 | 95.6 | 99.7 | 105 | 134 | 133 | 91.5 | 62.9 | 32.9 | 29.3 | 24.3 |
| MAX | 112 | 163 | 229 | 310 | 187 | 256 | 320 | 153 | 182 | 89.3 | 90.0 | 55.1 |
| (WY) | 1990 | 1973 | 1973 | 1979 | 1970 | 1972 | 1983 | 1979 | 1998 | 1998 | 1979 | 1979 |
| MIN | 11.6 | 11.2 | 15.5 | 19.0 | 32.4 | 70.1 | 44.2 | 48.7 | 25.4 | 11.4 | 8.86 | 7.05 |
| (WY) | 1998 | 1966 | 1966 | 1966 | 2002 | 2002 | 1966 | 1986 | 1999 | 1999 | 1995 | 1980 |

SUMMARY STATISTICS

| | FOR 2003 CALENDAR YEAR | FOR 2004 WATER YEAR | ^a WATER YEARS 1964 - 2004 |
|--------------------------|------------------------|---------------------|--------------------------------------|
| ANNUAL TOTAL | 32188 | 27804 | |
| ANNUAL MEAN | 88.2 | 76.0 | 75.6 |
| HIGHEST ANNUAL MEAN | | | 114 |
| LOWEST ANNUAL MEAN | | | 33.3 |
| HIGHEST DAILY MEAN | 319 | Oct 30 | 826 |
| LOWEST DAILY MEAN | 20 | Oct 10 | 4.2 |
| ANNUAL SEVEN-DAY MINIMUM | 20 | Oct 8 | 4.2 |
| MAXIMUM PEAK FLOW | | | 896 |
| MAXIMUM PEAK STAGE | | | 8.64 |
| INSTANTANEOUS LOW FLOW | | | 4.1 |
| ANNUAL RUNOFF (CFSM) | 2.51 | 2.16 | 2.15 |
| ANNUAL RUNOFF (INCHES) | 34.02 | 29.38 | 29.19 |
| 10 PERCENT EXCEEDS | 163 | 156 | 155 |
| 50 PERCENT EXCEEDS | 69 | 60 | 58 |
| 90 PERCENT EXCEEDS | 32 | 19 | 15 |

^a Years of operation not continuous; see Period of Record for actual years of operation.

PAWCATUCK RIVER BASIN

413223071423001 CLIMATOLOGICAL STATION NEAR ARCADIA, RI

LOCATION.--Lat 41° 32' 23", long 71° 42' 30", Washington County, Hydrologic Unit 01090005, 0.6 mi west of Wood River bridge on Old Nooseneck Road, 1.1 mi southwest of Arcadia.

PERIOD OF RECORD.--

Air Temperature: December 2002 to December 2004 (discontinued).

Precipitation: December 2002 to December 2004 (discontinued).

GAGE.--Air temperature and precipitation recorder. Datum of gage is 150 ft above National Geodetic Vertical Datum of 1929 (from topographic map).

REMARKS.--Air temperature records good. Precipitation records good except those for the period December through March, which are fair. Extremes for period of record are for those values reported.

EXTREMES FOR PERIOD OF RECORD.--

Air Temperature: Maximum recorded, 33.3 °C, June 25, 2003; minimum, -27.2°C, Feb. 14, 2003.

Precipitation: Maximum daily total, 3.13 in., Apr. 13, 2004; minimum, 0.00 in., many days during the year.

TEMPERATURE, AIR, DEGREES CELSIUS WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY | OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | | |
|-------|---------|------|------|----------|-------|------|----------|-------|------|---------|-------|-------|
| | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
| 1 | 17.7 | 1.8 | 8.9 | 23.4 | 7.2 | 14.1 | 10.5 | -2.2 | 5.4 | 5.5 | -3.4 | 2.8 |
| 2 | 16.4 | 3.1 | 10.2 | 19.0 | 11.0 | 14.4 | 1.1 | -8.8 | -2.4 | 2.5 | -4.8 | -1.8 |
| 3 | 13.5 | .0 | 5.9 | 24.8 | 10.9 | 16.4 | -2.3 | -10.8 | -6.9 | 9.4 | .3 | 4.4 |
| 4 | 16.3 | -.6 | 8.5 | 12.8 | 6.3 | 9.5 | 4.7 | -13.6 | -4.9 | 9.6 | 3.0 | 6.3 |
| 5 | 14.8 | 1.5 | 8.6 | 15.2 | 6.3 | 11.0 | -1.9 | -8.0 | -4.4 | 3.0 | .7 | 1.6 |
| 6 | 14.3 | -1.2 | 5.5 | 15.9 | 9.9 | 13.3 | -.8 | -4.2 | -2.6 | 2.2 | -6.5 | -.6 |
| 7 | 15.6 | -1.9 | 6.2 | 13.6 | 2.8 | 8.7 | -1.3 | -4.5 | -3.4 | -5.7 | -9.0 | -7.2 |
| 8 | 21.2 | -.7 | 12.0 | 7.0 | -6.6 | 2.6 | 2.5 | -10.0 | -3.5 | -5.2 | -11.5 | -8.7 |
| 9 | 24.3 | 10.7 | 15.8 | 4.4 | -10.9 | -3.4 | 3.7 | -11.9 | -4.0 | -11.2 | -17.3 | -13.6 |
| 10 | 17.7 | 9.0 | 13.0 | 8.2 | -8.8 | -1.7 | 6.5 | -1.5 | 2.6 | -9.7 | -19.7 | -15.5 |
| 11 | 18.9 | 10.0 | 13.3 | 10.6 | -6.6 | 1.6 | 11.8 | 4.0 | 8.9 | -3.4 | -21.1 | -11.3 |
| 12 | 14.6 | 12.4 | 13.5 | 12.6 | 5.9 | 10.0 | 4.8 | -3.9 | 1.9 | .6 | -4.3 | -1.9 |
| 13 | 21.0 | 6.6 | 14.4 | 14.5 | 3.4 | 10.0 | -.9 | -7.4 | -3.6 | 4.6 | -11.0 | -2.3 |
| 14 | 17.7 | 3.8 | 11.4 | 4.5 | .5 | 2.5 | 4.4 | -7.4 | -3.7 | -11.0 | -18.0 | -14.8 |
| 15 | 16.8 | 10.6 | 15.1 | 5.8 | -.5 | 2.1 | 4.8 | -1.6 | 1.4 | -11.7 | -21.1 | -15.8 |
| 16 | 15.9 | 3.8 | 9.6 | 7.0 | -5.8 | 1.9 | 6.5 | -5.0 | -.5 | -11.4 | -21.6 | -16.1 |
| 17 | 14.1 | -.5 | 7.4 | 6.7 | 2.4 | 4.2 | 12.6 | -3.8 | 6.6 | 1.0 | -11.8 | -5.5 |
| 18 | 11.8 | -.3 | 6.3 | 12.3 | -1.5 | 5.1 | 4.1 | -.3 | 1.5 | .5 | -3.8 | -.9 |
| 19 | 5.3 | -.9 | 2.2 | 16.0 | 4.9 | 12.4 | 3.5 | -4.9 | -1.2 | -3.8 | -9.3 | -6.5 |
| 20 | 11.6 | -2.9 | 3.6 | 16.3 | 6.2 | 10.2 | 3.8 | -7.6 | -2.4 | -5.5 | -11.3 | -8.3 |
| 21 | 18.9 | 1.0 | 13.9 | 15.5 | 1.4 | 7.7 | 2.8 | -10.0 | -2.0 | -2.6 | -16.6 | -9.4 |
| 22 | 11.6 | 3.2 | 6.8 | 14.4 | -1.3 | 4.4 | 11.4 | -3.7 | 2.6 | 1.5 | -17.7 | -6.0 |
| 23 | 4.9 | -.7 | 2.6 | 12.9 | -2.4 | 3.2 | 11.2 | -1.9 | 4.2 | -5.6 | -12.0 | -9.5 |
| 24 | 7.6 | -3.6 | 1.9 | 10.6 | -3.2 | 4.3 | 14.1 | -.7 | 9.3 | -8.0 | -15.0 | -11.8 |
| 25 | 12.7 | -4.7 | 4.2 | 9.9 | -4.0 | 4.0 | 10.3 | .6 | 6.5 | -9.2 | -22.3 | -14.8 |
| 26 | 16.6 | 6.0 | 13.9 | 7.7 | -5.6 | .6 | 3.7 | -.9 | 1.6 | -7.1 | -16.6 | -10.7 |
| 27 | 18.2 | 13.1 | 16.2 | 13.0 | -1.5 | 5.1 | 9.8 | -3.8 | 2.3 | -4.8 | -9.4 | -6.8 |
| 28 | 15.7 | 6.9 | 11.1 | 16.5 | 5.2 | 10.6 | 11.3 | -6.5 | -.2 | -2.9 | -8.1 | -5.3 |
| 29 | 19.2 | 10.0 | 13.5 | 16.6 | 2.2 | 7.4 | 12.9 | -7.2 | .7 | -4.1 | -9.4 | -6.0 |
| 30 | 14.8 | 2.1 | 8.1 | 8.2 | -2.4 | 3.1 | 11.6 | -3.0 | 4.8 | -4.5 | -11.4 | -8.8 |
| 31 | 17.3 | .1 | 8.7 | --- | --- | --- | 8.5 | 2.4 | 4.8 | -3.5 | -12.6 | -7.3 |
| MONTH | 24.3 | -4.7 | 9.4 | 24.8 | -10.9 | 6.5 | 14.1 | -13.6 | 0.6 | 9.6 | -22.3 | -6.8 |

PAWCATUCK RIVER BASIN

413223071423001 CLIMATOLOGICAL STATION NEAR ARCADIA, RI--Continued

TEMPERATURE, AIR, DEGREES CELSIUS WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

| DAY | MAX | OCTOBER | | NOVEMBER | | | DECEMBER | | | JANUARY | | |
|-------|------|---------|------|----------|------|------|----------|-------|------|---------|-----|------|
| | | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
| 1 | 20.7 | 7.3 | 13.0 | 13.8 | 0.2 | 9.2 | 11.4 | 1.5 | 8.0 | --- | --- | --- |
| 2 | 17.4 | 8.0 | 13.0 | 12.6 | -1.9 | 5.8 | 7.8 | -3.9 | 2.7 | --- | --- | --- |
| 3 | 18.5 | 4.8 | 12.4 | 13.1 | -1.3 | 9.1 | 6.7 | -5.5 | -2 | --- | --- | --- |
| 4 | 17.8 | .6 | 9.1 | 9.7 | -4.8 | 3.5 | 4.6 | -6.6 | -1.4 | --- | --- | --- |
| 5 | 13.9 | .3 | 8.5 | 10.5 | 5.6 | 8.0 | 11.3 | -3.5 | 4.7 | --- | --- | --- |
| 6 | 15.2 | -2.6 | 5.6 | 13.6 | 2.0 | 8.9 | -.2 | -5.2 | -2.3 | --- | --- | --- |
| 7 | 21.6 | 1.1 | 10.1 | 17.1 | -1.2 | 9.6 | 6.3 | -.3 | 3.0 | --- | --- | --- |
| 8 | 20.7 | 3.4 | 10.8 | 12.5 | -.1 | 7.2 | 13.1 | 3.1 | 7.7 | --- | --- | --- |
| 9 | 18.9 | 6.5 | 11.9 | 4.1 | -7.5 | -1.6 | 6.6 | -3.2 | 2.9 | --- | --- | --- |
| 10 | 18.4 | 9.9 | 12.6 | 4.7 | -9.3 | -3.1 | 5.5 | 3.5 | 4.3 | --- | --- | --- |
| 11 | 16.8 | 6.5 | 11.6 | 12.7 | -5.0 | 3.4 | 8.3 | 5.4 | 6.5 | --- | --- | --- |
| 12 | 17.2 | 3.6 | 10.0 | 5.3 | -.1 | 2.8 | 5.6 | -2.8 | 1.8 | --- | --- | --- |
| 13 | 21.2 | -.4 | 9.0 | 3.3 | -2.9 | -.9 | 5.2 | -1.2 | 2.2 | --- | --- | --- |
| 14 | 12.6 | 3.8 | 9.2 | 7.0 | -6.6 | .0 | .5 | -9.4 | -2.4 | --- | --- | --- |
| 15 | 13.9 | 9.9 | 11.7 | 13.0 | -4.1 | 1.8 | -1.9 | -11.8 | -7.5 | --- | --- | --- |
| 16 | 14.5 | 7.0 | 11.2 | 11.3 | -4.5 | 1.8 | 3.9 | -13.7 | -5.1 | --- | --- | --- |
| 17 | 11.4 | 2.5 | 7.4 | 12.5 | -4.0 | 3.8 | 6.3 | -4.4 | 2.7 | --- | --- | --- |
| 18 | 14.3 | -.3 | 7.2 | 16.4 | .3 | 8.0 | 3.3 | -10.2 | -3.2 | --- | --- | --- |
| 19 | 7.4 | 5.2 | 6.3 | 16.2 | .7 | 8.7 | 5.8 | -5.4 | -.2 | --- | --- | --- |
| 20 | 11.7 | 6.0 | 8.4 | 9.3 | -2.6 | 3.7 | .2 | -16.0 | -9.3 | --- | --- | --- |
| 21 | 9.8 | 2.3 | 6.2 | 5.3 | 3.6 | 4.5 | -1.2 | -18.9 | -9.7 | --- | --- | --- |
| 22 | 9.8 | 6.2 | 7.4 | 8.3 | 1.0 | 5.0 | 9.4 | -11.8 | -2.6 | --- | --- | --- |
| 23 | 9.2 | 3.8 | 7.0 | 10.2 | -3.1 | 3.1 | 12.8 | -2.1 | 7.7 | --- | --- | --- |
| 24 | 9.8 | 6.5 | 7.6 | 11.6 | -2.2 | 5.0 | 9.0 | -4.1 | -.2 | --- | --- | --- |
| 25 | 10.7 | 1.9 | 7.3 | 12.9 | .1 | 9.7 | .7 | -9.0 | -4.4 | --- | --- | --- |
| 26 | 14.1 | -1.4 | 4.9 | 4.0 | -5.6 | -.7 | -1.8 | -6.6 | -4.2 | --- | --- | --- |
| 27 | 14.4 | -.7 | 5.7 | 8.2 | -7.2 | 1.8 | -4.0 | -12.1 | -7.0 | --- | --- | --- |
| 28 | 12.0 | -2.3 | 5.2 | 11.5 | 5.5 | 9.5 | -2.4 | -15.0 | -7.4 | --- | --- | --- |
| 29 | 12.7 | -2.8 | 5.6 | 10.1 | -2.8 | 2.7 | 5.3 | -2.5 | .9 | --- | --- | --- |
| 30 | 12.5 | 7.7 | 10.2 | 9.4 | -2.1 | 2.7 | 5.4 | -6.0 | -.3 | --- | --- | --- |
| 31 | 21.2 | 6.7 | 15.1 | --- | --- | --- | 7.7 | -6.0 | 1.6 | --- | --- | --- |
| MONTH | 21.6 | -2.8 | 9.1 | 17.1 | -9.3 | 4.4 | 13.1 | -18.9 | -0.3 | --- | --- | --- |

PAWCATUCK RIVER BASIN

01118000 WOOD RIVER AT HOPE VALLEY, RI

LOCATION.--Lat 41°29'53", long 71°43'01", Washington County, Hydrologic Unit 01090005, on right bank 0.2 mi downstream from highway bridge at Hope Valley and 6.6 mi upstream from mouth.

DRAINAGE AREA.--72.4 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Discharge: August to December 1909 (gage heights only), March 1941 to current year. Records of daily discharge for August to December 1909, published in WSP 261, have been found to be unreliable and should not be used.

REVISED RECORDS.--WSP 1201: 1948(P). See also PERIOD OF RECORD.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 61.11 ft above National Geodetic Vertical Datum of 1929. August to December 1909, nonrecording gage at site 1,000 ft upstream at different datum.

REMARKS.--Records good except those for estimated daily discharge, which are fair. Some seasonal regulation by Locustville Pond on Brushy Brook since 1968. Some regulation at low flow by mills and ponds upstream until 1952; regulation greater prior to 1948.

AVERAGE DISCHARGE.--63 years (water years 1942-2004), 155 ft³/s, 29.16 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,390 ft³/s, June 6, 1982, gage height, 10.26 ft; minimum discharge, 4.0 ft³/s, Sept. 9, 1987; minimum daily discharge, 10 ft³/s, Oct. 13, 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since 1711, at least 12.4 ft in February 1886. Flood in November 1927 reached a stage of 11.7 ft, and flood in March 1936 reached a discharge of 1,540 ft³/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,280 ft³/s, Apr. 14, gage height, 7.11 ft; minimum discharge, 27 ft³/s, Sept. 7, 8.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|------|------|------|------|-------|------|------|------|------|------|
| 1 | 51 | 359 | e120 | e231 | e112 | 124 | 527 | 253 | 178 | 49 | 34 | 35 |
| 2 | 50 | 274 | e116 | e223 | e109 | 134 | 715 | 247 | 181 | 47 | 34 | 32 |
| 3 | 48 | 240 | e109 | e223 | e113 | 147 | 580 | 281 | 160 | 48 | 31 | 30 |
| 4 | 48 | 209 | e101 | e224 | 156 | 153 | 470 | 350 | 142 | 45 | 30 | 29 |
| 5 | 48 | 192 | e99 | e280 | 155 | 153 | 435 | 323 | 128 | 59 | 100 | 29 |
| 6 | 45 | e196 | e112 | e290 | 164 | 190 | 366 | 280 | 121 | 66 | 118 | 28 |
| 7 | 43 | e186 | e114 | e265 | 311 | 224 | 312 | 252 | 123 | 69 | 78 | 27 |
| 8 | 41 | e171 | e109 | e227 | 275 | 203 | 278 | 224 | 114 | 65 | 61 | 41 |
| 9 | 41 | e148 | e105 | e195 | 225 | 190 | 260 | 213 | 104 | 64 | 50 | 53 |
| 10 | 41 | e139 | e106 | e168 | 210 | 174 | 242 | 208 | 96 | 66 | 42 | 51 |
| 11 | 40 | e136 | e229 | e158 | 194 | 160 | 230 | 199 | 89 | 63 | 38 | 41 |
| 12 | 40 | e142 | e388 | e164 | 175 | 151 | 221 | 187 | 84 | 68 | 37 | 46 |
| 13 | 42 | e159 | e343 | e161 | 163 | 145 | 341 | 176 | 82 | 81 | 58 | 38 |
| 14 | 41 | e153 | e286 | e149 | 152 | 137 | 1110 | 164 | 79 | 94 | 64 | 33 |
| 15 | 114 | e146 | e388 | e143 | 144 | 132 | 1030 | 164 | 76 | 75 | 127 | 30 |
| 16 | 136 | e133 | e355 | e138 | 131 | 131 | 742 | 159 | 73 | 59 | 142 | 35 |
| 17 | 108 | e128 | e360 | e144 | 127 | 135 | 550 | 148 | 70 | 50 | 104 | 35 |
| 18 | 106 | e125 | e619 | e146 | 125 | 131 | 448 | 142 | 75 | 45 | 81 | 108 |
| 19 | 97 | e119 | e538 | e146 | 121 | 133 | 374 | 146 | 91 | 44 | 68 | 214 |
| 20 | 85 | e134 | e419 | e140 | 120 | 132 | 343 | 141 | 89 | 42 | 62 | 128 |
| 21 | 79 | e138 | e349 | e136 | 120 | 196 | 306 | 136 | 77 | 39 | 66 | 92 |
| 22 | 82 | e130 | e314 | e133 | 126 | 232 | 284 | 135 | 72 | 37 | 92 | 73 |
| 23 | 79 | e127 | e290 | e130 | 130 | 201 | 278 | 131 | 70 | 36 | 75 | 61 |
| 24 | 72 | e119 | e305 | e123 | 127 | 184 | 302 | 129 | 63 | 37 | 62 | 52 |
| 25 | 65 | e121 | e400 | e116 | 122 | 176 | 283 | 126 | 62 | 37 | 53 | 46 |
| 26 | 63 | e114 | e383 | e118 | 118 | 167 | 303 | 121 | 60 | 33 | 46 | 42 |
| 27 | 107 | e111 | e341 | e116 | 115 | 169 | 405 | 152 | 60 | 32 | 42 | 39 |
| 28 | 200 | e110 | e305 | e122 | 113 | 167 | 365 | 187 | 56 | 40 | 40 | 44 |
| 29 | 441 | e140 | e279 | e120 | 116 | 156 | 303 | 236 | 54 | 43 | 37 | 262 |
| 30 | 682 | e130 | e268 | e117 | --- | 151 | 274 | 187 | 52 | 38 | 35 | 280 |
| 31 | 501 | --- | e249 | e115 | --- | 185 | --- | 162 | --- | 35 | 37 | --- |
| TOTAL | 3636 | 4729 | 8499 | 5161 | 4369 | 5063 | 12677 | 5959 | 2781 | 1606 | 1944 | 2054 |
| MEAN | 117 | 158 | 274 | 166 | 151 | 163 | 423 | 192 | 92.7 | 51.8 | 62.7 | 68.5 |
| MAX | 682 | 359 | 619 | 290 | 311 | 232 | 1110 | 350 | 181 | 94 | 142 | 280 |
| MIN | 40 | 110 | 99 | 115 | 109 | 124 | 221 | 121 | 52 | 32 | 30 | 27 |
| CFSM | 1.62 | 2.18 | 3.79 | 2.30 | 2.08 | 2.26 | 5.84 | 2.66 | 1.28 | 0.72 | 0.87 | 0.95 |
| IN. | 1.87 | 2.43 | 4.37 | 2.65 | 2.24 | 2.60 | 6.51 | 3.06 | 1.43 | 0.83 | 1.00 | 1.06 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 2004, BY WATER YEAR (WY)

| | | | | | | | | | | | | |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 75.5 | 128 | 185 | 200 | 215 | 278 | 266 | 191 | 134 | 69.9 | 62.3 | 59.6 |
| MAX | 341 | 386 | 477 | 666 | 398 | 465 | 664 | 365 | 540 | 178 | 183 | 311 |
| (WY) | 1956 | 1956 | 1987 | 1979 | 1970 | 1972 | 1983 | 1979 | 1982 | 1998 | 1979 | 1954 |
| MIN | 22.6 | 24.9 | 35.1 | 36.8 | 65.6 | 137 | 89.4 | 91.9 | 48.3 | 23.8 | 18.9 | 17.4 |
| (WY) | 1958 | 1966 | 1966 | 1981 | 2002 | 2002 | 1966 | 1986 | 1957 | 1999 | 2002 | 1957 |

SUMMARY STATISTICS FOR 2003 CALENDAR YEAR FOR 2004 WATER YEAR WATER YEARS 1941 - 2004

| | | | | | | | | | | | | |
|--------------------------|-------|-------|-------|--------|--|-------|--------|--------|------|--------|-------|------|
| ANNUAL TOTAL | 67691 | 58478 | | | | | | | | | | |
| ANNUAL MEAN | 185 | 160 | | | | | | | 155 | | | |
| HIGHEST ANNUAL MEAN | | | | | | | | | 235 | | | 1973 |
| LOWEST ANNUAL MEAN | | | | | | | | | 71.2 | | | 1966 |
| HIGHEST DAILY MEAN | | | 732 | Mar 31 | | 1110 | Apr 14 | | 2200 | Jun 6 | 1982 | |
| LOWEST DAILY MEAN | | | 40 | Oct 11 | | 27 | Sep 7 | | 10 | Oct 13 | 1941 | |
| ANNUAL SEVEN-DAY MINIMUM | | | 41 | Oct 8 | | 30 | Sep 1 | | 13 | Aug 1 | 1999 | |
| MAXIMUM PEAK FLOW | | | | | | 1280 | Apr 14 | | 2390 | Jun 6 | 1982 | |
| MAXIMUM PEAK STAGE | | | | | | | 7.11 | Apr 14 | | 10.26 | Jun 6 | 1982 |
| INSTANTANEOUS LOW FLOW | | | | | | | 27 | Sep 7 | | 4.0 | Sep 9 | 1987 |
| ANNUAL RUNOFF (CFSM) | | | 2.56 | | | 2.21 | | | | 2.15 | | |
| ANNUAL RUNOFF (INCHES) | | | 34.78 | | | 30.05 | | | | 29.16 | | |
| 10 PERCENT EXCEEDS | | | 345 | | | 311 | | | | 315 | | |
| 50 PERCENT EXCEEDS | | | 148 | | | 128 | | | | 120 | | |
| 90 PERCENT EXCEEDS | | | 65 | | | 41 | | | | 35 | | |

e Estimated

PAWCATUCK RIVER BASIN

01118000 WOOD RIVER AT HOPE VALLEY, RI--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1977 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1977 to current year.

WATER TEMPERATURE: October 1977 to current year.

INSTRUMENTATION.--Water-quality monitor since October 1977.

REMARKS.--Specific conductance records fair, except those for estimated values, which are poor; temperature records good. Interruptions in the record are due to malfunctions of the instrument. Extremes for period of daily record and current year are for those values reported.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum recorded, 329 $\mu\text{S}/\text{cm}$, Feb. 06, 2004; minimum, 21 $\mu\text{S}/\text{cm}$, Jan. 23, 1979.

WATER TEMPERATURE: Maximum recorded, 29.5°C, July 24, 1987, July 26, 27, 28, 1989; minimum, -0.1°C, Feb. 14, 17, 2003.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 329 $\mu\text{S}/\text{cm}$, Feb. 6; minimum, 60 $\mu\text{S}/\text{cm}$, Apr. 14, 15.

WATER TEMPERATURE: Maximum recorded, 25.0°C, Aug. 2; minimum, 0.0°C, on many days during winter period.

SPECIFIC CONDUCTANCE ($\mu\text{S}/\text{CM}$ AT 25°C), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|
| | | | | | | | | | | | | |
| 1 | 125 | 124 | 124 | 73 | 66 | 69 | 101 | 97 | 99 | 94 | 92 | 93 |
| 2 | --- | --- | e126 | 78 | 73 | 76 | 105 | 101 | 103 | 108 | 94 | 97 |
| 3 | 128 | 125 | 126 | 78 | 77 | 78 | 105 | 103 | 105 | 97 | 95 | 96 |
| 4 | --- | --- | e126 | 83 | 78 | 81 | 105 | 100 | 103 | 108 | 94 | 97 |
| 5 | 130 | 126 | 128 | 87 | 83 | 85 | 104 | 99 | 102 | 103 | 96 | 100 |
| 6 | 133 | 126 | 129 | 92 | 86 | 89 | 142 | 102 | 122 | 96 | 91 | 92 |
| 7 | 131 | 125 | 127 | 93 | 91 | 92 | 118 | 104 | 110 | 93 | 88 | 91 |
| 8 | 130 | 127 | 129 | 97 | 91 | 93 | 110 | 102 | 106 | 93 | 86 | 89 |
| 9 | 134 | 130 | 132 | 91 | 88 | 89 | 112 | 103 | 108 | 95 | 90 | 93 |
| 10 | 133 | 131 | 131 | 89 | 88 | 88 | 119 | 110 | 113 | 101 | 94 | 98 |
| 11 | 134 | 132 | 133 | 92 | 89 | 91 | 149 | 109 | 123 | 105 | 100 | 103 |
| 12 | --- | --- | e133 | 93 | 92 | 92 | 110 | 87 | 96 | 160 | 105 | 120 |
| 13 | 134 | 132 | 133 | 120 | 92 | 99 | 87 | 81 | 84 | 109 | 100 | 106 |
| 14 | 137 | 131 | 133 | 96 | 95 | 96 | 292 | 75 | 96 | 104 | 99 | 101 |
| 15 | 136 | 118 | 126 | 98 | 96 | 97 | 271 | 86 | 121 | 119 | 102 | 106 |
| 16 | 119 | 110 | 112 | 97 | 95 | 96 | 87 | 84 | 85 | 109 | 103 | 106 |
| 17 | 112 | 109 | 110 | 97 | 96 | 96 | 101 | 86 | 90 | 112 | 108 | 110 |
| 18 | 111 | 108 | 110 | 97 | 95 | 96 | 101 | 74 | 84 | 161 | 108 | 126 |
| 19 | 113 | 109 | 111 | 95 | 94 | 95 | 74 | 70 | 71 | 156 | 110 | 123 |
| 20 | 114 | 111 | 113 | 105 | 95 | 98 | 76 | 70 | 73 | 111 | 106 | 108 |
| 21 | 117 | 114 | 115 | 98 | 96 | 97 | 80 | 76 | 78 | 112 | 105 | 108 |
| 22 | 115 | 110 | 112 | 102 | 96 | 99 | 84 | 80 | 82 | 111 | 107 | 109 |
| 23 | 111 | 106 | 108 | 102 | 100 | 101 | 88 | 84 | 86 | 111 | 105 | 107 |
| 24 | 107 | 103 | 105 | 100 | 99 | 99 | 124 | 88 | 94 | 111 | 106 | 108 |
| 25 | 107 | 103 | 105 | 100 | 98 | 99 | 96 | 76 | 82 | 112 | 107 | 109 |
| 26 | 109 | 100 | 105 | 100 | 98 | 99 | 78 | 76 | 77 | 115 | 109 | 111 |
| 27 | 109 | 100 | 106 | 99 | 98 | 98 | 82 | 78 | 80 | 112 | 108 | 110 |
| 28 | 106 | 101 | 103 | 100 | 98 | 99 | 86 | 82 | 84 | 145 | 104 | 122 |
| 29 | 102 | 86 | 95 | 102 | 99 | 100 | 88 | 86 | 87 | 134 | 111 | 118 |
| 30 | 86 | 67 | 74 | 99 | 96 | 98 | 93 | 88 | 89 | 113 | 108 | 110 |
| 31 | 67 | 64 | 66 | --- | --- | --- | 92 | 90 | 90 | 112 | 106 | 109 |
| MONTH | --- | --- | 116 | 120 | 66 | 93 | 292 | 70 | 94 | 161 | 86 | 106 |

PAWCATUCK RIVER BASIN

01118000 WOOD RIVER AT HOPE VALLEY, RI--Continued

SPECIFIC CONDUCTANCE (µS/CM AT 25°C), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY | MAX | FEBRUARY | | | MAX | MARCH | | | MAX | APRIL | | | MAX | MAY | | |
|-------|-----|----------|------|-----|-----|-------|------|-----|-----|-------|------|-----|-----|-----|------|--|
| | | MIN | MEAN | | | MIN | MEAN | | | MIN | MEAN | | | MIN | MEAN | |
| 1 | 112 | 106 | 108 | 113 | 108 | 110 | 108 | 93 | 101 | 100 | 96 | 99 | | | | |
| 2 | 116 | 105 | 109 | 108 | 104 | 106 | 93 | 75 | 84 | 101 | 98 | 99 | | | | |
| 3 | 239 | 104 | 121 | 104 | 101 | 102 | 77 | 75 | 76 | 100 | 97 | 99 | | | | |
| 4 | 319 | 121 | 163 | 103 | 99 | 101 | 83 | 77 | 80 | 100 | 93 | 97 | | | | |
| 5 | 122 | 115 | 119 | 103 | 100 | 101 | 86 | 83 | 85 | 94 | 90 | 92 | | | | |
| 6 | 329 | 114 | 190 | 121 | 98 | 105 | 89 | 86 | 88 | 96 | 93 | 94 | | | | |
| 7 | 182 | 111 | 138 | 98 | 89 | 92 | 91 | 89 | 90 | 99 | 96 | 98 | | | | |
| 8 | 111 | 102 | 106 | 89 | 87 | 88 | 96 | 91 | 94 | 102 | 98 | 100 | | | | |
| 9 | 107 | 101 | 104 | 91 | 88 | 89 | 98 | 95 | 97 | 102 | 101 | 102 | | | | |
| 10 | 105 | 101 | 104 | 95 | 91 | 93 | 102 | 98 | 100 | 102 | 100 | 101 | | | | |
| 11 | 107 | 104 | 106 | 97 | 95 | 96 | 101 | 99 | 99 | 106 | 102 | 104 | | | | |
| 12 | 108 | 104 | 105 | 100 | 96 | 97 | 102 | 99 | 100 | 108 | 105 | 106 | | | | |
| 13 | 107 | 103 | 105 | 100 | 97 | 99 | 105 | 94 | 101 | 109 | 106 | 108 | | | | |
| 14 | 110 | 105 | 107 | 100 | 97 | 99 | 94 | 60 | 74 | 113 | 107 | 110 | | | | |
| 15 | 109 | 107 | 108 | 102 | 98 | 99 | 64 | 60 | 61 | 113 | 109 | 111 | | | | |
| 16 | 110 | 105 | 108 | 188 | 98 | 117 | 70 | 63 | 66 | 114 | 112 | 113 | | | | |
| 17 | 110 | 106 | 108 | 192 | 118 | 145 | 75 | 70 | 72 | 116 | 113 | 114 | | | | |
| 18 | 114 | 107 | 110 | 118 | 109 | 111 | 80 | 75 | 78 | 121 | 113 | 118 | | | | |
| 19 | 112 | 108 | 110 | 203 | 106 | 140 | 87 | 80 | 83 | 120 | 117 | 118 | | | | |
| 20 | 112 | 110 | 111 | 128 | 113 | 117 | 90 | 85 | 87 | 121 | 117 | 119 | | | | |
| 21 | 114 | 110 | 112 | 159 | 109 | 125 | 92 | 89 | 91 | 122 | 120 | 121 | | | | |
| 22 | 114 | 112 | 113 | 109 | 100 | 103 | 94 | 92 | 93 | 122 | 116 | 121 | | | | |
| 23 | 114 | 111 | 112 | 101 | 98 | 99 | 96 | 93 | 94 | 123 | 120 | 121 | | | | |
| 24 | 116 | 113 | 114 | 101 | 99 | 100 | 98 | 93 | 95 | 123 | 117 | 120 | | | | |
| 25 | 116 | 115 | 115 | 101 | 99 | 100 | 98 | 94 | 96 | 119 | 116 | 117 | | | | |
| 26 | 116 | 114 | 115 | 103 | 101 | 102 | 97 | 93 | 95 | 120 | 118 | 118 | | | | |
| 27 | 116 | 114 | 115 | 117 | 102 | 106 | 95 | 90 | 91 | 122 | 114 | 117 | | | | |
| 28 | 116 | 114 | 115 | 105 | 102 | 104 | 91 | 88 | 90 | 118 | 111 | 114 | | | | |
| 29 | 116 | 112 | 114 | 105 | 102 | 103 | 93 | 90 | 91 | 111 | 101 | 106 | | | | |
| 30 | --- | --- | --- | 104 | 101 | 102 | 96 | 93 | 95 | 112 | 107 | 109 | | | | |
| 31 | --- | --- | --- | 131 | 102 | 108 | --- | --- | --- | 116 | 112 | 115 | | | | |
| MONTH | 329 | 101 | 116 | 203 | 87 | 105 | 108 | 60 | 88 | 123 | 90 | 109 | | | | |

| DAY | MAX | JUNE | | | MAX | JULY | | | MAX | AUGUST | | | MAX | SEPTEMBER | | |
|-------|-----|------|------|-----|-----|------|------|-----|-----|--------|------|-----|-----|-----------|------|--|
| | | MIN | MEAN | | | MIN | MEAN | | | MIN | MEAN | | | MIN | MEAN | |
| 1 | 119 | 112 | 115 | 144 | 134 | 135 | 146 | 143 | 145 | 151 | 148 | 150 | | | | |
| 2 | 115 | 106 | 111 | 144 | 136 | 141 | 149 | 144 | 147 | 151 | 150 | 151 | | | | |
| 3 | 108 | 106 | 107 | 141 | 135 | 136 | 150 | 145 | 148 | 152 | 151 | 151 | | | | |
| 4 | 108 | 106 | 107 | 145 | 134 | 136 | 149 | 147 | 148 | 156 | 152 | 154 | | | | |
| 5 | 108 | 106 | 108 | --- | --- | e133 | 158 | 132 | 144 | 156 | 153 | 155 | | | | |
| 6 | 113 | 108 | 110 | 140 | 128 | 134 | 132 | 116 | 119 | 155 | 153 | 154 | | | | |
| 7 | 114 | 111 | 113 | 146 | 125 | 128 | 131 | 116 | 122 | 158 | 154 | 157 | | | | |
| 8 | 115 | 112 | 114 | 146 | 125 | 135 | 133 | 127 | 130 | 160 | 150 | 156 | | | | |
| 9 | 120 | 115 | 118 | 160 | 146 | 155 | 134 | 132 | 133 | 159 | 149 | 153 | | | | |
| 10 | 122 | 119 | 121 | 167 | 160 | 164 | 134 | 132 | 133 | 149 | 143 | 145 | | | | |
| 11 | 123 | 121 | 122 | 179 | 167 | 173 | 136 | 133 | 134 | 148 | 144 | 146 | | | | |
| 12 | 123 | 121 | 122 | 186 | 179 | 183 | 138 | 135 | 137 | 148 | 146 | 147 | | | | |
| 13 | 122 | 120 | 121 | 190 | 182 | 185 | 140 | 132 | 136 | 148 | 146 | 147 | | | | |
| 14 | 133 | 121 | 124 | 193 | 185 | 191 | 142 | 132 | 139 | 147 | 144 | 145 | | | | |
| 15 | 133 | 129 | 130 | 185 | 170 | 177 | 159 | 129 | 145 | 146 | 144 | 145 | | | | |
| 16 | 131 | 129 | 130 | 171 | 169 | 170 | 152 | 135 | 143 | 151 | 146 | 148 | | | | |
| 17 | 132 | 130 | 131 | 169 | 164 | 166 | 143 | 139 | 141 | 152 | 150 | 151 | | | | |
| 18 | 132 | 130 | 131 | 164 | 159 | 161 | 146 | 142 | 144 | 152 | 126 | 142 | | | | |
| 19 | 132 | 124 | 129 | --- | --- | e159 | 142 | 141 | 142 | 135 | 118 | 124 | | | | |
| 20 | 127 | 123 | 125 | 161 | 147 | 151 | 142 | 139 | 141 | 128 | 120 | 124 | | | | |
| 21 | 128 | 123 | 126 | 157 | 147 | 149 | 140 | 131 | 138 | 133 | 128 | 131 | | | | |
| 22 | 128 | 124 | 126 | 158 | 144 | 148 | 148 | 134 | 138 | 132 | 131 | 132 | | | | |
| 23 | 128 | 126 | 127 | 155 | 144 | 149 | 135 | 132 | 134 | 131 | 129 | 130 | | | | |
| 24 | 130 | 126 | 128 | --- | --- | e146 | 137 | 131 | 134 | 134 | 130 | 132 | | | | |
| 25 | 132 | 128 | 130 | 149 | 144 | 146 | 139 | 134 | 137 | 137 | 132 | 134 | | | | |
| 26 | 132 | 130 | 131 | 146 | 145 | 146 | 139 | 136 | 137 | 138 | 136 | 137 | | | | |
| 27 | 133 | 129 | 131 | 148 | 145 | 146 | 141 | 139 | 140 | 141 | 138 | 139 | | | | |
| 28 | 132 | 130 | 131 | 145 | 139 | 143 | 145 | 141 | 142 | 143 | 134 | 140 | | | | |
| 29 | 134 | 131 | 133 | 145 | 143 | 144 | 148 | 143 | 145 | 134 | 111 | 125 | | | | |
| 30 | 135 | 132 | 133 | 144 | 142 | 143 | 149 | 144 | 147 | 111 | 107 | 108 | | | | |
| 31 | --- | --- | --- | 144 | 142 | 143 | 150 | 147 | 149 | --- | --- | --- | | | | |
| MONTH | 135 | 106 | 123 | --- | --- | 152 | 159 | 116 | 139 | 160 | 107 | 142 | | | | |

e Estimated

PAWCATUCK RIVER BASIN

01118000 WOOD RIVER AT HOPE VALLEY, RI--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY | OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | | |
|-------|---------|------|------|----------|------|------|----------|-----|------|---------|------|------|
| | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
| 1 | 16.3 | 14.5 | 15.3 | 12.3 | 11.1 | 11.7 | 6.4 | 5.2 | 6.0 | 4.0 | 3.3 | 3.7 |
| 2 | 15.8 | 14.0 | 15.1 | 13.6 | 12.3 | 13.0 | 5.2 | 2.8 | 4.3 | 3.3 | 3.0 | 3.1 |
| 3 | 14.2 | 12.2 | 13.2 | 14.4 | 13.2 | 13.7 | 2.8 | 1.3 | 2.1 | 3.9 | 3.0 | 3.3 |
| 4 | 13.0 | 11.5 | 12.2 | 14.1 | 12.8 | 13.7 | 2.0 | .8 | 1.4 | 4.8 | 3.9 | 4.5 |
| 5 | 13.3 | 11.7 | 12.4 | 12.8 | 12.3 | 12.4 | 1.4 | .6 | 1.0 | 4.8 | 4.3 | 4.6 |
| 6 | 12.5 | 10.3 | 11.4 | 12.8 | 12.1 | 12.5 | .9 | .3 | .6 | 4.3 | 2.8 | 3.7 |
| 7 | 12.1 | 9.8 | 11.0 | 13.2 | 12.1 | 12.6 | .9 | .4 | .6 | 2.8 | .5 | 1.6 |
| 8 | 12.9 | 10.0 | 11.4 | 12.1 | 9.2 | 10.8 | 1.3 | .4 | .7 | .7 | .1 | .3 |
| 9 | 13.7 | 11.6 | 12.6 | 9.2 | 6.5 | 7.9 | 1.5 | .3 | .9 | .4 | .0 | .2 |
| 10 | 13.4 | 12.4 | 12.9 | 6.5 | 5.1 | 5.8 | 2.0 | 1.1 | 1.6 | .5 | .0 | .2 |
| 11 | 13.6 | 12.2 | 12.9 | 5.5 | 4.5 | 5.1 | 3.3 | 1.8 | 2.7 | .7 | .1 | .4 |
| 12 | 13.5 | 12.9 | 13.2 | 6.5 | 5.4 | 5.8 | 3.0 | 1.8 | 2.3 | .8 | .5 | .6 |
| 13 | 14.7 | 13.0 | 13.7 | 7.9 | 6.5 | 7.3 | 1.8 | .9 | 1.4 | 1.2 | .2 | .7 |
| 14 | 13.9 | 12.3 | 13.2 | 7.2 | 5.4 | 6.3 | .9 | .1 | .7 | .6 | .1 | .3 |
| 15 | 14.2 | 13.3 | 13.9 | 5.4 | 3.8 | 4.5 | 1.3 | .8 | 1.1 | .3 | .0 | .1 |
| 16 | 13.8 | 12.4 | 13.0 | 4.5 | 3.3 | 4.0 | 1.3 | .7 | 1.0 | .2 | .0 | .1 |
| 17 | 12.8 | 11.6 | 12.1 | 4.7 | 4.2 | 4.5 | 3.0 | 1.1 | 1.9 | .5 | .0 | .2 |
| 18 | 12.2 | 10.9 | 11.6 | 6.0 | 4.6 | 5.2 | 3.1 | 2.4 | 2.9 | .4 | .3 | .3 |
| 19 | 10.9 | 9.6 | 10.4 | 7.3 | 5.4 | 6.4 | 2.4 | 1.9 | 2.1 | .6 | .0 | .2 |
| 20 | 10.2 | 8.5 | 9.3 | 8.5 | 7.3 | 8.1 | 1.9 | 1.4 | 1.7 | .5 | .0 | .2 |
| 21 | 10.8 | 8.4 | 9.7 | 9.3 | 8.1 | 8.6 | 1.7 | 1.1 | 1.4 | .5 | .0 | .2 |
| 22 | 10.2 | 9.7 | 10.0 | 8.6 | 7.3 | 7.9 | 2.3 | 1.3 | 1.8 | .5 | .0 | .2 |
| 23 | 9.7 | 8.5 | 9.3 | 7.5 | 6.4 | 7.0 | 3.2 | 2.2 | 2.8 | .4 | .0 | .1 |
| 24 | 8.8 | 7.4 | 8.2 | 6.9 | 5.7 | 6.3 | 4.9 | 3.1 | 4.0 | .4 | -.1 | .1 |
| 25 | 8.3 | 6.4 | 7.3 | 6.9 | 6.0 | 6.5 | 5.9 | 4.9 | 5.4 | .3 | -.1 | .1 |
| 26 | 9.0 | 7.5 | 8.2 | 6.4 | 5.5 | 5.9 | 5.2 | 3.6 | 4.2 | .4 | .0 | .1 |
| 27 | 10.9 | 9.0 | 10.1 | 6.3 | 5.3 | 5.8 | 3.8 | 3.0 | 3.4 | .4 | .0 | .2 |
| 28 | 12.9 | 10.9 | 11.9 | 7.8 | 5.8 | 6.5 | 3.2 | 2.4 | 2.8 | .3 | -.2 | .1 |
| 29 | 13.0 | 12.4 | 12.7 | 8.1 | 7.1 | 7.7 | 3.2 | 2.1 | 2.6 | .4 | .0 | .1 |
| 30 | 13.0 | 11.7 | 12.4 | 7.4 | 6.2 | 6.9 | 3.9 | 2.6 | 3.3 | .4 | -.1 | .1 |
| 31 | 11.7 | 10.8 | 11.2 | --- | --- | --- | 4.4 | 3.6 | 3.9 | .4 | -.2 | .1 |
| MONTH | 16.3 | 6.4 | 11.7 | 14.4 | 3.3 | 8.0 | 6.4 | 0.1 | 2.3 | 4.8 | -0.2 | 1.0 |

| DAY | FEBRUARY | | | MARCH | | | APRIL | | | MAY | | |
|-------|----------|------|------|-------|-----|------|-------|------|------|------|------|------|
| | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
| 1 | 0.4 | -.2 | 0.0 | 6.4 | 4.0 | 5.0 | 7.2 | 7.0 | 7.1 | 16.9 | 14.7 | 15.8 |
| 2 | .6 | -.1 | .1 | 6.4 | 4.9 | 5.5 | 7.0 | 6.3 | 6.6 | 16.6 | 15.6 | 16.1 |
| 3 | .7 | -.1 | .4 | 7.1 | 5.0 | 5.9 | 6.3 | 6.0 | 6.1 | 15.6 | 15.0 | 15.4 |
| 4 | 1.3 | .4 | .8 | 6.3 | 5.6 | 5.9 | 7.1 | 6.1 | 6.6 | 15.5 | 14.0 | 14.7 |
| 5 | 1.4 | .6 | 1.0 | 5.7 | 5.2 | 5.5 | 7.1 | 6.2 | 6.6 | 16.1 | 13.6 | 14.1 |
| 6 | 1.2 | .7 | 1.0 | 6.0 | 5.3 | 5.6 | 7.1 | 5.3 | 6.2 | 15.4 | 13.2 | 14.2 |
| 7 | 1.5 | .9 | 1.1 | 6.2 | 4.8 | 5.4 | 7.6 | 6.4 | 6.8 | 17.5 | 14.5 | 15.9 |
| 8 | 1.0 | .3 | .6 | 5.2 | 4.0 | 4.7 | 8.6 | 6.5 | 7.5 | 17.5 | 15.7 | 16.4 |
| 9 | 1.2 | .2 | .7 | 4.0 | 3.0 | 3.6 | 10.3 | 7.8 | 8.9 | 15.7 | 14.0 | 15.0 |
| 10 | 2.4 | 1.0 | 1.6 | 4.1 | 2.5 | 3.3 | 10.9 | 8.4 | 9.5 | 15.9 | 13.2 | 14.5 |
| 11 | 2.7 | 1.5 | 2.0 | 4.3 | 3.0 | 3.4 | 9.6 | 8.8 | 9.2 | 18.8 | 15.0 | 16.7 |
| 12 | 2.2 | 1.1 | 1.5 | 4.7 | 3.2 | 3.8 | 10.3 | 8.2 | 9.1 | 20.7 | 17.6 | 18.9 |
| 13 | 2.8 | 1.3 | 1.9 | 5.1 | 2.8 | 3.8 | 9.3 | 9.0 | 9.1 | 22.3 | 19.6 | 20.7 |
| 14 | 3.4 | 1.8 | 2.4 | 4.7 | 2.8 | 3.7 | 9.9 | 9.2 | 9.7 | 20.7 | 18.6 | 19.5 |
| 15 | 3.1 | 1.6 | 2.3 | 6.6 | 3.8 | 5.0 | 9.9 | 9.4 | 9.7 | 20.9 | 18.3 | 19.4 |
| 16 | 2.6 | 1.0 | 1.6 | 5.3 | 3.8 | 4.8 | 10.0 | 8.4 | 9.3 | 21.3 | 19.6 | 20.3 |
| 17 | 2.4 | .8 | 1.5 | 3.8 | 2.2 | 3.1 | 10.9 | 9.2 | 10.1 | 20.1 | 18.0 | 19.2 |
| 18 | 1.9 | 1.3 | 1.6 | 3.1 | 1.9 | 2.4 | 13.1 | 10.9 | 12.0 | 18.8 | 17.6 | 18.0 |
| 19 | 3.1 | 1.1 | 1.9 | 3.3 | 2.3 | 2.6 | 14.2 | 12.5 | 13.3 | 18.6 | 17.4 | 17.9 |
| 20 | 2.8 | 1.6 | 2.2 | 4.6 | 1.7 | 3.0 | 16.3 | 14.0 | 14.9 | 19.3 | 16.5 | 17.6 |
| 21 | 3.3 | 2.2 | 2.8 | 5.4 | 3.5 | 4.3 | 15.2 | 13.5 | 14.4 | 18.7 | 16.9 | 17.6 |
| 22 | 4.5 | 2.6 | 3.3 | 5.1 | 3.5 | 4.2 | 15.1 | 13.3 | 14.1 | 17.6 | 16.5 | 17.2 |
| 23 | 4.6 | 2.7 | 3.4 | 4.8 | 2.7 | 3.6 | 15.1 | 13.6 | 14.8 | 18.7 | 15.8 | 16.9 |
| 24 | 3.7 | 2.6 | 3.1 | 5.9 | 3.2 | 4.5 | 14.5 | 12.6 | 13.5 | 17.5 | 16.4 | 16.9 |
| 25 | 4.0 | 2.1 | 2.9 | 7.1 | 5.1 | 6.0 | 14.4 | 12.4 | 13.3 | 17.5 | 16.1 | 16.7 |
| 26 | 4.4 | 2.3 | 3.1 | 9.4 | 6.6 | 7.8 | 12.4 | 11.4 | 11.9 | 16.1 | 14.8 | 15.3 |
| 27 | 4.6 | 2.4 | 3.3 | 10.4 | 8.5 | 9.5 | 13.6 | 11.3 | 12.3 | 16.4 | 14.2 | 15.1 |
| 28 | 5.2 | 2.7 | 3.7 | 9.8 | 8.0 | 9.1 | 13.9 | 12.6 | 13.2 | 15.9 | 15.1 | 15.4 |
| 29 | 5.7 | 3.2 | 4.3 | 9.8 | 7.2 | 8.3 | 13.8 | 12.2 | 13.0 | 16.6 | 14.6 | 15.6 |
| 30 | --- | --- | --- | 8.4 | 7.3 | 7.8 | 15.6 | 13.1 | 14.3 | 17.3 | 14.8 | 16.0 |
| 31 | --- | --- | --- | 7.7 | 7.2 | 7.4 | --- | --- | --- | 16.9 | 15.1 | 16.0 |
| MONTH | 5.7 | -0.2 | 1.9 | 10.4 | 1.7 | 5.1 | 16.3 | 5.3 | 10.4 | 22.3 | 13.2 | 16.7 |

PAWCATUCK RIVER BASIN

01118010 PAWCATUCK RIVER AT BURDICKVILLE, RI

LOCATION.--Lat 41° 24' 58", long 71° 43' 46", Washington County, Hydrologic Unit 01090005, 400 ft upstream from bridge on Burdickville Road, 0.4 mi east of Burdickville, RI.

DRAINAGE AREA.--205 mi².

PERIOD OF RECORD.--Discharge: August 2002 to December 2004 (discontinued). Discharge measurements made in water year 1991.

GAGE.--Water-stage recorder. Elevation of gage is 45 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are fair.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,310 ft³/s, Apr. 15, 2004, gage height, 5.48 ft; minimum discharge, 42 ft³/s, Aug. 27, 2002; minimum daily discharge, 44 ft³/s, Aug. 27, 28, 2002.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|
| 1 | 145 | 803 | 291 | 551 | 277 | 325 | 955 | 683 | 414 | 141 | 102 | 128 |
| 2 | 142 | 630 | 276 | 524 | 275 | 341 | 1550 | 640 | 440 | 136 | 101 | 117 |
| 3 | 143 | 520 | 265 | 510 | 280 | 359 | 1620 | 668 | 420 | 135 | 94 | 108 |
| 4 | 142 | 466 | 254 | 505 | 392 | 376 | 1490 | 813 | 383 | 132 | 88 | 108 |
| 5 | 142 | 437 | 251 | 581 | 405 | 377 | 1350 | 847 | 350 | 157 | 172 | 108 |
| 6 | 137 | 476 | 265 | 651 | 447 | 449 | 1190 | 786 | 335 | 189 | 265 | 93 |
| 7 | 132 | 472 | 265 | 622 | 804 | 533 | 1020 | 722 | 332 | 181 | 213 | 97 |
| 8 | 128 | 433 | 270 | 551 | 829 | 504 | 876 | 645 | 321 | 165 | 160 | 98 |
| 9 | 126 | 380 | 268 | 486 | 688 | 458 | 780 | 598 | 303 | 151 | 149 | 119 |
| 10 | 127 | 354 | 271 | e438 | 580 | 422 | 706 | 577 | 279 | 148 | 149 | 117 |
| 11 | 119 | 340 | 385 | e403 | 526 | 394 | 640 | 560 | 259 | 143 | 139 | 107 |
| 12 | 121 | 349 | 678 | 383 | 484 | 373 | 599 | 537 | 243 | 141 | 134 | 104 |
| 13 | 124 | 375 | 735 | 390 | 447 | 356 | 759 | 491 | 237 | 194 | 196 | 100 |
| 14 | 120 | 381 | 644 | e379 | 425 | 337 | 1690 | 455 | 232 | 243 | 262 | 95 |
| 15 | 221 | 352 | 844 | e367 | 409 | 326 | 2260 | 442 | 246 | 214 | 422 | 88 |
| 16 | 301 | 333 | 966 | e359 | 379 | 322 | 2000 | 427 | 234 | 172 | 549 | 109 |
| 17 | 265 | 321 | 916 | e353 | 360 | 329 | 1650 | 399 | 217 | 143 | 485 | 117 |
| 18 | 253 | 312 | 1160 | 351 | 352 | 324 | 1370 | 383 | 212 | 128 | 378 | 241 |
| 19 | 239 | 302 | 1290 | 351 | 339 | 328 | 1180 | 389 | 271 | 122 | 279 | 488 |
| 20 | 223 | 321 | 1170 | e344 | 332 | 327 | 1020 | 380 | 259 | 115 | 244 | 416 |
| 21 | 203 | 346 | 997 | e333 | 330 | 433 | 904 | 364 | 228 | 110 | 226 | 303 |
| 22 | 203 | 338 | 847 | e322 | 339 | 537 | 815 | 359 | 207 | 103 | 301 | 222 |
| 23 | 199 | 331 | 760 | e321 | 346 | 505 | 761 | 347 | 208 | 96 | 289 | 180 |
| 24 | 184 | 316 | 713 | e312 | 339 | 451 | 786 | 346 | 189 | 96 | 248 | 154 |
| 25 | 174 | 309 | 809 | e298 | 327 | 418 | 773 | 338 | 180 | 102 | 200 | 137 |
| 26 | 168 | 306 | 858 | e286 | 315 | 403 | 771 | 333 | 173 | 98 | 171 | 126 |
| 27 | 227 | 297 | 790 | 282 | 309 | 402 | 920 | 380 | 169 | 94 | 150 | 118 |
| 28 | 391 | 285 | 716 | 284 | 306 | 400 | 936 | 448 | 166 | 103 | 138 | 132 |
| 29 | 669 | 298 | 650 | 287 | 312 | 380 | 833 | 542 | 161 | 118 | 132 | 543 |
| 30 | 1080 | 307 | 608 | e284 | --- | 364 | 748 | 490 | 150 | 112 | 127 | 753 |
| 31 | 1000 | --- | 583 | e282 | --- | 427 | --- | 421 | --- | 106 | 133 | --- |
| TOTAL | 7848 | 11490 | 19795 | 12390 | 11953 | 12280 | 32952 | 15810 | 7818 | 4288 | 6696 | 5626 |
| MEAN | 253 | 383 | 639 | 400 | 412 | 396 | 1098 | 510 | 261 | 138 | 216 | 188 |
| MAX | 1080 | 803 | 1290 | 651 | 829 | 537 | 2260 | 847 | 440 | 243 | 549 | 753 |
| MIN | 119 | 285 | 251 | 282 | 275 | 322 | 599 | 333 | 150 | 94 | 88 | 88 |
| CFSM | 1.23 | 1.87 | 3.11 | 1.95 | 2.01 | 1.93 | 5.36 | 2.49 | 1.27 | 0.67 | 1.05 | 0.91 |
| IN. | 1.42 | 2.09 | 3.59 | 2.25 | 2.17 | 2.23 | 5.98 | 2.87 | 1.42 | 0.78 | 1.22 | 1.02 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2002 - 2004, BY WATER YEAR (WY)

| | 2002 | 2003 | 2004 | 2003 | 2004 | 2003 | 2004 | 2003 | 2004 | 2003 | 2004 | |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 198 | 368 | 598 | 476 | 401 | 592 | 991 | 531 | 446 | 220 | 287 | 177 |
| MAX | 253 | 383 | 639 | 552 | 412 | 789 | 1098 | 552 | 631 | 302 | 358 | 241 |
| (WY) | 2004 | 2004 | 2004 | 2003 | 2004 | 2003 | 2004 | 2003 | 2003 | 2003 | 2003 | 2003 |
| MIN | 142 | 353 | 557 | 400 | 389 | 396 | 884 | 510 | 261 | 138 | 216 | 102 |
| (WY) | 2003 | 2003 | 2003 | 2004 | 2003 | 2004 | 2003 | 2004 | 2004 | 2004 | 2004 | 2002 |

SUMMARY STATISTICS

| | FOR 2003 CALENDAR YEAR | | FOR 2004 WATER YEAR | | WATER YEARS 2002 - 2004 | |
|--------------------------|------------------------|--|---------------------|--|-------------------------|--|
| ANNUAL TOTAL | 181855 | | 148946 | | | |
| ANNUAL MEAN | 498 | | 407 | | 443 | |
| HIGHEST ANNUAL MEAN | | | | | 479 | |
| LOWEST ANNUAL MEAN | | | | | 407 | |
| HIGHEST DAILY MEAN | 1440 | | 2260 | | 2260 | |
| LOWEST DAILY MEAN | 119 | | 88 | | 44 | |
| ANNUAL SEVEN-DAY MINIMUM | 124 | | 99 | | 46 | |
| MAXIMUM PEAK FLOW | | | 2310 | | 2310 | |
| MAXIMUM PEAK STAGE | | | 5.48 | | 5.48 | |
| INSTANTANEOUS LOW FLOW | | | 84 | | 42 | |
| ANNUAL RUNOFF (CFSM) | 2.43 | | 1.99 | | 2.16 | |
| ANNUAL RUNOFF (INCHES) | 33.00 | | 27.03 | | 29.37 | |
| 10 PERCENT EXCEEDS | 868 | | 803 | | 828 | |
| 50 PERCENT EXCEEDS | 410 | | 332 | | 359 | |
| 90 PERCENT EXCEEDS | 201 | | 122 | | 135 | |

e Estimated

PAWCATUCK RIVER BASIN

01118010 PAWCATUCK RIVER AT BURDICKVILLE, RI--Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|-------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1 | 616 | 221 | 741 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 2 | 482 | 209 | 982 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 3 | 370 | 191 | 968 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 4 | 303 | 201 | 846 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 5 | 268 | 370 | 732 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 6 | 237 | 389 | 640 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 7 | 219 | 359 | 637 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 8 | 208 | 317 | 801 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 9 | 197 | 286 | 833 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 10 | 194 | 268 | 871 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 11 | 198 | 258 | 984 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 12 | 197 | 261 | 993 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 13 | 188 | 379 | 910 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 14 | 192 | 408 | 799 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 15 | 195 | 378 | e734 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 16 | 316 | 350 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 17 | 353 | 333 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 18 | 326 | 338 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 19 | 364 | 330 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 20 | 430 | 312 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 21 | 408 | 323 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 22 | 376 | 303 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 23 | 353 | 284 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 24 | 333 | 282 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 25 | 311 | 359 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 26 | 285 | 418 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 27 | 241 | 413 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 28 | 228 | 426 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 29 | 192 | 635 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 30 | 191 | 711 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 31 | 225 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| TOTAL | 8996 | 10312 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| MEAN | 290 | 344 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| MAX | 616 | 711 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| MIN | 188 | 191 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| CFSM | 1.42 | 1.68 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| IN. | 1.63 | 1.87 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |

| STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2002 - 2005, BY WATER YEAR (WY) | | | | | | | | | | | | |
|---|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 228 | 360 | 598 | 476 | 401 | 592 | 991 | 531 | 446 | 220 | 287 | 177 |
| MAX | 290 | 383 | 639 | 552 | 412 | 789 | 1098 | 552 | 631 | 302 | 358 | 241 |
| (WY) | 2005 | 2004 | 2004 | 2003 | 2004 | 2003 | 2004 | 2003 | 2003 | 2003 | 2003 | 2003 |
| MIN | 142 | 344 | 557 | 400 | 389 | 396 | 884 | 510 | 261 | 138 | 216 | 102 |
| (WY) | 2003 | 2005 | 2003 | 2004 | 2003 | 2004 | 2003 | 2004 | 2004 | 2004 | 2004 | 2002 |

| SUMMARY STATISTICS | | WATER YEARS 2002 - 2005 | |
|--------------------------|--|-------------------------|-------------|
| ANNUAL MEAN | | 443 | |
| HIGHEST ANNUAL MEAN | | 479 | 2003 |
| LOWEST ANNUAL MEAN | | 407 | 2004 |
| HIGHEST DAILY MEAN | | 2260 | Apr 15 2004 |
| LOWEST DAILY MEAN | | 44 | Aug 27 2002 |
| ANNUAL SEVEN-DAY MINIMUM | | 46 | Aug 22 2002 |
| MAXIMUM PEAK FLOW | | 2290 | Apr 15 2004 |
| MAXIMUM PEAK STAGE | | 5.45 | Apr 15 2004 |
| INSTANTANEOUS LOW FLOW | | 42 | Aug 27 2002 |
| ANNUAL RUNOFF (CFSM) | | 2.16 | |
| ANNUAL RUNOFF (INCHES) | | 29.37 | |
| 10 PERCENT EXCEEDS | | 828 | |
| 50 PERCENT EXCEEDS | | 359 | |
| 90 PERCENT EXCEEDS | | 135 | |

e Estimated

PAWCATUCK RIVER BASIN

01118360 ASHAWAY RIVER AT ASHAWAY, RI

LOCATION.--Lat 41°25'24", long 71°47'32", Washington County, Hydrologic Unit 01090005, at bridge on Laurel Street, 0.4 miles west of Ashaway, RI.

DRAINAGE AREA.--28.6 mi².

PERIOD OF RECORD.--Discharge:August 2002 to December 2004 (discontinued). Discharge measurements made in water year 1991.

GAGE.--Water-stage recorder. Elevation of gage is 40 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are fair.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,350 ft³/s, Apr. 14, 2004, gage height, 4.93 ft; minimum discharge, 0.70 ft³/s, Aug. 28, 2003.DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|
| 1 | 15 | 125 | e47 | 72 | 26 | e31 | e347 | 83 | 47 | 9.6 | 5.7 | 7.4 |
| 2 | 14 | 100 | e42 | 68 | 26 | e31 | e468 | 80 | 52 | 9.6 | 5.5 | 6.1 |
| 3 | 14 | 84 | e36 | 66 | 28 | e32 | e365 | 99 | 50 | 8.3 | 5.2 | 6.0 |
| 4 | 13 | 73 | e31 | 65 | 59 | e33 | e268 | 143 | 41 | 7.6 | 4.8 | 6.0 |
| 5 | 19 | 71 | e32 | 97 | 56 | e34 | e210 | 119 | 33 | 11 | 25 | 6.1 |
| 6 | 16 | 89 | e34 | 107 | 77 | e53 | e124 | 98 | 30 | 11 | 13 | 5.2 |
| 7 | 14 | 87 | e34 | 84 | 224 | e69 | 110 | 87 | 29 | 9.5 | 7.5 | 5.6 |
| 8 | 13 | 73 | e35 | 66 | 167 | e62 | 101 | 77 | 27 | 8.7 | 6.2 | 7.8 |
| 9 | 12 | e66 | e34 | 56 | 92 | e53 | 93 | 73 | 26 | 7.8 | 6.3 | 9.7 |
| 10 | 11 | e62 | e36 | 47 | 74 | e46 | 87 | 72 | 23 | 7.1 | 5.9 | 8.7 |
| 11 | 11 | e65 | e95 | 43 | 69 | e39 | 79 | 69 | 19 | 6.7 | 6.1 | 6.8 |
| 12 | 12 | e75 | e186 | 46 | 60 | e34 | 76 | 64 | 17 | 5.9 | 5.9 | 6.0 |
| 13 | 12 | e78 | e128 | 49 | 56 | e31 | 194 | 60 | 14 | 12 | 6.1 | 5.9 |
| 14 | 12 | e72 | e59 | 45 | 55 | e31 | 1000 | 53 | 15 | 15 | 7.0 | 5.4 |
| 15 | 44 | e68 | e174 | 41 | 53 | e29 | 453 | 51 | 20 | 13 | 25 | 4.3 |
| 16 | 50 | e62 | e204 | 40 | e48 | e29 | 250 | 47 | 19 | 10 | 19 | 6.5 |
| 17 | 36 | e60 | e203 | 41 | e39 | e29 | 172 | 43 | 17 | 9.6 | 17 | 7.0 |
| 18 | 35 | e56 | e275 | 42 | e30 | e28 | 144 | 41 | 17 | 10 | 13 | 41 |
| 19 | 33 | e54 | e161 | 42 | e28 | e31 | 129 | 44 | 36 | 9.0 | 11 | 52 |
| 20 | 30 | e59 | 133 | 38 | e26 | e47 | 116 | 39 | 29 | 8.5 | 11 | 30 |
| 21 | 28 | e68 | 109 | 35 | e27 | e105 | 102 | 37 | 19 | 7.6 | 15 | 19 |
| 22 | 27 | e67 | 94 | 33 | e30 | e137 | 96 | 35 | 15 | 6.8 | 29 | 15 |
| 23 | 25 | e61 | 85 | 32 | e30 | e116 | 92 | 34 | 15 | 6.3 | 19 | 12 |
| 24 | 23 | e53 | 93 | 30 | e28 | e94 | 109 | 34 | 14 | 5.9 | 14 | 10 |
| 25 | 22 | e51 | 172 | 29 | e27 | e87 | 100 | 32 | 13 | 5.7 | 10 | 8.8 |
| 26 | 21 | e53 | 138 | 28 | e27 | e76 | 110 | 29 | 13 | 4.9 | 7.9 | 8.5 |
| 27 | 49 | e49 | 110 | 28 | e26 | e80 | 165 | 46 | 11 | 4.4 | 8.5 | 8.7 |
| 28 | 104 | e48 | 92 | 29 | e26 | e80 | 134 | 63 | 11 | 5.3 | 9.0 | 15 |
| 29 | 292 | e59 | 82 | 29 | e29 | e72 | 100 | 79 | 10 | 5.6 | 8.1 | 155 |
| 30 | 367 | e53 | 77 | 27 | --- | e61 | 89 | 56 | 9.5 | 5.2 | 8.0 | 137 |
| 31 | 182 | --- | 76 | 26 | --- | e101 | --- | 42 | --- | 5.4 | 8.7 | --- |
| TOTAL | 1556 | 2041 | 3107 | 1481 | 1543 | 1781 | 5883 | 1929 | 691.5 | 253.0 | 343.4 | 622.5 |
| MEAN | 50.2 | 68.0 | 100 | 47.8 | 53.2 | 57.5 | 196 | 62.2 | 23.1 | 8.16 | 11.1 | 20.8 |
| MAX | 367 | 125 | 275 | 107 | 224 | 137 | 1000 | 143 | 52 | 15 | 29 | 155 |
| MIN | 11 | 48 | 31 | 26 | 26 | 28 | 76 | 29 | 9.5 | 4.4 | 4.8 | 4.3 |
| CFSM | 1.76 | 2.38 | 3.50 | 1.67 | 1.86 | 2.01 | 6.86 | 2.18 | 0.81 | 0.29 | 0.39 | 0.73 |
| IN. | 2.02 | 2.65 | 4.04 | 1.93 | 2.01 | 2.32 | 7.65 | 2.51 | 0.90 | 0.33 | 0.45 | 0.81 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2002 - 2004, BY WATER YEAR (WY)

| | 2002 | 2003 | 2004 | 2003 | 2004 | 2003 | 2004 | 2003 | 2004 | 2003 | 2004 | |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 31.4 | 60.8 | 96.0 | 60.2 | 54.6 | 94.7 | 159 | 66.1 | 57.4 | 20.8 | 23.9 | 19.5 |
| MAX | 50.2 | 68.0 | 100 | 72.6 | 56.0 | 132 | 196 | 70.1 | 91.8 | 33.5 | 36.6 | 29.1 |
| (WY) | 2004 | 2004 | 2004 | 2003 | 2003 | 2003 | 2004 | 2003 | 2003 | 2003 | 2003 | 2003 |
| MIN | 12.5 | 53.6 | 91.7 | 47.8 | 53.2 | 57.5 | 122 | 62.2 | 23.1 | 8.16 | 11.1 | 8.54 |
| (WY) | 2003 | 2003 | 2003 | 2004 | 2004 | 2004 | 2003 | 2004 | 2004 | 2004 | 2004 | 2002 |

SUMMARY STATISTICS

| | FOR 2003 CALENDAR YEAR | | FOR 2004 WATER YEAR | | WATER YEARS 2002 - 2004 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|-------------|
| ANNUAL TOTAL | 26251 | | 21231.4 | | | |
| ANNUAL MEAN | 71.9 | | 58.0 | | 62.4 | |
| HIGHEST ANNUAL MEAN | | | | | 66.8 | |
| LOWEST ANNUAL MEAN | | | | | 58.0 | |
| HIGHEST DAILY MEAN | 367 | Oct 30 | 1000 | Apr 14 | 1000 | Apr 14 2004 |
| LOWEST DAILY MEAN | 11 | Oct 10 | 4.3 | Sep 15 | 0.96 | Aug 28 2002 |
| ANNUAL SEVEN-DAY MINIMUM | 12 | Oct 8 | 5.2 | Jul 25 | 2.9 | Aug 23 2002 |
| MAXIMUM PEAK FLOW | | | 1350 | Apr 14 | 1350 | Apr 14 2004 |
| MAXIMUM PEAK STAGE | | | 4.93 | Apr 14 | 4.93 | Apr 14 2004 |
| INSTANTANEOUS LOW FLOW | | | 3.8 | Sep 15 | 0.70 | Aug 28 2002 |
| ANNUAL RUNOFF (CFSM) | 2.51 | | 2.03 | | 2.18 | |
| ANNUAL RUNOFF (INCHES) | 34.14 | | 27.62 | | 29.65 | |
| 10 PERCENT EXCEEDS | 145 | | 117 | | 128 | |
| 50 PERCENT EXCEEDS | 57 | | 35 | | 43 | |
| 90 PERCENT EXCEEDS | 19 | | 7.1 | | 9.0 | |

e Estimated

PAWCATUCK RIVER BASIN

01118360 ASHAWAY RIVER AT ASHAWAY, RI--Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1 | 73 | 20 | 175 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 2 | 46 | 18 | 274 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 3 | 36 | 18 | 170 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 4 | 27 | 18 | 125 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 5 | 22 | 87 | 106 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 6 | 17 | 74 | 91 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 7 | 14 | 52 | 98 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 8 | 13 | 38 | 167 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 9 | 13 | 29 | 138 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 10 | 13 | 25 | 142 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 11 | 12 | 23 | 189 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 12 | 11 | 26 | 161 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 13 | 9.7 | 69 | 129 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 14 | 10 | 69 | 110 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 15 | 13 | 55 | e96 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 16 | 32 | 48 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 17 | 34 | 41 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 18 | 29 | 38 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 19 | 49 | 36 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 20 | 72 | 34 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 21 | 51 | 39 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 22 | 37 | 39 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 23 | 29 | 36 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 24 | 24 | 34 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 25 | 23 | 58 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 26 | 19 | 74 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 27 | 16 | 58 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 28 | 15 | 66 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 29 | 13 | 204 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 30 | 14 | 145 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 31 | 18 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| TOTAL | 804.7 | 1571 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| MEAN | 26.0 | 52.4 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| MAX | 73 | 204 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| MIN | 9.7 | 18 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| CFSM | 0.91 | 1.83 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| IN. | 1.05 | 2.04 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2002 - 2005, BY WATER YEAR (WY)

| | 2002 | 2003 | 2004 | 2005 | 2002 | 2003 | 2004 | 2005 | 2002 | 2003 | 2004 | 2005 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 29.6 | 58.0 | 96.0 | 60.2 | 54.6 | 94.7 | 159 | 66.1 | 57.4 | 20.8 | 23.9 | 19.5 |
| MAX | 50.2 | 68.0 | 100 | 72.6 | 56.0 | 132 | 196 | 70.1 | 91.8 | 33.5 | 36.6 | 29.1 |
| (WY) | 2004 | 2004 | 2004 | 2003 | 2003 | 2003 | 2004 | 2003 | 2003 | 2003 | 2003 | 2003 |
| MIN | 12.5 | 52.4 | 91.7 | 47.8 | 53.2 | 57.5 | 122 | 62.2 | 23.1 | 8.16 | 11.1 | 8.54 |
| (WY) | 2003 | 2005 | 2003 | 2004 | 2004 | 2004 | 2003 | 2004 | 2004 | 2004 | 2004 | 2002 |

SUMMARY STATISTICS

WATER YEARS 2002 - 2005

| | |
|--------------------------|-------|
| ANNUAL MEAN | 62.4 |
| HIGHEST ANNUAL MEAN | 66.8 |
| LOWEST ANNUAL MEAN | 58.0 |
| HIGHEST DAILY MEAN | 1000 |
| LOWEST DAILY MEAN | 0.96 |
| ANNUAL SEVEN-DAY MINIMUM | 2.9 |
| MAXIMUM PEAK FLOW | 1350 |
| MAXIMUM PEAK STAGE | 4.93 |
| INSTANTANEOUS LOW FLOW | 0.70 |
| ANNUAL RUNOFF (CFSM) | 2.18 |
| ANNUAL RUNOFF (INCHES) | 29.65 |
| 10 PERCENT EXCEEDS | 128 |
| 50 PERCENT EXCEEDS | 43 |
| 90 PERCENT EXCEEDS | 9.0 |

e Estimated

PAWCATUCK RIVER BASIN

01118400 SHUNOCK RIVER NEAR NORTH STONINGTON, CT

LOCATION.--Lat 41°24'36", long 71°50'43", New London County, Hydrologic Unit 01090005, at bridge on State Route 49, 900 ft upstream from mouth, and 2.9 mi southeast of North Stonington.

DRAINAGE AREA.--17.2 mi².

PERIOD OF RECORD.--Discharge: October 2002 to December 2004 (discontinued). Discharge measurements made in water years 1961-73.

GAGE.--Water-stage recorder. Elevation of gage is 25 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are fair.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge 533 ft³/s, Apr. 14, 2004, gage height 5.01 ft; minimum discharge, 2.4 ft³/s, Oct. 10, 2002.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|------|------|------|------|------|------|------|-------|-------|-------|-------|
| 1 | 8.1 | 71 | 25 | 45 | e19 | 26 | 179 | 51 | 26 | 7.6 | 4.0 | 4.2 |
| 2 | 7.6 | 56 | 23 | 44 | e19 | 28 | 262 | 48 | 30 | 7.5 | 4.1 | 3.8 |
| 3 | 7.5 | 48 | 21 | 41 | 19 | 28 | 157 | 58 | 27 | 7.1 | 3.9 | 3.8 |
| 4 | 7.7 | 40 | 20 | 40 | 34 | 29 | 128 | 77 | 23 | 6.8 | 3.7 | 3.5 |
| 5 | 7.4 | 38 | 20 | 54 | 31 | 29 | 109 | 70 | 20 | 7.6 | 13 | 3.4 |
| 6 | 7.6 | 46 | 21 | 61 | 42 | 41 | 90 | 55 | 19 | 7.8 | 11 | 3.3 |
| 7 | 7.3 | 47 | 21 | 52 | 125 | 47 | 76 | 48 | 20 | 7.3 | 7.4 | 3.1 |
| 8 | 7.9 | 42 | 20 | 41 | 98 | 40 | 65 | 42 | 18 | 6.8 | 5.5 | 3.6 |
| 9 | 9.0 | 36 | 21 | 37 | 60 | 36 | 57 | 40 | 17 | 6.4 | 4.7 | 4.2 |
| 10 | 7.7 | 32 | 21 | e33 | 45 | 33 | 52 | 39 | 16 | 5.9 | 4.2 | 3.8 |
| 11 | 7.4 | 32 | 39 | e30 | 43 | 30 | 46 | 36 | 15 | 5.6 | 4.0 | 3.3 |
| 12 | 7.8 | 34 | 73 | 28 | 38 | 29 | 45 | 34 | 14 | 5.4 | 3.9 | 3.2 |
| 13 | 8.4 | 38 | 57 | 28 | 36 | 27 | 135 | 32 | 14 | 9.5 | 5.1 | 3.1 |
| 14 | 7.8 | 36 | 43 | e28 | 34 | 25 | 471 | 31 | 16 | 14 | 4.2 | 3.1 |
| 15 | 18 | 33 | 85 | e27 | 33 | 25 | 265 | 28 | 15 | 12 | 13 | 3.0 |
| 16 | 20 | 29 | 96 | e27 | 29 | 25 | 169 | 27 | 13 | 9.7 | 14 | 3.8 |
| 17 | 17 | 28 | 80 | e28 | 26 | 25 | 129 | 27 | 14 | 7.2 | 12 | 3.6 |
| 18 | 16 | 26 | 140 | e27 | 26 | 24 | 107 | 25 | 13 | 6.4 | 8.7 | 14 |
| 19 | 15 | 26 | 116 | 27 | 25 | 26 | 93 | 26 | 19 | 6.0 | 6.8 | 19 |
| 20 | 14 | 30 | 83 | e26 | 25 | 26 | 80 | 24 | 16 | 5.5 | 6.4 | 13 |
| 21 | 13 | 31 | 67 | e25 | 25 | 43 | 68 | 23 | 12 | 5.0 | 8.2 | 8.2 |
| 22 | 13 | 30 | 60 | e26 | 27 | 53 | 63 | 23 | 12 | 4.7 | 14 | 6.2 |
| 23 | 13 | 28 | 55 | e25 | 28 | 42 | 58 | 22 | 12 | 4.6 | 10 | 5.1 |
| 24 | 12 | 26 | 59 | e25 | 26 | 34 | 66 | 22 | 11 | 4.6 | 7.5 | 4.7 |
| 25 | 11 | 27 | 110 | e24 | 25 | 30 | 60 | 22 | 10 | 4.4 | 6.4 | 4.2 |
| 26 | 11 | 26 | 99 | e22 | 24 | 29 | 71 | 20 | 9.8 | 4.1 | 5.8 | 3.9 |
| 27 | 21 | 25 | 74 | 20 | 23 | 29 | 97 | 25 | 9.0 | 3.9 | 5.3 | 3.6 |
| 28 | 42 | 25 | 62 | 20 | 23 | 31 | 85 | 35 | 8.5 | 4.8 | 4.9 | 6.6 |
| 29 | 120 | 27 | 58 | 19 | 24 | 28 | 65 | 42 | 9.8 | 4.7 | 4.5 | 60 |
| 30 | 179 | 25 | 53 | e19 | --- | 26 | 55 | 30 | 8.3 | 4.1 | 4.4 | 69 |
| 31 | 109 | --- | 50 | e19 | --- | 48 | --- | 24 | --- | 4.1 | 4.6 | --- |
| TOTAL | 753.2 | 1038 | 1772 | 968 | 1032 | 992 | 3403 | 1106 | 467.4 | 201.1 | 215.2 | 277.3 |
| MEAN | 24.3 | 34.6 | 57.2 | 31.2 | 35.6 | 32.0 | 113 | 35.7 | 15.6 | 6.49 | 6.94 | 9.24 |
| MAX | 179 | 71 | 140 | 61 | 125 | 53 | 471 | 77 | 30 | 14 | 14 | 69 |
| MIN | 7.3 | 25 | 20 | 19 | 19 | 24 | 45 | 20 | 8.3 | 3.9 | 3.7 | 3.0 |
| CFSM | 1.41 | 2.01 | 3.32 | 1.82 | 2.07 | 1.86 | 6.59 | 2.07 | 0.91 | 0.38 | 0.40 | 0.54 |
| IN. | 1.63 | 2.24 | 3.83 | 2.09 | 2.23 | 2.15 | 7.36 | 2.39 | 1.01 | 0.43 | 0.47 | 0.60 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2003 - 2004, BY WATER YEAR (WY)

| | 2003 | 2004 | 2003 | 2004 | 2003 | 2004 | 2003 | 2004 | 2003 | 2004 | 2003 | 2004 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 15.0 | 32.0 | 55.5 | 38.3 | 34.1 | 56.1 | 96.2 | 39.9 | 36.5 | 14.7 | 13.2 | 11.7 |
| MAX | 24.3 | 34.6 | 57.2 | 45.3 | 35.6 | 80.1 | 113 | 44.1 | 57.5 | 22.8 | 19.4 | 14.2 |
| (WY) | 2004 | 2004 | 2004 | 2003 | 2004 | 2003 | 2004 | 2003 | 2003 | 2003 | 2003 | 2003 |
| MIN | 5.68 | 29.4 | 53.9 | 31.2 | 32.5 | 32.0 | 79.0 | 35.7 | 15.6 | 6.49 | 6.94 | 9.24 |
| (WY) | 2003 | 2003 | 2003 | 2004 | 2003 | 2004 | 2003 | 2004 | 2004 | 2004 | 2004 | 2004 |

SUMMARY STATISTICS

| | FOR 2003 CALENDAR YEAR | | FOR 2004 WATER YEAR | | WATER YEARS 2003 - 2004 | |
|--------------------------|------------------------|-------|---------------------|--------|-------------------------|-------------|
| ANNUAL TOTAL | 15560.7 | | 12225.2 | | | |
| ANNUAL MEAN | 42.6 | | 33.4 | | 36.9 | |
| HIGHEST ANNUAL MEAN | | | | | 40.3 | |
| LOWEST ANNUAL MEAN | | | | | 33.4 | |
| HIGHEST DAILY MEAN | 197 | Mar 3 | 471 | Apr 14 | 471 | Apr 14 2004 |
| LOWEST DAILY MEAN | 7.3 | Oct 7 | 3.0 | Sep 15 | 2.5 | Oct 10 2002 |
| ANNUAL SEVEN-DAY MINIMUM | 7.6 | Oct 2 | 3.3 | Sep 11 | 2.9 | Oct 5 2002 |
| MAXIMUM PEAK FLOW | | | 533 | Apr 14 | 533 | Apr 14 2004 |
| MAXIMUM PEAK STAGE | | | 5.01 | Apr 14 | 5.01 | Apr 14 2004 |
| INSTANTANEOUS LOW FLOW | | | 2.7 | Sep 18 | 2.4 | Oct 10 2002 |
| ANNUAL RUNOFF (CFSM) | 2.48 | | 1.94 | | 2.14 | |
| ANNUAL RUNOFF (INCHES) | 33.65 | | 26.44 | | 29.13 | |
| 10 PERCENT EXCEEDS | 86 | | 69 | | 78 | |
| 50 PERCENT EXCEEDS | 31 | | 25 | | 26 | |
| 90 PERCENT EXCEEDS | 11 | | 4.6 | | 5.5 | |

e Estimated

PAWCATUCK RIVER BASIN

01118400 SHUNOCK RIVER NEAR NORTH STONINGTON, CT--Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1 | 36 | 9.6 | 89 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 2 | 20 | 9.4 | 134 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 3 | 14 | 9.0 | 93 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 4 | 12 | 10 | 68 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 5 | 10 | 38 | 57 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 6 | 9.4 | 34 | 49 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 7 | 8.6 | 24 | 52 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 8 | 7.9 | 18 | 75 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 9 | 7.1 | 16 | 70 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 10 | 6.5 | 14 | 71 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 11 | 6.3 | 14 | 90 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 12 | 6.1 | 15 | 84 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 13 | 5.9 | 33 | 71 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 14 | 6.0 | 38 | 69 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 15 | 6.5 | 30 | e102 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 16 | 12 | 26 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 17 | 15 | 24 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 18 | 12 | 22 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 19 | 21 | 20 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 20 | 33 | 19 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 21 | 26 | 20 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 22 | 19 | 20 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 23 | 16 | 18 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 24 | 14 | 18 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 25 | 13 | 22 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 26 | 12 | 27 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 27 | 11 | 25 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 28 | 11 | 35 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 29 | 10 | 120 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 30 | 9.7 | 91 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 31 | 9.7 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| TOTAL | 406.7 | 819.0 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| MEAN | 13.1 | 27.3 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| MAX | 36 | 120 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| MIN | 5.9 | 9.0 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| CFSM | 0.76 | 1.59 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| IN. | 0.88 | 1.77 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2003 - 2005, BY WATER YEAR (WY)

| | 2003 | 2004 | 2005 | 2003 | 2004 | 2005 | 2003 | 2004 | 2005 | 2003 | 2004 | 2005 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 14.4 | 30.4 | 55.5 | 38.3 | 34.1 | 56.1 | 96.2 | 39.9 | 36.5 | 14.7 | 13.2 | 11.7 |
| MAX | 24.3 | 34.6 | 57.2 | 45.3 | 35.6 | 80.1 | 113 | 44.1 | 57.5 | 22.8 | 19.4 | 14.2 |
| (WY) | 2004 | 2004 | 2004 | 2003 | 2004 | 2003 | 2004 | 2003 | 2003 | 2003 | 2003 | 2003 |
| MIN | 5.68 | 27.3 | 53.9 | 31.2 | 32.5 | 32.0 | 79.0 | 35.7 | 15.6 | 6.49 | 6.94 | 9.24 |
| (WY) | 2003 | 2005 | 2003 | 2004 | 2003 | 2004 | 2003 | 2004 | 2004 | 2004 | 2004 | 2004 |

SUMMARY STATISTICS

WATER YEARS 2003 - 2005

| | |
|--------------------------|-------|
| ANNUAL MEAN | 36.9 |
| HIGHEST ANNUAL MEAN | 40.3 |
| LOWEST ANNUAL MEAN | 33.4 |
| HIGHEST DAILY MEAN | 471 |
| LOWEST DAILY MEAN | 2.5 |
| ANNUAL SEVEN-DAY MINIMUM | 2.9 |
| MAXIMUM PEAK FLOW | 533 |
| MAXIMUM PEAK STAGE | 5.01 |
| INSTANTANEOUS LOW FLOW | 2.4 |
| ANNUAL RUNOFF (CFSM) | 2.14 |
| ANNUAL RUNOFF (INCHES) | 29.13 |
| 10 PERCENT EXCEEDS | 78 |
| 50 PERCENT EXCEEDS | 26 |
| 90 PERCENT EXCEEDS | 5.5 |

e Estimated

PAWCATUCK RIVER BASIN

01118500 PAWCATUCK RIVER AT WESTERLY, RI

LOCATION.--Lat 41° 23' 01", long 71° 50' 01", Washington County, Hydrologic Unit 01090005, on left bank at Westerly, 2.1 mi downstream from Shunock River.

DRAINAGE AREA.--295 mi².

PERIOD OF RECORD.--Discharge: November 1940 to current year.

Water-quality records: Water years 1953, 1963, 1976-2002.

REVISED RECORDS.--WSP 1051: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1.76 ft below sea level.

REMARKS.--Records good except those for estimated daily discharge, which are fair. Many days are adjusted for tidal backwater, which lasts as much as 4 hours during times of high tide. Diurnal fluctuation at low flow prior to 1962 by mills upstream; regulation much greater prior to 1958. Diversion upstream for municipal supply of Westerly.

AVERAGE DISCHARGE.--63 years (water years 1942-2004), 576 ft³/s, 26.52 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,070 ft³/s, June 6, 1982, gage height, 12.86 ft; minimum daily discharge, 25 ft³/s, Aug. 17, 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1936 reached a discharge of 3,150 ft³/s, by computation of flow over dam 1.5 mi upstream. Maximum discharge since 1886 occurred in November 1927 and was possibly more than twice that in March 1936. Maximum stage since at least 1635, 15.0 ft, Sept. 21, 1938, due to hurricane tidal wave.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,110 ft³/s, Apr. 15, gage height, 8.18 ft; maximum gage height, 8.56 ft, Apr. 14 (backwater from tide); minimum discharge, 117 ft³/s, Aug. 4.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|------|
| 1 | 195 | 1270 | 417 | 729 | e402 | 435 | 1350 | 998 | 578 | 192 | 131 | 164 |
| 2 | 189 | 1010 | 391 | 693 | e408 | 459 | 2330 | 930 | 612 | 186 | 130 | 156 |
| 3 | 186 | 807 | 366 | 664 | e405 | 481 | 2300 | 939 | 598 | 186 | 124 | 146 |
| 4 | 184 | 676 | 345 | 655 | 532 | 504 | 2190 | 1110 | 557 | 182 | 119 | 140 |
| 5 | 189 | 630 | 338 | 752 | e558 | 520 | 1990 | 1170 | 502 | 193 | 180 | 140 |
| 6 | 186 | 686 | 357 | 856 | 609 | 596 | 1780 | 1110 | 468 | 240 | 258 | 137 |
| 7 | 176 | 717 | 365 | 830 | 1260 | 721 | 1520 | 1020 | 456 | 240 | 247 | 133 |
| 8 | 171 | 664 | 373 | 738 | 1270 | 711 | 1300 | 918 | 436 | 229 | 201 | 142 |
| 9 | 168 | 589 | 367 | 652 | 1020 | 647 | 1160 | 844 | 409 | 220 | 169 | 168 |
| 10 | 165 | 534 | 367 | e581 | 862 | 597 | 1050 | 802 | 374 | 204 | 147 | 175 |
| 11 | 165 | 508 | 489 | e523 | 763 | 557 | 950 | 755 | 342 | 195 | 135 | 166 |
| 12 | 166 | 508 | 835 | 500 | 685 | 525 | 884 | 715 | 308 | 190 | 130 | 154 |
| 13 | 174 | 534 | 945 | 505 | 632 | 498 | 1180 | 676 | 288 | 231 | 144 | 147 |
| 14 | 170 | 555 | 877 | 504 | 602 | 479 | 2510 | 639 | 277 | 309 | 202 | 140 |
| 15 | 261 | 524 | 1130 | e495 | 581 | 459 | 3080 | 606 | 295 | 299 | 322 | 131 |
| 16 | 384 | 485 | 1300 | e487 | 536 | 446 | 2940 | 586 | 285 | 253 | 505 | 142 |
| 17 | 380 | 460 | 1300 | e487 | 501 | 453 | 2610 | 565 | 265 | 209 | 520 | 160 |
| 18 | 350 | 440 | 1620 | e482 | 487 | 447 | 2200 | 546 | 254 | 187 | 411 | 241 |
| 19 | 340 | 427 | 1690 | e487 | 478 | 446 | 1870 | 543 | 326 | 177 | 297 | 517 |
| 20 | 313 | 444 | 1590 | e472 | 468 | 449 | 1600 | 538 | 351 | 167 | 242 | 542 |
| 21 | 283 | 490 | 1370 | e467 | 462 | 562 | 1360 | 514 | 291 | 160 | 229 | 413 |
| 22 | 274 | 488 | 1190 | e467 | 475 | 716 | 1230 | 503 | 256 | 153 | 298 | 286 |
| 23 | 273 | 468 | 1030 | e460 | 485 | 706 | 1120 | 495 | 256 | 146 | 306 | 227 |
| 24 | 254 | 452 | 972 | e433 | 478 | 631 | 1130 | 490 | 243 | 146 | 259 | 202 |
| 25 | 234 | 434 | 1140 | e424 | 463 | 570 | 1120 | 480 | 228 | 147 | 219 | 187 |
| 26 | 226 | 425 | 1180 | e407 | 443 | 542 | 1120 | 469 | 223 | 145 | 192 | 179 |
| 27 | 286 | 414 | 1110 | e411 | 428 | 539 | 1310 | 512 | 215 | 135 | 177 | 169 |
| 28 | 506 | 404 | 988 | e415 | 418 | 544 | 1330 | 604 | 205 | 142 | 170 | 178 |
| 29 | 1040 | 418 | 886 | e411 | 420 | 522 | 1230 | 746 | 205 | 157 | 164 | 658 |
| 30 | 1710 | 430 | 815 | e415 | --- | 494 | 1100 | 723 | 200 | 156 | 162 | 1070 |
| 31 | 1530 | --- | 776 | e398 | --- | 567 | --- | 620 | --- | 142 | 165 | --- |
| TOTAL | 11128 | 16891 | 26919 | 16800 | 17131 | 16823 | 48844 | 22166 | 10303 | 5918 | 6955 | 7410 |
| MEAN | 359 | 563 | 868 | 542 | 591 | 543 | 1628 | 715 | 343 | 191 | 224 | 247 |
| MAX | 1710 | 1270 | 1690 | 856 | 1270 | 721 | 3080 | 1170 | 612 | 309 | 520 | 1070 |
| MIN | 165 | 404 | 338 | 398 | 402 | 435 | 884 | 469 | 200 | 135 | 119 | 131 |
| CFSM | 1.22 | 1.91 | 2.94 | 1.84 | 2.00 | 1.84 | 5.52 | 2.42 | 1.16 | 0.65 | 0.76 | 0.84 |
| IN. | 1.40 | 2.13 | 3.39 | 2.12 | 2.16 | 2.12 | 6.16 | 2.80 | 1.30 | 0.75 | 0.88 | 0.93 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 2004, BY WATER YEAR (WY)

| | | | | | | | | | | | | |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 256 | 444 | 655 | 742 | 805 | 1039 | 1000 | 720 | 515 | 265 | 234 | 218 |
| MAX | 1186 | 1450 | 1789 | 2151 | 1377 | 1775 | 2603 | 1274 | 2246 | 642 | 763 | 1233 |
| (WY) | 1956 | 1956 | 1987 | 1979 | 1982 | 1994 | 1983 | 1948 | 1982 | 1959 | 1946 | 1954 |
| MIN | 87.2 | 88.9 | 115 | 131 | 223 | 453 | 371 | 325 | 210 | 98.5 | 71.9 | 65.7 |
| (WY) | 1950 | 2002 | 1966 | 1981 | 2002 | 2002 | 1966 | 1986 | 1942 | 1957 | 1999 | 1964 |

SUMMARY STATISTICS FOR 2003 CALENDAR YEAR FOR 2004 WATER YEAR WATER YEARS 1941 - 2004

| | | | | | | | | |
|--------------------------|--------|--------|--------|--------|-------|--------|-------|------|
| ANNUAL TOTAL | 263287 | | 207288 | | 576 | | | |
| ANNUAL MEAN | 721 | | 566 | | 871 | | | |
| HIGHEST ANNUAL MEAN | | | | | 251 | | | |
| LOWEST ANNUAL MEAN | | | | | 1981 | | | |
| HIGHEST DAILY MEAN | 2060 | Mar 31 | 3080 | Apr 15 | 6220 | Jun 6 | 1982 | |
| LOWEST DAILY MEAN | 165 | Oct 10 | 119 | Aug 4 | 25 | Aug 17 | 1941 | |
| ANNUAL SEVEN-DAY MINIMUM | 168 | Oct 8 | 137 | Jul 29 | 47 | Sep 2 | 1995 | |
| MAXIMUM PEAK FLOW | | | 3110 | Apr 15 | 7070 | Jun 6 | 1982 | |
| MAXIMUM PEAK STAGE | | | 8.56 | | 12.86 | | Jun 6 | 1982 |
| INSTANTANEOUS LOW FLOW | | | 117 | | Aug 4 | | | |
| ANNUAL RUNOFF (CFSM) | 2.45 | | 1.92 | | 1.95 | | | |
| ANNUAL RUNOFF (INCHES) | 33.20 | | 26.14 | | 26.52 | | | |
| 10 PERCENT EXCEEDS | 1310 | | 1150 | | 1210 | | | |
| 50 PERCENT EXCEEDS | 544 | | 462 | | 450 | | | |
| 90 PERCENT EXCEEDS | 239 | | 165 | | 127 | | | |

e Estimated

THAMES RIVER BASIN

01123360 QUINEBAUG RIVER BELOW EAST BRIMFIELD DAM AT FISKDALE, MA

LOCATION.--Lat 42° 06' 31", long 72° 07' 27", Worcester County, Hydrologic Unit 01100001, stage sensor located on right bank, 750 ft downstream from East Brimfield Dam and 2.4 mi upstream from Cedar Pond outlet, at Fiskdale.

DRAINAGE AREA.--62.6 mi².

PERIOD OF RECORD.--October 1972 to September 1990, October 2002 to current year. Gage operated from October 1990 to September 2002 for U.S. Army Corps of Engineers flood-control project information; missing and erroneous data were not estimated.

REVISED RECORDS.--WDR MA-RI-03-1: Drainage area.

GAGE.--Water-stage recorder in gate house. Datum of gage is 613.51 ft above National Geodetic Vertical Datum of 1929 (U.S. Army Corps of Engineers benchmark). Telephone and satellite gage-height telemeter at station.

REMARKS.--Records good except those for estimated daily discharge, which are poor. Flow regulated by East Brimfield Lake.

AVERAGE DISCHARGE.--20 years (water years 1973–1990, 2003–04), 131 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,040 ft³/s, Jan. 30, 1976, gage height, 6.42 ft; maximum gage height, 6.52 ft, Mar. 17, 1977; minimum daily discharge, 2.2 ft³/s, Sept. 10, 1983.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 872 ft³/s, Dec. 19; gage height, 6.11 ft; minimum discharge, 13 ft³/s, Sept. 1, 2.

**DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES**

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1 | 74 | 315 | 134 | 225 | 64 | 60 | 221 | 217 | 112 | 26 | 42 | 27 |
| 2 | 67 | 277 | 128 | 217 | 62 | 79 | 365 | 190 | 119 | 33 | 36 | 20 |
| 3 | 57 | 246 | 116 | 202 | 63 | 130 | 464 | 184 | 126 | 44 | 30 | 24 |
| 4 | 51 | 221 | 107 | 210 | 70 | 167 | 460 | 221 | 114 | 50 | 26 | 23 |
| 5 | 46 | 219 | 88 | 225 | 73 | 176 | 449 | 229 | 96 | 45 | 32 | 22 |
| 6 | 42 | 241 | 72 | 230 | 81 | 184 | 374 | 293 | 80 | 43 | 36 | 22 |
| 7 | 39 | 247 | 71 | 231 | 109 | 197 | 227 | 273 | 69 | 38 | 35 | 22 |
| 8 | 36 | 233 | 65 | 228 | 124 | 188 | 203 | 202 | 63 | 36 | 31 | 22 |
| 9 | 35 | 215 | 67 | 205 | 126 | 164 | 202 | 177 | 58 | 38 | 27 | 24 |
| 10 | 33 | 201 | 67 | 149 | 122 | 140 | 199 | 176 | 57 | 36 | 22 | 51 |
| 11 | 41 | 179 | 100 | 125 | 112 | 125 | 178 | 175 | 54 | 33 | 19 | 81 |
| 12 | 58 | 162 | 198 | 115 | 97 | 119 | 150 | 161 | 50 | 29 | e22 | 76 |
| 13 | 67 | 158 | 218 | 114 | 85 | 113 | 163 | 144 | 44 | 28 | e20 | e59 |
| 14 | 69 | 145 | 199 | 109 | 79 | 105 | 118 | 129 | 40 | 28 | 18 | 44 |
| 15 | 105 | 127 | 197 | 108 | 73 | 100 | 196 | 117 | 39 | 31 | 21 | 34 |
| 16 | 107 | 107 | 215 | 99 | 67 | 97 | 257 | 107 | 35 | 31 | 27 | 29 |
| 17 | 104 | 96 | 225 | 91 | 63 | 98 | 311 | 97 | 30 | 29 | 36 | 26 |
| 18 | 100 | 104 | 375 | 90 | 60 | 97 | 467 | 93 | 28 | 26 | 43 | 78 |
| 19 | 93 | 125 | 724 | 92 | 58 | 93 | 492 | 149 | 31 | 29 | 43 | 219 |
| 20 | 88 | 163 | 837 | 91 | 57 | 90 | 480 | 177 | 35 | e29 | e40 | 346 |
| 21 | 88 | 179 | 759 | 87 | 56 | 115 | 329 | e160 | 37 | e29 | 50 | 288 |
| 22 | 91 | 173 | 499 | 83 | 56 | 148 | 265 | 131 | 33 | 27 | e90 | 220 |
| 23 | 94 | 156 | 340 | 80 | 56 | 150 | 238 | 112 | 29 | 23 | e110 | 141 |
| 24 | 93 | 120 | 331 | 76 | 56 | 135 | 284 | 105 | 27 | 82 | e100 | 94 |
| 25 | 91 | 133 | 434 | 71 | 54 | 123 | 344 | 116 | 25 | 137 | e75 | 69 |
| 26 | 92 | 138 | 449 | 66 | 53 | 119 | 347 | 118 | 31 | 134 | e60 | 56 |
| 27 | 118 | 111 | 448 | 63 | 52 | 132 | 344 | 131 | 35 | 97 | e40 | 47 |
| 28 | 159 | 117 | 437 | 67 | 52 | 145 | 342 | 148 | 38 | 75 | e36 | 70 |
| 29 | 253 | 136 | 373 | 70 | 55 | 143 | 324 | 158 | 35 | 63 | e34 | 205 |
| 30 | 335 | 135 | 273 | 68 | --- | 129 | 242 | 145 | 30 | 55 | e32 | 320 |
| 31 | 342 | --- | 231 | 66 | --- | 136 | --- | 122 | --- | 47 | e34 | --- |
| TOTAL | 3068 | 5179 | 8777 | 3953 | 2135 | 3997 | 9035 | 4957 | 1600 | 1451 | 1267 | 2759 |
| MEAN | 99.0 | 173 | 283 | 128 | 73.6 | 129 | 301 | 160 | 53.3 | 46.8 | 40.9 | 92.0 |
| MAX | 342 | 315 | 837 | 231 | 126 | 197 | 492 | 293 | 126 | 137 | 110 | 346 |
| MIN | 33 | 96 | 65 | 63 | 52 | 60 | 118 | 93 | 25 | 23 | 18 | 20 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1973 - 2004, BY WATER YEAR (WY)

| | MEAN | MAX | MIN | (WY) | MEAN | MAX | MIN | (WY) | MEAN | MAX | MIN | (WY) | MEAN | MAX | MIN | (WY) | MEAN | MAX | MIN | (WY) | MEAN | MAX | MIN | (WY) | MEAN | MAX | MIN | (WY) | MEAN | MAX | MIN | (WY) | MEAN | MAX | MIN | (WY) | MEAN | MAX | MIN | (WY) | | | | | | | | |
|------|------|-----|------|------|------|-----|------|------|------|-----|------|------|------|-----|------|------|------|-----|------|------|------|-----|------|------|------|-----|------|------|------|-----|------|------|------|-----|------|------|------|------|------|------|------|-----|------|------|------|-----|------|------|
| 1973 | 88.6 | 271 | 26.1 | 1990 | 103 | 237 | 15.2 | 2002 | 150 | 312 | 15.6 | 2002 | 150 | 371 | 22.1 | 1981 | 162 | 308 | 46.2 | 2002 | 217 | 552 | 76.2 | 1985 | 242 | 522 | 76.2 | 1985 | 153 | 326 | 65.6 | 1986 | 124 | 423 | 43.8 | 1974 | 47.9 | 89.5 | 23.9 | 1979 | 45.5 | 149 | 9.30 | 1974 | 44.6 | 122 | 11.3 | 1986 |

SUMMARY STATISTICS

| | FOR 2003 CALENDAR YEAR | FOR 2004 WATER YEAR | ^a WATER YEARS 1973 - 2004 |
|--------------------------|------------------------|---------------------|--------------------------------------|
| ANNUAL TOTAL | 56768 | 48178 | |
| ANNUAL MEAN | 156 | 132 | 131 |
| HIGHEST ANNUAL MEAN | | | 178 |
| LOWEST ANNUAL MEAN | | | 56.7 |
| HIGHEST DAILY MEAN | 837 | Dec 20 | 997 |
| LOWEST DAILY MEAN | 21 | Aug 24 | 18 |
| ANNUAL SEVEN-DAY MINIMUM | 24 | Sep 12 | 21 |
| MAXIMUM PEAK FLOW | | | 872 |
| MAXIMUM PEAK STAGE | | | 6.11 |
| INSTANTANEOUS LOW FLOW | | | 13 |
| 10 PERCENT EXCEEDS | 330 | | 271 |
| 50 PERCENT EXCEEDS | 118 | | 98 |
| 90 PERCENT EXCEEDS | 38 | | 30 |

^a Years of operation not continuous; see Period of Record for actual years of operation.

e Estimated

THAMES RIVER BASIN

01123600 QUINEBAUG RIVER BELOW WESTVILLE DAM NEAR SOUTHBRIDGE, MA

LOCATION.--Lat 42°04'58", long 72°03'27", Worcester County, Hydrologic Unit 01100001, stage sensor located on right bank, 200 ft downstream from Westville Dam, 1.0 mi upstream from McKinstry Brook, and 1.3 mi west of Southbridge.

DRAINAGE AREA.--94.4 mi².

PERIOD OF RECORD.--October 1962 to September 1990, October 2002 to current year. Gage operated from October 1990 to September 2002 for U.S. Army Corps of Engineers flood-control project information; missing and erroneous data were not estimated.

REVISED RECORDS.--WDR MA-RI-03-1: Drainage area.

GAGE.--Water-stage recorder in gate house. Datum of gage is 613.51 ft above National Geodetic Vertical Datum of 1929 (U.S. Army Corps of Engineers benchmark). Telephone and satellite gage-height telemeter at station.

REMARKS.--Records good except those for discharges greater than 200 ft³/s and those for estimated daily discharges, which are poor. Flow regulated by Westville and East Brimfield Lakes and by other mills and reservoirs upstream.

AVERAGE DISCHARGE.--30 years (water years 1963–1990, 2003–2004), 175 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,850 ft³/s, Mar. 23, 1980, gage height, 6.83 ft; minimum daily, 7.3 ft³/s, Nov. 21, 28, 1964, July 30, 1965.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,430 ft³/s, Dec. 18, gage height, 6.22 ft; minimum discharge, 20 ft³/s, Oct. 7, 8.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004 DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|-------|------|------|------|-------|------|------|------|------|------|
| 1 | 100 | 506 | 197 | 384 | 106 | 105 | 513 | 416 | 198 | 62 | 86 | 63 |
| 2 | 93 | 442 | 183 | 374 | 104 | 130 | 781 | 365 | 207 | 78 | 78 | 43 |
| 3 | 82 | 375 | 161 | 351 | 101 | 192 | 863 | 360 | 213 | 83 | 70 | 41 |
| 4 | 73 | 336 | 149 | 368 | 115 | 244 | 818 | e525 | 193 | 91 | 60 | 46 |
| 5 | 69 | 328 | 137 | 427 | 116 | 266 | 774 | 496 | 167 | 87 | 71 | 45 |
| 6 | 76 | 412 | 121 | 439 | 129 | 291 | 694 | 504 | 143 | 85 | 70 | 42 |
| 7 | 49 | 391 | 122 | 397 | 190 | 317 | 460 | 538 | 129 | 78 | 68 | 43 |
| 8 | 53 | 359 | 117 | 375 | 195 | 264 | 374 | 391 | 119 | 74 | 62 | 52 |
| 9 | 97 | 323 | 116 | 336 | 187 | 232 | 363 | e330 | 102 | 81 | 56 | e85 |
| 10 | 59 | 294 | 116 | 240 | 179 | 282 | 353 | 335 | 110 | 74 | 50 | e95 |
| 11 | 59 | 262 | 222 | 199 | 166 | 193 | 335 | 319 | 106 | 70 | 45 | e120 |
| 12 | 73 | 229 | 450 | 187 | 147 | 182 | 277 | 288 | 100 | 64 | 44 | e125 |
| 13 | 87 | 227 | 443 | 180 | 131 | 176 | 348 | 255 | 97 | 60 | 48 | e100 |
| 14 | 86 | 204 | 386 | 170 | 123 | 167 | 450 | 223 | 88 | 63 | 44 | 84 |
| 15 | 159 | 180 | 386 | 165 | 117 | 158 | 644 | 199 | 85 | 64 | 53 | 73 |
| 16 | 162 | 159 | 394 | 152 | 108 | 158 | 802 | 190 | 83 | 63 | 60 | 63 |
| 17 | 147 | 144 | 422 | 147 | 103 | 155 | 714 | 180 | 75 | 62 | 71 | 56 |
| 18 | 138 | 145 | 993 | 148 | 100 | 153 | 698 | 162 | 71 | 56 | 75 | 239 |
| 19 | 128 | 160 | 1210 | 148 | 98 | 150 | 794 | 310 | 71 | 60 | 74 | 440 |
| 20 | 119 | 216 | 1240 | 143 | 95 | 145 | 788 | 312 | 73 | 60 | 74 | 466 |
| 21 | 113 | 253 | 1220 | 135 | 94 | 191 | 653 | 281 | 73 | 56 | 93 | 497 |
| 22 | 115 | 240 | 963 | 130 | 94 | 233 | 497 | 229 | 73 | 54 | 136 | 334 |
| 23 | 114 | 213 | 639 | 126 | 95 | 239 | 491 | 196 | 65 | 49 | 152 | 216 |
| 24 | 113 | 179 | 566 | 120 | 95 | 215 | 530 | 186 | 61 | 142 | 151 | 137 |
| 25 | 111 | 138 | 740 | 113 | 93 | 193 | 572 | 200 | 58 | 204 | 122 | 111 |
| 26 | 116 | 175 | 753 | 109 | 90 | 186 | 609 | 205 | 66 | 207 | 95 | 97 |
| 27 | 154 | 214 | 720 | 106 | 88 | 216 | 661 | 240 | 71 | 168 | 78 | 87 |
| 28 | 243 | 197 | 690 | 109 | 91 | 246 | 620 | 272 | 74 | 161 | 67 | 147 |
| 29 | 511 | 215 | 635 | 111 | 98 | 231 | 579 | 293 | 75 | 131 | 59 | 492 |
| 30 | 644 | 209 | 501 | 110 | --- | 205 | 467 | 261 | 69 | 111 | 52 | 559 |
| 31 | 536 | --- | 408 | 109 | --- | 254 | --- | 213 | --- | 99 | 64 | --- |
| TOTAL | 4679 | 7725 | 15400 | 6608 | 3448 | 6369 | 17522 | 9274 | 3115 | 2797 | 2328 | 4998 |
| MEAN | 151 | 258 | 497 | 213 | 119 | 205 | 584 | 299 | 104 | 90.2 | 75.1 | 167 |
| MAX | 644 | 506 | 1240 | 439 | 195 | 317 | 863 | 538 | 213 | 207 | 152 | 559 |
| MIN | 49 | 138 | 116 | 106 | 88 | 105 | 277 | 162 | 58 | 49 | 44 | 41 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1963 - 2004, BY WATER YEAR (WY)

| | 1963 | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 | 1970 | 1971 | 1972 | 1973 | 1974 | 1975 | 1976 | 1977 | 1978 | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 106 | 132 | 195 | 185 | 215 | 320 | 360 | 212 | 172 | 66.3 | 55.3 | 58.0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MAX | 418 | 333 | 497 | 517 | 548 | 615 | 783 | 464 | 604 | 150 | 228 | 180 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| (WY) | 1990 | 1990 | 2004 | 1979 | 1970 | 1972 | 1987 | 1989 | 1982 | 1972 | 1989 | 1975 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MIN | 17.1 | 24.4 | 28.9 | 28.0 | 59.4 | 123 | 98.2 | 81.3 | 33.7 | 12.8 | 16.0 | 16.5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| (WY) | 1966 | 1966 | 2002 | 2002 | 2002 | 2002 | 1985 | 1985 | 1964 | 1965 | 1974 | 1965 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

SUMMARY STATISTICS FOR 2003 CALENDAR YEAR FOR 2004 WATER YEAR ^aWATER YEARS 1963 - 2004

| | | | | | | | |
|--------------------------|-------|--------|------|--------|------|--------|------|
| ANNUAL TOTAL | 93239 | 84263 | | | | | |
| ANNUAL MEAN | 255 | 230 | | | | | |
| HIGHEST ANNUAL MEAN | | 175 | | | | | |
| LOWEST ANNUAL MEAN | | 259 | | | | | |
| HIGHEST DAILY MEAN | 1240 | Dec 20 | 1240 | Dec 20 | 1620 | Oct 24 | 1989 |
| LOWEST DAILY MEAN | 35 | Aug 25 | 41 | Sep 3 | 7.3 | Nov 21 | 1964 |
| ANNUAL SEVEN-DAY MINIMUM | 38 | Aug 24 | 45 | Sep 2 | 7.9 | Jul 24 | 1965 |
| MAXIMUM PEAK FLOW | | | 1430 | Dec 18 | | | |
| MAXIMUM PEAK STAGE | | | 6.22 | Dec 18 | | | |
| INSTANTANEOUS LOW FLOW | | | 20 | Oct 7 | | | |
| 10 PERCENT EXCEEDS | 568 | 512 | 381 | | | | |
| 50 PERCENT EXCEEDS | 175 | 152 | 114 | | | | |
| 90 PERCENT EXCEEDS | 61 | 63 | 27 | | | | |

^a Years of operation not continuous; see Period of Record for actual years of operation.

e Estimated

CONNECTICUT RIVER BASIN

01162500 PRIEST BROOK NEAR WINCHENDON, MA

LOCATION.--Lat 42° 40' 57", long 72° 06' 56", Worcester County, Hydrologic Unit 01080202, on right bank 100 ft downstream from highway bridge, 3 mi upstream from mouth, and 3.5 mi west of Winchendon.

DRAINAGE AREA.--19.4 mi².

PERIOD OF RECORD.--Discharge: May 1916 to current year. Monthly discharge only October 1917 to July 1918 (published in WSP 1301) and September 1935 to September 1936.

Water-quality records: August 1994.

REVISED RECORDS.--WSP 451: 1916. WSP 871: Drainage area. WSP 1051: 1919, 1922--24. WSP 1301: 1917(M), 1919--24(M), 1926--27(M), 1929(M), 1931--35(M).

GAGE.--Water-stage recorder. Concrete control since September 1936. Datum of gage is 849.67 ft above National Geodetic Vertical Datum of 1929. Prior to Sept. 11, 1936, nonrecording gage on left bank at same datum.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Prior to 1962, occasional diurnal fluctuation at low flow by mill upstream; prior to 1953, regulation at low flow by mill and ponds. Satellite gage-height telemeter at station.

AVERAGE DISCHARGE.--88 years (water years 1917--2004), 33.0 ft³/s, 23.10 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,000 ft³/s, Sept. 21, 1938, gage height, 9.90 ft, from rating curve extended above 620 ft³/s on basis of contracted-opening measurements at gage heights 8.4 ft and 9.90 ft; minimum discharge, 0.08 ft³/s, several times in September 1929.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 410 ft³/s, Apr. 2, gage height, 5.04 ft; minimum discharge, 2.1 ft³/s, Aug. 14.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|------|------|------|------|------|------|-------|-------|-------|--------|
| 1 | 40 | 107 | 55 | 64 | 14 | 14 | 205 | 52 | 38 | 4.0 | 5.0 | 5.5 |
| 2 | 32 | 80 | 49 | 56 | 13 | 19 | 395 | 45 | 37 | 4.7 | 5.3 | 4.9 |
| 3 | 26 | 69 | 39 | 53 | 13 | 32 | 312 | 43 | 36 | 3.9 | 4.5 | 4.0 |
| 4 | 22 | 74 | 33 | 57 | 15 | 37 | 217 | 61 | 34 | 3.5 | 4.1 | 3.6 |
| 5 | 21 | 66 | 32 | 61 | 13 | 37 | 171 | 74 | 30 | 3.2 | 4.2 | 3.1 |
| 6 | 20 | 64 | 32 | 58 | 14 | 43 | 135 | 62 | 25 | 3.3 | 4.4 | 2.8 |
| 7 | 18 | 59 | 31 | e51 | 16 | 55 | 106 | 50 | 25 | 3.1 | 3.8 | 2.7 |
| 8 | 16 | 51 | 33 | 44 | 16 | 54 | 85 | 41 | 36 | 3.6 | 3.5 | 2.9 |
| 9 | 15 | 43 | 33 | 37 | 15 | 47 | 71 | 37 | 33 | 9.1 | 3.3 | 13 |
| 10 | 13 | 41 | 31 | 32 | 15 | 41 | 60 | 35 | 33 | 10 | 2.9 | 26 |
| 11 | 12 | 44 | 37 | 31 | 15 | 42 | 50 | 43 | 41 | 9.1 | 2.8 | 19 |
| 12 | 11 | 42 | 70 | 31 | 14 | 36 | 45 | 51 | 34 | 8.0 | 2.8 | 14 |
| 13 | 11 | 42 | 71 | 30 | 14 | 37 | 54 | 40 | 21 | 7.5 | 2.6 | 11 |
| 14 | 11 | 43 | 59 | 27 | 13 | 36 | 238 | 32 | 13 | 7.6 | 2.3 | 9.5 |
| 15 | 20 | 40 | 54 | 26 | 13 | 29 | 235 | 26 | 11 | 6.7 | 3.0 | 8.2 |
| 16 | 38 | 36 | 50 | e24 | 13 | 29 | 186 | 31 | 8.1 | 6.1 | 3.5 | 6.6 |
| 17 | 34 | 33 | 56 | 24 | 13 | 28 | 136 | 30 | 7.1 | 5.5 | 5.6 | 6.4 |
| 18 | 28 | 32 | 220 | 24 | 13 | 26 | 105 | 23 | 7.3 | 4.9 | 5.0 | 107 |
| 19 | 24 | 31 | 206 | 23 | 12 | 25 | 83 | 24 | 7.0 | 8.9 | 4.1 | 211 |
| 20 | 21 | 65 | 171 | 21 | 11 | 25 | 67 | 26 | 6.1 | 13 | 6.2 | 142 |
| 21 | 25 | 99 | 132 | 21 | 11 | 28 | 52 | 21 | 5.1 | 10 | 37 | 95 |
| 22 | 25 | 83 | 103 | 20 | 12 | 32 | 38 | 18 | 4.8 | 7.2 | 69 | 65 |
| 23 | 26 | 68 | 84 | 19 | 12 | 31 | 38 | 19 | 4.2 | 5.6 | 43 | 45 |
| 24 | 24 | 50 | 82 | 18 | 11 | 27 | 47 | 24 | 3.6 | 5.0 | 30 | 33 |
| 25 | 22 | 44 | 178 | 16 | 11 | 28 | 43 | 53 | 3.6 | 3.8 | 26 | 26 |
| 26 | 20 | 41 | 185 | 16 | 11 | 32 | 53 | 89 | 4.6 | 3.1 | 17 | 21 |
| 27 | 22 | 38 | 152 | 15 | 11 | 61 | 113 | 98 | 5.0 | 2.7 | 13 | 16 |
| 28 | 61 | 37 | 122 | 15 | 11 | 97 | 116 | 95 | 4.3 | 5.2 | 10 | 14 |
| 29 | 119 | 49 | 98 | 15 | 11 | 91 | 88 | 83 | 4.9 | 7.5 | 8.2 | 38 |
| 30 | 189 | 59 | 82 | 15 | --- | 75 | 67 | 63 | 4.1 | 7.2 | 6.7 | 55 |
| 31 | 143 | --- | 73 | 15 | --- | 74 | --- | 47 | --- | 5.6 | 6.0 | --- |
| TOTAL | 1109 | 1630 | 2653 | 959 | 376 | 1268 | 3611 | 1436 | 526.8 | 188.6 | 344.8 | 1011.2 |
| MEAN | 35.8 | 54.3 | 85.6 | 30.9 | 13.0 | 40.9 | 120 | 46.3 | 17.6 | 6.08 | 11.1 | 33.7 |
| MAX | 189 | 107 | 220 | 64 | 16 | 97 | 395 | 98 | 41 | 13 | 69 | 211 |
| MIN | 11 | 31 | 31 | 15 | 11 | 14 | 38 | 18 | 3.6 | 2.7 | 2.3 | 2.7 |
| CFSM | 1.84 | 2.80 | 4.41 | 1.59 | 0.67 | 2.11 | 6.20 | 2.39 | 0.91 | 0.31 | 0.57 | 1.74 |
| IN. | 2.13 | 3.13 | 5.09 | 1.84 | 0.72 | 2.43 | 6.92 | 2.75 | 1.01 | 0.36 | 0.66 | 1.94 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1916 - 2004, BY WATER YEAR (WY)

| | MEAN | MAX | MIN |
|------|------|------|------|
| 1916 | 16.1 | 69.2 | 0.55 |
| 1917 | 28.9 | 124 | 1.38 |
| 1918 | 34.6 | 120 | 4.67 |
| 1919 | 30.4 | 90.3 | 1.23 |
| 1920 | 27.8 | 102 | 5.28 |
| 1921 | 63.9 | 162 | 13.6 |
| 1922 | 92.6 | 225 | 21.8 |
| 1923 | 42.5 | 93.9 | 12.6 |
| 1924 | 25.2 | 125 | 2.53 |
| 1925 | 12.2 | 62.5 | 1.04 |
| 1926 | 10.1 | 68.8 | 0.47 |
| 1927 | 12.5 | 178 | 0.29 |
| 1928 | 12.5 | 1938 | 1965 |
| 1929 | 12.5 | 1938 | 1964 |

SUMMARY STATISTICS

| | FOR 2003 CALENDAR YEAR | FOR 2004 WATER YEAR | WATER YEARS 1916 - 2004 |
|--------------------------|------------------------|---------------------|-------------------------|
| ANNUAL TOTAL | 16324.0 | 15113.4 | |
| ANNUAL MEAN | 44.7 | 41.3 | 33.0 |
| HIGHEST ANNUAL MEAN | | | 55.0 |
| LOWEST ANNUAL MEAN | | | 8.19 |
| HIGHEST DAILY MEAN | 340 | Mar 30 | 2280 |
| LOWEST DAILY MEAN | 3.1 | Jul 14 | 0.10 |
| ANNUAL SEVEN-DAY MINIMUM | 3.3 | Jul 9 | 0.19 |
| MAXIMUM PEAK FLOW | | | 3000 |
| MAXIMUM PEAK STAGE | | 5.04 | Apr 2 |
| INSTANTANEOUS LOW FLOW | | 2.1 | Aug 14 |
| ANNUAL RUNOFF (CFSM) | 2.31 | 2.13 | 1.70 |
| ANNUAL RUNOFF (INCHES) | 31.30 | 28.98 | 23.10 |
| 10 PERCENT EXCEEDS | 100 | 92 | 81 |
| 50 PERCENT EXCEEDS | 30 | 28 | 17 |
| 90 PERCENT EXCEEDS | 5.5 | 4.6 | 2.4 |

e Estimated

CONNECTICUT RIVER BASIN

01163200 OTTER RIVER AT OTTER RIVER, MA

LOCATION.--Lat 42° 35' 18", long 72° 02' 29", Worcester County, Hydrologic Unit 01080202, on right bank at upstream side of Turner Street Bridge, 0.2 mi upstream from Bailey Brook, 0.8 mi southeast of Otter River, and 2 mi northwest of Gardner.

DRAINAGE AREA.--34.1 mi².

WATER DISCHARGE RECORDS

PERIOD OF RECORD.--Discharge: December 1964 to current year.

Water-quality records: Water year 1965–69, 1994, 2003–04.

REVISED RECORDS.--WDR MA-RI-84-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 900 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--39 years (water years 1966–2004), 62.4 ft³/s, 24.86 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 948 ft³/s, Mar. 7, 1979, gage height, 5.02 ft; minimum discharge, 2.0 ft³/s, Sept. 5, 1995.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 656 ft³/s, Apr. 2, gage height, 3.95 ft; minimum discharge, 5.5 ft³/s, Aug. 11.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|------|------|------|------|------|------|------|------|-------|--------|
| 1 | 59 | 174 | 49 | 114 | 37 | 32 | 274 | 87 | 55 | 16 | 14 | 19 |
| 2 | 51 | 117 | 45 | 100 | 36 | 44 | 592 | 77 | 53 | 24 | 12 | 17 |
| 3 | 45 | 94 | 41 | 95 | 36 | 80 | 508 | 76 | 51 | 22 | 12 | 16 |
| 4 | 40 | 80 | 35 | 103 | 43 | 97 | 352 | 133 | 47 | 18 | 11 | 15 |
| 5 | 63 | 79 | 33 | 113 | 38 | 91 | 261 | 152 | 42 | 17 | 14 | 13 |
| 6 | 35 | 100 | 34 | 108 | 40 | 106 | 204 | 129 | 37 | 17 | 16 | 12 |
| 7 | 19 | 95 | 48 | e97 | 45 | 127 | 164 | 102 | 34 | 15 | 13 | 8.4 |
| 8 | 14 | 79 | 44 | e88 | 41 | 111 | 142 | 80 | 31 | 16 | 12 | 9.3 |
| 9 | 18 | 71 | 41 | e80 | 37 | 87 | 125 | 73 | 30 | 60 | 11 | 45 |
| 10 | 16 | 67 | 39 | e71 | 35 | 69 | 113 | 78 | 46 | 52 | 8.8 | 57 |
| 11 | 13 | 64 | 56 | e63 | 34 | 62 | 98 | 68 | 42 | 41 | 7.6 | 45 |
| 12 | 12 | 68 | 128 | 49 | 33 | 60 | 87 | 59 | 36 | 32 | 13 | 36 |
| 13 | 13 | 72 | e110 | 50 | 32 | 57 | 99 | 52 | 31 | 27 | 20 | 29 |
| 14 | 14 | 68 | e89 | e53 | 31 | 51 | 279 | 46 | 28 | 25 | 18 | 23 |
| 15 | 38 | 60 | e75 | e48 | 30 | 51 | 354 | 44 | 26 | 24 | 18 | 20 |
| 16 | 52 | 54 | e75 | e51 | e30 | 51 | 269 | 49 | 23 | 22 | 21 | 18 |
| 17 | 38 | 50 | e96 | 46 | 29 | 53 | 193 | 43 | 22 | 21 | 20 | 18 |
| 18 | 32 | 49 | e351 | 46 | 28 | 49 | 151 | 42 | 27 | 19 | 18 | 118 |
| 19 | 27 | 44 | 377 | 46 | 28 | 46 | 125 | 44 | 26 | 19 | 17 | 255 |
| 20 | 23 | 66 | 274 | 45 | 27 | 44 | 102 | 40 | 23 | 22 | 16 | 198 |
| 21 | 21 | 78 | e179 | 43 | 28 | 61 | 85 | 37 | 21 | 19 | 32 | 120 |
| 22 | 21 | 69 | 144 | 42 | 28 | 70 | 75 | 35 | 20 | 18 | 69 | 77 |
| 23 | 25 | 70 | 115 | 41 | 28 | 55 | 102 | 39 | 19 | 17 | 53 | 57 |
| 24 | 24 | 54 | 123 | 40 | 28 | 51 | 143 | 45 | 19 | 19 | 39 | 51 |
| 25 | 22 | 51 | 271 | 39 | 27 | 53 | 129 | 94 | 17 | 18 | 31 | 45 |
| 26 | 24 | 47 | 297 | 38 | 27 | 65 | 128 | 107 | 19 | 16 | 25 | 39 |
| 27 | 46 | 43 | 233 | 38 | 26 | 114 | 165 | 152 | 21 | 13 | 22 | 34 |
| 28 | 158 | 41 | 173 | 41 | 27 | 149 | 165 | 146 | 27 | 18 | 20 | 43 |
| 29 | 220 | 54 | 136 | 43 | 28 | 130 | 133 | 121 | 23 | 19 | 18 | 97 |
| 30 | 284 | 53 | 121 | 40 | -- | 98 | 105 | 87 | 19 | 17 | 17 | 134 |
| 31 | 240 | --- | 123 | 39 | --- | 107 | --- | 64 | --- | 15 | 22 | --- |
| TOTAL | 1707 | 2111 | 3955 | 1910 | 937 | 2321 | 5722 | 2401 | 915 | 698 | 640.4 | 1668.7 |
| MEAN | 55.1 | 70.4 | 128 | 61.6 | 32.3 | 74.9 | 191 | 77.5 | 30.5 | 22.5 | 20.7 | 55.6 |
| MAX | 284 | 174 | 377 | 114 | 45 | 149 | 592 | 152 | 55 | 60 | 69 | 255 |
| MIN | 12 | 41 | 33 | 38 | 26 | 32 | 75 | 35 | 17 | 13 | 7.6 | 8.4 |
| CFSM | 1.61 | 2.06 | 3.74 | 1.81 | 0.95 | 2.20 | 5.59 | 2.27 | 0.89 | 0.66 | 0.61 | 1.63 |
| IN. | 1.86 | 2.30 | 4.31 | 2.08 | 1.02 | 2.53 | 6.24 | 2.62 | 1.00 | 0.76 | 0.70 | 1.82 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 2004, BY WATER YEAR (WY)

| | 1965 | 1966 | 1967 | 1968 | 1969 | 1970 | 1971 | 1972 | 1973 | 1974 | 1975 | 1976 | 1977 | 1978 | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | | | | | |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--|--|--|--|--|
| MEAN | 40.4 | 57.1 | 68.4 | 61.5 | 64.7 | 110 | 131 | 74.5 | 54.8 | 26.6 | 25.1 | 25.4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MAX | 117 | 123 | 200 | 149 | 153 | 223 | 279 | 139 | 155 | 58.2 | 87.5 | 85.5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| (WY) | 1980 | 1996 | 1997 | 1979 | 1976 | 1979 | 1987 | 1984 | 1998 | 1967 | 1991 | 1991 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MIN | 8.27 | 12.9 | 18.1 | 9.64 | 17.3 | 38.4 | 45.0 | 27.6 | 9.22 | 8.20 | 4.44 | 5.48 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| (WY) | 1969 | 2002 | 1965 | 1981 | 1977 | 1965 | 1985 | 1965 | 1999 | 1966 | 1966 | 1995 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

SUMMARY STATISTICS

| | FOR 2003 CALENDAR YEAR | | FOR 2004 WATER YEAR | | WATER YEARS 1965 - 2004 | |
|--------------------------|------------------------|--|---------------------|--|-------------------------|--|
| ANNUAL TOTAL | 28736.3 | | 24986.1 | | | |
| ANNUAL MEAN | 78.7 | | 68.3 | | 62.4 | |
| HIGHEST ANNUAL MEAN | | | | | 90.0 | |
| LOWEST ANNUAL MEAN | | | | | 30.2 | |
| HIGHEST DAILY MEAN | 422 | | 592 | | 883 | |
| LOWEST DAILY MEAN | 5.5 | | 7.6 | | 2.4 | |
| ANNUAL SEVEN-DAY MINIMUM | 6.3 | | 12 | | 2.6 | |
| MAXIMUM PEAK FLOW | | | 656 | | 948 | |
| MAXIMUM PEAK STAGE | | | 3.95 | | 5.02 | |
| INSTANTANEOUS LOW FLOW | | | 5.5 | | 2.0 | |
| ANNUAL RUNOFF (CFSM) | 2.31 | | 2.00 | | 1.83 | |
| ANNUAL RUNOFF (INCHES) | 31.35 | | 27.26 | | 24.86 | |
| 10 PERCENT EXCEEDS | 169 | | 138 | | 137 | |
| 50 PERCENT EXCEEDS | 54 | | 45 | | 41 | |
| 90 PERCENT EXCEEDS | 15 | | 17 | | 11 | |

e Estimated

CONNECTICUT RIVER BASIN
 01163200 OTTER RIVER AT OTTER RIVER, MA--Continued
 WATER QUALITY RECORDS

PERIOD OF RECORD.--Intermittent water-quality samples, water years 1965-69, 1994, 2003-04.

| DATE | TIME | INSTAN- TANEOUS DISCHARGE, CFS (00061) | DISSOLVED OXYGEN, MG/L (00300) | DISSOLVED OXYGEN, PERCENT OF SATURATION (00301) | PH, WATER, UNFLTRD FIELD, STD UNITS (00400) | SPECIF. CONDUCTANCE, WAT UNF US/CM 25 DEG C (00095) | TEMPERATURE, WATER, DEG C (00010) |
|----------|------|--|---|---|---|--|--|
| OCT 2003 | | | | | | | |
| 21... | 1025 | 20 | 8.8 | 80 | 6.5 | 367 | 9.0 |
| NOV | | | | | | | |
| 20... | 1000 | 69 | 10.5 | 92 | 6.1 | 273 | 7.8 |
| DEC | | | | | | | |
| 09... | 1230 | 43 | 12.0 | 83 | 5.9 | 312 | .0 |
| JAN 2004 | | | | | | | |
| 28... | 1415 | 44 | 11.4 | 82 | 5.7 | 339 | .0 |
| FEB | | | | | | | |
| 18... | 0940 | 28 | 12.1 | 84 | 6.2 | 396 | .0 |
| MAR | | | | | | | |
| 09... | 1020 | 87 | 13.0 | 92 | 5.8 | 388 | .4 |
| 23... | 1015 | 54 | 12.6 | 90 | 6.0 | 438 | .6 |
| APR | | | | | | | |
| 07... | 0945 | 166 | 11.4 | 92 | 6.2 | 209 | 4.2 |
| 14... | 1140 | 280 | 10.8 | 91 | 5.9 | 246 | 6.7 |
| MAY | | | | | | | |
| 11... | 0940 | 67 | 8.8 | 88 | 6.0 | 289 | 14.6 |
| JUN | | | | | | | |
| 14... | 1500 | 28 | 7.8 | 85 | 6.0 | 356 | 18.4 |
| JUL | | | | | | | |
| 19... | 1410 | 19 | 7.1 | 83 | 6.0 | 402 | 21.7 |
| 26... | 1330 | 16 | 7.4 | 87 | 6.3 | 408 | 21.5 |
| AUG | | | | | | | |
| 09... | 1550 | 10 | 7.3 | 84 | 6.6 | 411 | 21.5 |
| SEP | | | | | | | |
| 02... | 1340 | 16 | 7.2 | 82 | 6.6 | 398 | 21.3 |

CONNECTICUT RIVER BASIN

01163200 OTTER RIVER AT OTTER RIVER, MA--Continued

| DATE | AMMONIA + ORG-N, WATER, UNFLTRD MG/L AS N (00625) | AMMONIA WATER, FLTRD, MG/L AS N (00608) | NITRITE + NITRATE WATER FLTRD, MG/L AS N (00631) | NITRITE WATER, FLTRD, MG/L AS N (00613) | ORTHO- PHOSPHATE, WATER, FLTRD, MG/L AS P (00671) | PHOSPHORUS, WATER, UNFLTRD MG/L (00665) | SUSPENDED SEDIMENT CONCENTRATION MG/L (80154) |
|----------|---|---|--|---|---|---|---|
| OCT 2003 | | | | | | | |
| 21... | 0.86 | 0.11 | 3.70 | 0.022 | 0.18 | 0.33 | 7 |
| NOV | | | | | | | |
| 20... | .57 | .08 | 1.95 | E.005 | .14 | .23 | 7 |
| DEC | | | | | | | |
| 09... | .58 | .13 | 1.96 | E.006 | .14 | .24 | 6 |
| JAN 2004 | | | | | | | |
| 28... | .56 | .15 | 2.43 | .016 | .15 | .23 | 6 |
| FEB | | | | | | | |
| 18... | .82 | .25 | 2.55 | .033 | .21 | .34 | 4 |
| MAR | | | | | | | |
| 09... | .54 | .16 | .70 | .016 | .04 | .082 | 3 |
| 23... | .62 | .21 | 1.12 | .038 | .07 | .139 | 4 |
| APR | | | | | | | |
| 07... | .38 | -- | 1.12 | .041 | <.18 | .028 | 3 |
| 14... | .41 | .10 | .35 | .014 | <.02 | .055 | 8 |
| MAY | | | | | | | |
| 11... | .49 | .08 | .76 | .011 | <.02 | .051 | 4 |
| JUN | | | | | | | |
| 14... | .68 | .07 | 2.93 | .015 | E.02 | .120 | 9 |
| JUL | | | | | | | |
| 19... | .86 | .05 | 4.48 | .013 | .03 | .145 | 14 |
| 26... | .79 | E.02 | 4.42 | .011 | -- | .13 | -- |
| AUG | | | | | | | |
| 09... | .70 | <.04 | 4.23 | .009 | E.02 | .130 | 9 |
| SEP | | | | | | | |
| 02... | .78 | .05 | 4.47 | .012 | .02 | .147 | -- |

< Less than
E Estimated value

CONNECTICUT RIVER BASIN

01166500 MILLERS RIVER AT ERVING, MA

LOCATION.--Lat 42° 35' 51", long 72° 26' 19", Franklin County, Hydrologic Unit 01080202, on right bank 75 ft downstream from bridge at Farley, 0.6 mi upstream from Mormon Hollow Brook, 2.4 mi downstream from Erving, and 5.5 mi upstream from mouth.

DRAINAGE AREA.--372 mi².

PERIOD OF RECORD.--Discharge: August 1914 to June 1915 (twice-daily gage heights and corresponding discharge), July 1915 to current year.

Water-quality records: Water years 1953, 1965–66, 1994.

REVISED RECORDS.--WSP 641: 1920(M), WSP 781: 1928(M), 1933(M), WSP 1301: 1915(M), WDR MA-RI-84-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 380 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to June 30, 1915, nonrecording gage, June 30, 1915, to Sept. 20, 1938, water-stage recorder, and Sept. 21 to Dec. 31, 1938, non-recording gage, at site 2.2 mi upstream at different datum. Jan. 1 to Mar. 29, 1939, nonrecording gage, and Mar. 30, 1939, to Sept. 12, 1941, water-stage recorder, at site 0.4 mi downstream at different datum.

REMARKS.--Records good except those for estimated daily discharge, which are poor. Flow regulated by powerplants and by Lake Monomonac and other reservoirs; high flow regulated by Birch Hill Reservoir 22 mi upstream since 1941 and Tully Lake since 1948. Greater regulation by powerplants prior to 1966.

AVERAGE DISCHARGE.--89 years (water years 1916–2004), 638 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 29,000 ft³/s, Sept. 22, 1938, gage height, 13.37 ft, from floodmarks, site and datum then in use, mean of two slope-area measurements; practically no flow at times during 1915 and 1916 because of regulations; minimum daily discharge, 8 ft³/s, Sept. 6, 1926.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,670 ft³/s, Dec. 18, gage height, 5.83 ft; minimum discharge, 77 ft³/s, July 31, Aug. 8–10.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|------|-------|
| 1 | 660 | 1790 | 804 | 1320 | e391 | 396 | 2520 | 1090 | 730 | 141 | 157 | 128 |
| 2 | 579 | 1400 | 780 | 1200 | e387 | 482 | 3100 | 978 | 680 | 172 | 178 | 125 |
| 3 | 522 | 1220 | 706 | 1120 | e381 | 648 | 3120 | 857 | 621 | 168 | 141 | 115 |
| 4 | 418 | 1110 | 686 | e1050 | e365 | 788 | 3010 | 1140 | 578 | 149 | 128 | 104 |
| 5 | 408 | 1050 | 614 | e1010 | e362 | 805 | 2980 | 1270 | 519 | 137 | 132 | 101 |
| 6 | 394 | 1060 | 559 | e974 | e359 | 835 | 3160 | 1200 | 457 | 138 | 131 | 97 |
| 7 | 366 | 1020 | 526 | e1030 | e377 | 932 | 2950 | 1050 | 403 | 134 | 118 | 87 |
| 8 | 331 | 922 | 631 | e911 | e362 | 915 | 2570 | 897 | 364 | 165 | 111 | 91 |
| 9 | 306 | 820 | 637 | e759 | e369 | 828 | 2270 | 797 | 337 | 373 | 99 | 296 |
| 10 | 273 | 750 | 599 | e731 | e387 | 727 | 2080 | 771 | 382 | 314 | 107 | 363 |
| 11 | 258 | 683 | 685 | 739 | e388 | 652 | 1890 | 746 | 398 | 286 | 94 | 371 |
| 12 | 243 | 670 | 1040 | e743 | e384 | 628 | 1740 | 696 | 355 | 259 | 100 | 327 |
| 13 | 225 | 691 | 1150 | e720 | e376 | 577 | 1710 | 611 | 348 | 236 | 106 | 266 |
| 14 | 219 | 682 | 1060 | e694 | e374 | 559 | 2810 | 542 | 282 | 217 | 105 | 212 |
| 15 | 478 | 642 | 1030 | e680 | e367 | 516 | 3280 | 460 | 266 | 183 | 120 | 172 |
| 16 | 623 | 606 | 1090 | 671 | e358 | 490 | 3050 | 480 | 242 | 164 | 114 | 168 |
| 17 | 598 | 577 | 1350 | e622 | e355 | 504 | 2520 | 457 | 226 | 147 | 136 | 196 |
| 18 | 511 | 548 | 3420 | e600 | 354 | 493 | 2060 | 448 | 223 | 144 | 117 | 1480 |
| 19 | 439 | 566 | 3070 | e560 | 347 | 458 | 1650 | 435 | 217 | 175 | 122 | 2480 |
| 20 | 398 | 937 | 3140 | e556 | 324 | 399 | 1260 | 411 | 212 | 224 | 136 | 2270 |
| 21 | 347 | 1180 | 2770 | e547 | 315 | 456 | 1130 | 403 | 168 | 220 | 522 | 1950 |
| 22 | 329 | 1120 | 2370 | e542 | 318 | 491 | 942 | 363 | 174 | 180 | 856 | 1240 |
| 23 | 364 | 1010 | 1780 | e529 | 323 | 479 | 955 | 400 | 164 | 163 | 753 | 924 |
| 24 | 361 | 909 | 1650 | e538 | 322 | 479 | 1060 | 418 | 147 | 147 | 558 | 667 |
| 25 | 322 | 805 | 2760 | e533 | 318 | 474 | 1050 | 562 | 141 | 136 | 370 | 552 |
| 26 | 320 | 733 | 2780 | e507 | 315 | 445 | 1190 | 839 | 155 | 125 | 297 | 476 |
| 27 | 386 | 649 | 2620 | e480 | 314 | 615 | 1680 | 1120 | 159 | 114 | 243 | 393 |
| 28 | 838 | 638 | 2270 | e471 | 323 | 706 | 1730 | 1220 | 155 | 193 | 198 | 387 |
| 29 | 1950 | 847 | 1930 | e458 | 343 | 669 | 1560 | 1280 | 169 | 181 | 167 | 747 |
| 30 | 2640 | 868 | 1620 | e449 | --- | 844 | 1260 | 1040 | 158 | 156 | 156 | 1080 |
| 31 | 2430 | --- | 1510 | e440 | --- | 1210 | --- | 855 | --- | 130 | 138 | --- |
| TOTAL | 18536 | 26503 | 47637 | 22184 | 10258 | 19500 | 62287 | 23836 | 9430 | 5671 | 6710 | 17865 |
| MEAN | 598 | 883 | 1537 | 716 | 354 | 629 | 2076 | 769 | 314 | 183 | 216 | 596 |
| MAX | 2640 | 1790 | 3420 | 1320 | 391 | 1210 | 3280 | 1280 | 730 | 373 | 856 | 2480 |
| MIN | 219 | 548 | 526 | 440 | 314 | 396 | 942 | 363 | 141 | 114 | 94 | 87 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1916 - 2004, BY WATER YEAR (WY)

| | MEAN | MAX | (WY) | MIN | (WY) |
|------|------|------|------|------|------|
| MEAN | 348 | 528 | 659 | 617 | 609 |
| MAX | 1622 | 1617 | 2324 | 1444 | 1894 |
| (WY) | 1976 | 1928 | 1997 | 1978 | 1984 |
| MIN | 74.0 | 79.7 | 143 | 69.5 | 132 |
| (WY) | 1940 | 1965 | 1931 | 1981 | 1931 |

SUMMARY STATISTICS FOR 2003 CALENDAR YEAR FOR 2004 WATER YEAR WATER YEARS 1916 - 2004

| | | | | | |
|--------------------------|--------|--------|------|--------|-------|
| ANNUAL TOTAL | 292225 | 270417 | | | |
| ANNUAL MEAN | 801 | 739 | | | 638 |
| HIGHEST ANNUAL MEAN | | | | | 1044 |
| LOWEST ANNUAL MEAN | | | | | 196 |
| HIGHEST DAILY MEAN | 3550 | Apr 1 | 3420 | Dec 18 | 22000 |
| LOWEST DAILY MEAN | 92 | Jul 31 | 87 | Sep 7 | 8.0 |
| ANNUAL SEVEN-DAY MINIMUM | 126 | Jul 16 | 103 | Sep 2 | 31 |
| MAXIMUM PEAK FLOW | | | 3670 | Dec 18 | 29000 |
| MAXIMUM PEAK STAGE | | | 5.83 | Dec 18 | 13.37 |
| INSTANTANEOUS LOW FLOW | | | 77 | Jul 31 | |
| 10 PERCENT EXCEEDS | 1940 | | 1720 | | 1490 |
| 50 PERCENT EXCEEDS | 567 | | 514 | | 402 |
| 90 PERCENT EXCEEDS | 170 | | 143 | | 105 |

e Estimated

CONNECTICUT RIVER BASIN

01168500 DEERFIELD RIVER AT CHARLEMONT, MA

LOCATION.--Lat 42° 37' 33", long 72° 51' 20", Franklin County, Hydrologic Unit 01080203, on left bank 0.8 mi east of Charlemont, 2.5 mi downstream from Chickley River, and at mile 24.5.

DRAINAGE AREA.--361 mi².

PERIOD OF RECORD.--Discharge: June 1913 to current year.

Water-quality records: Water years 1954-55, 1958, 1967-69, 1995.

REVISED RECORDS.--WSP 781: 1915(M). WSP 1301: 1918(M). WDR MA-RI-84-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 517.36 ft above National Geodetic Vertical Datum of 1929.

REMARKS--Records good except those above 1,000 ft³/s, which are fair. Flow regulated by Somerset Reservoir, since 1924 by Harriman Reservoir, and by several powerplants upstream. Telephone and satellite gage-height telemeter at station. Measurements of water temperature and air temperature were made during the year.

AVERAGE DISCHARGE.--91 years (water years 1914-2004), 903 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 56,300 ft³/s, Sept. 21, 1938, gage height, 20.17 ft, from floodmarks, from rating curve extended above 31,000 ft³/s on basis of slope-area and contracted-opening measurements at gage heights 17.75 ft and 20.17 ft; minimum daily discharge, 5 ft³/s, June 17, 1921.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 13,800 ft³/s, Apr. 2, gage height, 9.71 ft; minimum discharge, 149 ft³/s, July 6, Aug. 9, Sept. 7.

**DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES**

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 1050 | 2080 | 2290 | 1590 | 1120 | 590 | 5550 | 856 | 995 | 303 | 616 | 644 |
| 2 | 891 | 1320 | 2180 | 1560 | 1110 | 714 | 6430 | 881 | 1190 | 390 | 560 | 573 |
| 3 | 823 | 1530 | 1550 | 1540 | 1090 | 830 | 2220 | 812 | 1020 | 292 | 676 | 627 |
| 4 | 715 | 1670 | 1350 | 1540 | 1080 | 727 | 2410 | 1000 | 1200 | 429 | 666 | 435 |
| 5 | 856 | 1560 | 1110 | 1650 | 1070 | 744 | 2290 | 1050 | 771 | 252 | 952 | 458 |
| 6 | 854 | 1420 | 1370 | 1560 | 1090 | 1190 | 1610 | 821 | 572 | 205 | 499 | 541 |
| 7 | 913 | 1540 | 1190 | 1500 | 1090 | 1270 | 1500 | 776 | 571 | 234 | 458 | 482 |
| 8 | 835 | 1480 | 878 | 1540 | 1080 | 801 | 1290 | 551 | 481 | 272 | 389 | 675 |
| 9 | 791 | 1360 | 714 | 1530 | 1090 | 769 | 1000 | 495 | 407 | 333 | 320 | 1400 |
| 10 | 765 | 1240 | 892 | 1840 | 1070 | 753 | 1170 | 539 | 471 | 286 | 340 | 1140 |
| 11 | 548 | 1280 | 1900 | 1610 | 1110 | 661 | 1340 | 532 | 532 | 271 | 474 | 976 |
| 12 | 405 | 857 | 2850 | 1180 | 1090 | 700 | 1190 | 611 | 352 | 234 | 612 | 752 |
| 13 | 307 | 1200 | 1750 | 1310 | 991 | 456 | 1620 | 435 | 394 | 254 | 1100 | 722 |
| 14 | 649 | 1280 | 1510 | 1420 | 897 | 382 | 3600 | 422 | 336 | 285 | 1070 | 414 |
| 15 | 1010 | 1320 | 1520 | 1430 | 915 | 453 | 2860 | 432 | 359 | 408 | 568 | 593 |
| 16 | 1020 | 1170 | 1490 | 1350 | 894 | 415 | 2100 | 520 | 420 | 457 | 264 | 597 |
| 17 | 866 | 1060 | 2800 | 1250 | 877 | 721 | 1530 | 399 | 438 | 509 | 683 | 619 |
| 18 | 930 | 861 | 4160 | 1180 | 909 | 646 | 1080 | 411 | 495 | 332 | 736 | 4770 |
| 19 | 983 | 841 | 2480 | 1180 | 881 | 488 | 1520 | 515 | 378 | 349 | 727 | 2170 |
| 20 | 856 | 3670 | 1980 | 1370 | 879 | 467 | 1270 | 428 | 314 | 542 | 684 | 1330 |
| 21 | 487 | 2720 | 1710 | 1240 | 899 | 546 | 1350 | 381 | 370 | 593 | 1370 | 1110 |
| 22 | 423 | 2240 | 1590 | 1190 | 655 | 436 | 907 | 361 | 324 | 388 | 1290 | 1100 |
| 23 | 571 | 1530 | 1560 | 1190 | 608 | 566 | 980 | 376 | 368 | 417 | 811 | 1070 |
| 24 | 637 | 1330 | 2800 | 1350 | 597 | 511 | 1070 | 787 | 376 | 404 | 689 | 1090 |
| 25 | 518 | 1310 | 4710 | 1250 | 702 | 549 | 866 | 3630 | 560 | 324 | 552 | 1060 |
| 26 | 645 | 1090 | 3270 | 1180 | 595 | 733 | 1700 | 2720 | 476 | 309 | 611 | 1060 |
| 27 | 2370 | 1240 | 2480 | 1310 | 567 | 2520 | 2190 | 2580 | 322 | 441 | 553 | 860 |
| 28 | 3490 | 1310 | 2090 | 1120 | 413 | 2290 | 1610 | 1720 | 460 | 1380 | 600 | 911 |
| 29 | 6070 | 3240 | 2060 | 1100 | 414 | 1610 | 1230 | 1350 | 469 | 1050 | 698 | 992 |
| 30 | 5190 | 2710 | 1830 | 1120 | --- | 1340 | 992 | 1110 | 358 | 679 | 705 | 922 |
| 31 | 3020 | --- | 1670 | 1090 | --- | 2090 | --- | 923 | --- | 585 | 798 | --- |
| TOTAL | 39488 | 47459 | 61734 | 42270 | 25783 | 26968 | 56475 | 28424 | 15779 | 13207 | 21071 | 30093 |
| MEAN | 1274 | 1582 | 1991 | 1364 | 889 | 870 | 1882 | 917 | 526 | 426 | 680 | 1003 |
| MAX | 6070 | 3670 | 4710 | 1840 | 1120 | 2520 | 6430 | 3630 | 1200 | 1380 | 1370 | 4770 |
| MIN | 307 | 841 | 714 | 1090 | 413 | 382 | 866 | 361 | 314 | 205 | 264 | 414 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1913 - 2004, BY WATER YEAR (WY)

| | 1913 | 1914 | 1915 | 1916 | 1917 | 1918 | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 | 1925 | 1926 | 1927 | 1928 | 1929 | 1930 | 1931 | 1932 | 1933 | 1934 | 1935 | 1936 | 1937 | 1938 | 1939 | 1940 | 1941 | 1942 | 1943 | 1944 | 1945 | 1946 | 1947 | 1948 | 1949 | 1950 | 1951 | 1952 | 1953 | 1954 | 1955 | 1956 | 1957 | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 | 1970 | 1971 | 1972 | 1973 | 1974 | 1975 | 1976 | 1977 | 1978 | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 608 | 840 | 995 | 996 | 985 | 1364 | 1852 | 1126 | 666 | 452 | 467 | 487 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MAX | 2766 | 2123 | 2026 | 2092 | 2450 | 3642 | 4106 | 2889 | 1820 | 1611 | 1886 | 2404 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| (WY) | 1956 | 1956 | 1928 | 1978 | 1981 | 1921 | 1914 | 1943 | 1998 | 1915 | 1976 | 1938 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MIN | 90.8 | 177 | 133 | 363 | 268 | 429 | 529 | 280 | 188 | 78.1 | 131 | 74.0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| (WY) | 1915 | 1915 | 1915 | 1914 | 1919 | 1931 | 1995 | 1995 | 1941 | 1962 | 1964 | 1953 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

SUMMARY STATISTICS

| | FOR 2003 CALENDAR YEAR | | FOR 2004 WATER YEAR | | WATER YEARS 1913 - 2004 | |
|--------------------------|------------------------|--|---------------------|--|-------------------------|--|
| ANNUAL TOTAL | 413959 | | 408751 | | | |
| ANNUAL MEAN | 1134 | | 1117 | | | |
| HIGHEST ANNUAL MEAN | | | | | 903 | |
| LOWEST ANNUAL MEAN | | | | | 1364 | |
| HIGHEST DAILY MEAN | 6070 | | Oct 29 | | 6430 | |
| LOWEST DAILY MEAN | 160 | | Jul 21 | | 205 | |
| ANNUAL SEVEN-DAY MINIMUM | 259 | | Jul 10 | | 262 | |
| MAXIMUM PEAK FLOW | | | | | 13800 | |
| MAXIMUM PEAK STAGE | | | | | 9.71 | |
| INSTANTANEOUS LOW FLOW | | | | | 149 | |
| 10 PERCENT EXCEEDS | 2170 | | 2090 | | 1690 | |
| 50 PERCENT EXCEEDS | 894 | | 903 | | 691 | |
| 90 PERCENT EXCEEDS | 405 | | 389 | | 194 | |

CONNECTICUT RIVER BASIN

01169000 NORTH RIVER AT SHATTUCKVILLE, MA

LOCATION.--Lat 42° 38' 18", long 72° 43' 32", Franklin County, Hydrologic Unit 01080203, on right bank in Shattuckville, 1.2 mi south of Griswoldville, and 1.3 mi upstream from mouth.

DRAINAGE AREA.--89.0 mi².

WATER DISCHARGE RECORDS

PERIOD OF RECORD.--Discharge: October 1939 to current year. October and November 1939 monthly discharge only, published in WSP 1301. Water-quality records: Water years 1957, 1967-69, 1994-95, 2003-04.

REVISED RECORDS.--WSP 1111; 1945(M). WDR MA-RI-84-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 458.36 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Diurnal fluctuation at times caused by mill upstream; because storage capacity is small, daily flows are not affected appreciably. Prior to 1950, greater regulation by mill. Telephone and satellite gage-height telemeter at station.

AVERAGE DISCHARGE.--65 years (water years 1940-2004), 188 ft³/s, 28.69 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,200 ft³/s, Apr. 5, 1987, gage height, 11.19 ft, from rating curve extended above 2,900 ft³/s on basis of slope-area measurements at gage heights 9.55 ft and 11.19 ft; minimum daily discharge, 5.1 ft³/s, Oct. 3, 1948.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 10,900 ft³/s, Apr. 1, gage height, 10.20 ft; minimum discharge, 15 ft³/s, Aug. 10.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|-------|-------|-------|--------|------|------|-------|--------|------|-------|------|------|
| 1 | 335 | 443 | 380 | 304 | 84 | 80 | 4430 | 232 | 318 | 43 | 63 | 54 |
| 2 | 272 | 374 | 312 | 276 | 81 | 116 | 3020 | 214 | 412 | 44 | 60 | 43 |
| 3 | 225 | 424 | 262 | 290 | 77 | 264 | 1050 | 222 | 317 | 43 | 44 | 39 |
| 4 | 204 | e509 | 270 | 349 | 78 | 223 | 839 | 405 | 248 | 36 | 37 | 35 |
| 5 | 233 | e580 | 238 | e258 | 77 | 185 | 664 | 276 | 186 | 34 | 35 | 33 |
| 6 | 184 | 481 | 209 | e244 | 76 | 433 | 497 | 233 | 155 | 54 | 34 | 31 |
| 7 | 168 | 358 | 223 | e230 | 85 | 413 | 420 | 200 | 145 | 41 | 30 | 30 |
| 8 | 150 | 292 | 223 | e210 | 80 | 255 | 368 | 172 | 126 | 35 | 28 | 30 |
| 9 | 139 | 256 | 254 | e185 | 76 | 189 | 336 | 187 | 108 | 73 | 29 | 491 |
| 10 | 128 | 236 | 198 | e183 | e78 | 164 | 304 | 195 | 140 | 46 | 22 | 416 |
| 11 | 115 | 231 | 873 | e180 | e79 | 161 | 276 | 167 | 116 | 37 | 22 | 150 |
| 12 | 138 | 255 | 892 | e176 | e76 | 167 | 251 | 144 | 94 | 33 | 51 | 100 |
| 13 | 159 | 331 | 453 | e176 | e73 | 140 | 666 | 128 | 84 | 33 | 153 | 76 |
| 14 | 122 | 273 | 315 | e172 | 70 | 126 | 1230 | 114 | 78 | 43 | 121 | 64 |
| 15 | 667 | 220 | 336 | e174 | e71 | 124 | 607 | 119 | 75 | 53 | 69 | 58 |
| 16 | 386 | 197 | 299 | e172 | e71 | 119 | 430 | 193 | 65 | 70 | 69 | 53 |
| 17 | 252 | 190 | 968 | e168 | e71 | 117 | 349 | 134 | 62 | 52 | 143 | 72 |
| 18 | 204 | 184 | 1370 | e166 | e72 | 114 | 299 | e136 | 66 | 41 | 77 | 2300 |
| 19 | 180 | 213 | 612 | e166 | e70 | 108 | 278 | e126 | 63 | 40 | 58 | 755 |
| 20 | 169 | 1450 | 461 | e168 | e67 | 107 | 237 | 99 | 57 | 62 | 56 | 350 |
| 21 | 160 | 586 | 374 | e164 | 61 | 169 | 213 | 91 | 51 | 50 | 463 | 226 |
| 22 | 160 | 406 | 335 | e157 | 62 | 147 | 199 | 86 | 49 | 39 | 288 | 168 |
| 23 | 154 | 327 | 307 | e155 | e62 | 127 | 281 | 105 | 51 | 37 | 125 | 135 |
| 24 | 139 | 287 | 848 | e153 | e60 | 125 | 288 | 309 | 46 | 42 | 82 | 111 |
| 25 | 127 | 271 | 1300 | e142 | e58 | 147 | 223 | 844 | 43 | 36 | 64 | 101 |
| 26 | 123 | 240 | 629 | e136 | e58 | 274 | 675 | 519 | 57 | 29 | 55 | 93 |
| 27 | 739 | 223 | 477 | e125 | e57 | 793 | 711 | 769 | 63 | 32 | 49 | 84 |
| 28 | 890 | 312 | 400 | e125 | e57 | 701 | 408 | 443 | 48 | 414 | 46 | 161 |
| 29 | 2640 | 1080 | 360 | e118 | e59 | 526 | 310 | 312 | 58 | 131 | 44 | 289 |
| 30 | 961 | 494 | 358 | e110 | --- | 413 | 261 | 221 | 54 | 72 | 45 | 163 |
| 31 | 560 | --- | 343 | e102 | --- | 883 | --- | 176 | --- | 54 | 84 | --- |
| TOTAL | 11083 | 11723 | 14879 | 5734 | 2046 | 7910 | 20120 | 7571 | 3435 | 1849 | 2546 | 6711 |
| MEAN | 358 | 391 | 480 | 185 | 70.6 | 255 | 671 | 244 | 114 | 59.6 | 82.1 | 224 |
| MAX | 2640 | 1450 | 1370 | 349 | 85 | 883 | 4430 | 844 | 412 | 414 | 463 | 2300 |
| MIN | 115 | 184 | 198 | 102 | 57 | 80 | 199 | 86 | 43 | 29 | 22 | 30 |
| CFSM | 4.02 | 4.39 | 5.39 | 2.08 | 0.79 | 2.87 | 7.54 | 2.74 | 1.29 | 0.67 | 0.92 | 2.51 |
| IN. | 4.63 | 4.90 | 6.22 | 2.40 | 0.86 | 3.31 | 8.41 | 3.16 | 1.44 | 0.77 | 1.06 | 2.81 |
| STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2004, BY WATER YEAR (WY) | | | | | | | | | | | | |
| MEAN | 104 | 176 | 183 | 147 | 155 | 336 | 561 | 272 | 142 | 68.6 | 53.2 | 61.3 |
| MAX | 832 | 468 | 522 | 398 | 801 | 866 | 1076 | 772 | 417 | 316 | 285 | 306 |
| (WY) | 1956 | 1956 | 1974 | 1978 | 1981 | 1953 | 1969 | 1984 | 1973 | 2000 | 2000 | 1960 |
| MIN | 11.8 | 25.4 | 47.3 | 24.2 | 23.7 | 46.2 | 169 | 85.3 | 28.4 | 17.5 | 12.5 | 9.00 |
| (WY) | 1965 | 1965 | 1999 | 1981 | 1940 | 1940 | 1981 | 1986 | 1965 | 1962 | 1956 | 1953 |
| SUMMARY STATISTICS FOR 2003 CALENDAR YEAR FOR 2004 WATER YEAR WATER YEARS 1940 - 2004 | | | | | | | | | | | | |
| ANNUAL TOTAL | 96331 | | | 95607 | | | | | | | | |
| ANNUAL MEAN | 264 | | | 261 | | | | 188 | | | | |
| HIGHEST ANNUAL MEAN | | | | | | | | 299 | | | | |
| LOWEST ANNUAL MEAN | | | | | | | | 79.9 | | | | |
| HIGHEST DAILY MEAN | 2640 | | | Oct 29 | | 4430 | | Apr 1 | | 8740 | | |
| LOWEST DAILY MEAN | 21 | | | Jul 30 | | 22 | | Aug 10 | | 5.1 | | |
| ANNUAL SEVEN-DAY MINIMUM | 28 | | | Jul 25 | | 29 | | Aug 5 | | 6.3 | | |
| MAXIMUM PEAK FLOW | | | | 10900 | | | | Apr 1 | | 14200 | | |
| MAXIMUM PEAK STAGE | | | | 10.20 | | | | Apr 1 | | 11.19 | | |
| INSTANTANEOUS LOW FLOW | | | | 15 | | | | Aug 10 | | | | |
| ANNUAL RUNOFF (CFSM) | 2.97 | | | 2.94 | | | | 2.11 | | | | |
| ANNUAL RUNOFF (INCHES) | 40.26 | | | 39.96 | | | | 28.69 | | | | |
| 10 PERCENT EXCEEDS | 584 | | | 521 | | | | 427 | | | | |
| 50 PERCENT EXCEEDS | 153 | | | 162 | | | | 95 | | | | |
| 90 PERCENT EXCEEDS | 57 | | | 44 | | | | 21 | | | | |

e Estimated

CONNECTICUT RIVER BASIN

01169000 NORTH RIVER AT SHATTUCKVILLE, MA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Intermittent water-quality samples, water years 1957, 1967-69, 1994-95, 2003-04.

| DATE | TIME | INSTAN- TANEOUS DISCHARGE, CFS (00061) | DISSOLVED OXYGEN, MG/L (00300) | DISSOLVED OXYGEN, PERCENT OF SATURATION (00301) | PH, WATER, UNFLTRD FIELD, STD UNITS (00400) | SPECIF. CONDUCTANCE, WAT UNF US/CM 25 DEG C (00095) | TEMPERATURE, WATER, DEG C (00010) |
|----------|------|--|---|---|---|--|--|
| OCT 2003 | | | | | | | |
| 21... | 1515 | 158 | 11.1 | 101 | 7.7 | 112 | 9.7 |
| NOV | | | | | | | |
| 20... | 1550 | 1330 | 11.6 | 98 | 6.8 | 47 | 7.2 |
| DEC | | | | | | | |
| 08... | 1640 | 218 | 14.0 | 97 | 7.2 | 90 | .0 |
| JAN 2004 | | | | | | | |
| 27... | 1610 | E125 | 14.2 | 99 | 7.4 | 106 | .0 |
| FEB | | | | | | | |
| 18... | 1430 | E72 | 14.0 | 100 | 7.7 | 131 | 1.3 |
| MAR | | | | | | | |
| 09... | 1440 | 183 | 13.8 | 101 | 7.0 | 85 | 2.4 |
| 23... | 1600 | 169 | 13.6 | 100 | 7.3 | 113 | 1.9 |
| APR | | | | | | | |
| 07... | 1515 | 410 | 12.2 | 99 | 7.3 | 66 | 5.1 |
| 14... | 1530 | 963 | 12.1 | 97 | 7.0 | 56 | 5.4 |
| MAY | | | | | | | |
| 11... | 1400 | 169 | 10.5 | 106 | 8.2 | 99 | 15.7 |
| JUN | | | | | | | |
| 15... | 1110 | 77 | 9.9 | 105 | 7.8 | 128 | 18.0 |
| JUL | | | | | | | |
| 20... | 1015 | 68 | 9.5 | 106 | 7.8 | 105 | 20.0 |
| AUG | | | | | | | |
| 11... | 1020 | 22 | 9.9 | 109 | 8.6 | 133 | 19.8 |
| SEP | | | | | | | |
| 02... | 1730 | 41 | 9.2 | 103 | 8.7 | 119 | 20.9 |

CONNECTICUT RIVER BASIN
01169000 NORTH RIVER AT SHATTUCKVILLE, MA--Continued

| DATE | AMMONIA + ORG-N, WATER, UNFLTRD MG/L AS N (00625) | AMMONIA WATER, FLTRD, MG/L AS N (00608) | NITRITE + NITRATE WATER FLTRD, MG/L AS N (00631) | NITRITE WATER, FLTRD, MG/L AS N (00613) | ORTHO- PHOSPHATE, WATER, FLTRD, MG/L AS P (00671) | PHOSPHORUS, WATER, UNFLTRD MG/L (00665) | SUSPENDED SEDIMENT CONCEN- TRATION MG/L (80154) |
|----------|--|---|--|--|---|---|--|
| OCT 2003 | | | | | | | |
| 21... | 0.14 | <0.010 | 0.262 | <0.008 | E0.01 | 0.016 | 2 |
| NOV | | | | | | | |
| 20... | .28 | <.010 | .082 | <.008 | <.02 | .051 | 48 |
| DEC | | | | | | | |
| 08... | .10 | <.010 | .314 | <.008 | E.01 | .012 | 2 |
| JAN 2004 | | | | | | | |
| 27... | E.08 | <.010 | .412 | <.008 | <.02 | .009 | 0 |
| FEB | | | | | | | |
| 18... | .16 | <.010 | .507 | <.008 | .03 | .027 | 1 |
| MAR | | | | | | | |
| 09... | E.07 | <.010 | .329 | <.008 | <.02 | .007 | 0 |
| 23... | .14 | <.010 | .406 | E.004 | <.02 | .020 | 2 |
| APR | | | | | | | |
| 07... | .10 | <.010 | .349 | <.008 | <.02 | .018 | 8 |
| 14... | .15 | <.010 | .166 | <.008 | <.02 | .043 | 50 |
| MAY | | | | | | | |
| 11... | .14 | <.010 | .165 | E.007 | E.01 | .020 | 3 |
| JUN | | | | | | | |
| 15... | .18 | E.007 | .339 | E.005 | .03 | .037 | 1 |
| JUL | | | | | | | |
| 20... | .24 | E.006 | .252 | .025 | .02 | .040 | 3 |
| AUG | | | | | | | |
| 11... | .22 | E.008 | .175 | <.008 | <.02 | .021 | 5 |
| SEP | | | | | | | |
| 02... | .16 | .012 | .186 | <.008 | <.02 | .013 | -- |

< Less than
E Estimated value

CONNECTICUT RIVER BASIN

01169900 SOUTH RIVER NEAR CONWAY, MA

LOCATION.--Lat 42° 32' 31", long 72° 41' 39", Franklin County, Hydrologic Unit 01080203, on left bank at upstream side of Reeds Bridge just off Bardwell Road, 2.2 mi north of Conway, and 2.6 mi upstream from mouth.

DRAINAGE AREA.--24.1 mi².

WATER DISCHARGE RECORDS

PERIOD OF RECORD.--Discharge: June 1966 to current year.

Water-quality records: Water years 1967-69, 1994-95, 2003-04.

REVISED RECORDS.--WDR MA-NH-RI-VT-73-1: 1968-70(P), 1971(M), 1972(P). WDR MA-RI-84-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 460 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Oct. 7, 1970, at downstream side of bridge at same site and datum.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Diurnal fluctuation by small powerplant upstream since April 1982.

AVERAGE DISCHARGE.--38 years (water years 1967-2004), 53.4 ft³/s, 30.09 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,750 ft³/s, Apr. 4, 1987, gage height, 10.16 ft, minimum discharge, 2.1 ft³/s (estimated), Sept. 13, 1995, but may have been lower earlier in the month.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,760 ft³/s, Apr. 1, gage height, 7.89 ft; minimum discharge, 3.8 ft³/s, Aug. 11.

**DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES**

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|------|------|------|------|------|------|------|-------|-------|------|
| 1 | 88 | 114 | 89 | 87 | e30 | e31 | 1060 | 65 | 64 | 11 | 13 | 16 |
| 2 | 76 | 100 | 80 | 81 | e30 | e46 | 828 | 65 | 72 | 12 | 10 | e13 |
| 3 | 65 | 93 | 70 | 88 | e30 | e99 | 277 | 71 | 56 | 10 | 7.3 | 14 |
| 4 | 60 | 87 | 75 | 98 | e30 | e66 | 216 | 130 | 44 | 9.7 | 6.3 | e13 |
| 5 | 65 | 108 | 70 | 96 | e28 | e55 | 162 | 77 | 42 | 9.7 | 10 | e13 |
| 6 | 53 | 105 | 67 | 80 | e26 | e119 | 118 | 67 | 35 | 12 | 7.7 | e13 |
| 7 | 48 | 85 | 76 | 64 | e34 | e89 | 104 | 60 | 34 | 10 | 6.0 | e12 |
| 8 | 44 | 74 | 67 | 65 | e31 | 56 | 93 | 53 | 30 | 10 | 5.3 | e13 |
| 9 | 41 | 68 | 70 | e74 | e27 | 46 | 85 | 62 | 27 | 11 | 4.7 | e219 |
| 10 | 38 | 66 | 58 | e104 | 29 | 45 | 76 | 62 | 29 | 9.3 | 4.1 | e97 |
| 11 | 38 | 66 | 366 | e123 | 29 | 51 | 70 | 56 | 27 | 8.7 | 4.8 | e39 |
| 12 | 48 | 76 | 220 | e126 | 27 | 50 | 62 | 49 | 24 | 8.5 | 53 | e31 |
| 13 | 61 | 78 | 105 | e113 | 27 | 43 | 278 | 45 | 21 | 9.5 | 87 | e23 |
| 14 | 45 | 65 | 83 | e100 | 27 | 39 | 368 | 42 | 21 | 11 | 55 | e22 |
| 15 | 339 | 57 | 106 | e97 | 25 | 40 | 142 | 41 | 21 | 11 | 33 | e18 |
| 16 | 93 | 55 | 93 | e91 | 23 | 37 | 111 | 45 | 19 | 10 | 27 | e17 |
| 17 | 69 | 53 | 406 | e83 | 23 | 38 | 97 | 38 | 18 | 9.2 | 26 | e27 |
| 18 | 60 | 51 | 377 | e67 | 23 | 36 | 93 | 36 | 18 | 8.3 | 21 | 599 |
| 19 | 56 | 65 | 155 | e61 | 24 | 34 | 83 | 43 | 20 | 10 | 16 | 139 |
| 20 | 53 | 365 | 121 | e53 | 24 | 33 | 72 | 34 | 17 | 11 | e17 | e71 |
| 21 | 51 | 112 | 104 | e48 | 24 | 48 | 67 | 33 | 15 | 9.0 | e232 | e52 |
| 22 | 48 | 86 | 98 | e46 | 25 | 43 | 65 | 30 | 13 | 7.9 | e66 | e45 |
| 23 | 48 | 76 | 90 | e45 | 25 | 37 | 100 | 36 | 12 | 8.4 | e47 | e36 |
| 24 | 43 | 71 | 347 | e42 | 25 | 39 | 85 | 48 | 12 | 9.3 | e34 | e31 |
| 25 | 41 | 77 | 365 | e39 | 25 | 54 | 67 | 74 | 12 | 7.8 | e24 | e26 |
| 26 | 40 | 67 | 167 | e36 | 23 | 89 | 158 | 67 | 15 | 7.1 | e20 | e25 |
| 27 | 184 | 63 | 128 | e37 | 23 | 150 | 160 | 129 | 14 | 8.1 | e24 | e25 |
| 28 | 194 | 89 | 113 | e39 | 24 | 118 | 91 | 69 | 12 | 30 | e23 | e82 |
| 29 | 776 | 274 | 103 | e40 | e24 | 87 | 78 | 53 | 13 | 15 | e20 | e131 |
| 30 | 224 | 105 | 103 | e35 | --- | 71 | 72 | 40 | 12 | 10 | e27 | e57 |
| 31 | 138 | --- | 98 | e35 | --- | 248 | --- | 35 | --- | 8.3 | e22 | --- |
| TOTAL | 3227 | 2851 | 4470 | 2193 | 765 | 2037 | 5338 | 1755 | 769 | 322.8 | 953.2 | 1919 |
| MEAN | 104 | 95.0 | 144 | 70.7 | 26.4 | 65.7 | 178 | 56.6 | 25.6 | 10.4 | 30.7 | 64.0 |
| MAX | 776 | 365 | 406 | 126 | 34 | 248 | 1060 | 130 | 72 | 30 | 232 | 599 |
| MIN | 38 | 51 | 58 | 35 | 23 | 31 | 62 | 30 | 12 | 7.1 | 4.1 | 12 |
| CFSM | 4.32 | 3.94 | 5.98 | 2.94 | 1.09 | 2.73 | 7.38 | 2.35 | 1.06 | 0.43 | 1.28 | 2.65 |
| IN. | 4.98 | 4.40 | 6.90 | 3.39 | 1.18 | 3.14 | 8.24 | 2.71 | 1.19 | 0.50 | 1.47 | 2.96 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 2004, BY WATER YEAR (WY)

| | 30.9 | 50.3 | 54.9 | 47.2 | 50.3 | 96.0 | 130 | 72.0 | 47.7 | 21.6 | 19.0 | 20.7 |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 30.9 | 50.3 | 54.9 | 47.2 | 50.3 | 96.0 | 130 | 72.0 | 47.7 | 21.6 | 19.0 | 20.7 |
| MAX (WY) | 104 | 142 | 144 | 135 | 163 | 183 | 263 | 171 | 144 | 80.7 | 91.9 | 101 |
| MIN (WY) | 6.22 | 8.20 | 12.6 | 7.27 | 14.1 | 32.3 | 32.6 | 23.5 | 12.6 | 5.92 | 4.45 | 4.17 |
| WATER YEARS | 2004 | 1996 | 2004 | 1996 | 1981 | 1999 | 2001 | 1984 | 1982 | 2000 | 2000 | 1999 |
| WATER YEARS | 1983 | 2002 | 1999 | 1981 | 1980 | 1967 | 1985 | 1995 | 1985 | 1991 | 1999 | 1995 |

SUMMARY STATISTICS

| | FOR 2003 CALENDAR YEAR | | FOR 2004 WATER YEAR | | WATER YEARS 1966 - 2004 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|------------|
| ANNUAL TOTAL | 28101.4 | | 26600.0 | | | |
| ANNUAL MEAN | 77.0 | | 72.7 | | | |
| HIGHEST ANNUAL MEAN | | | | | 53.4 | |
| LOWEST ANNUAL MEAN | | | | | 82.6 | 1996 |
| HIGHEST DAILY MEAN | 776 | Oct 29 | 1060 | Apr 1 | 21.5 | 1985 |
| LOWEST DAILY MEAN | 4.1 | Jul 31 | 4.1 | Aug 10 | 1.6 | Aug 8 1999 |
| ANNUAL SEVEN-DAY MINIMUM | 6.4 | Jul 25 | 6.1 | Aug 5 | 2.0 | Aug 5 1999 |
| MAXIMUM PEAK FLOW | | | 2760 | Apr 1 | 5750 | Apr 4 1987 |
| MAXIMUM PEAK STAGE | | | 7.89 | Apr 1 | 10.16 | Apr 4 1987 |
| INSTANTANEOUS LOW FLOW | | | 3.8 | Aug 11 | | |
| ANNUAL RUNOFF (CFSM) | 3.19 | | 3.02 | | 2.21 | |
| ANNUAL RUNOFF (INCHES) | 43.38 | | 41.06 | | 30.09 | |
| 10 PERCENT EXCEEDS | 165 | | 127 | | 112 | |
| 50 PERCENT EXCEEDS | 48 | | 48 | | 31 | |
| 90 PERCENT EXCEEDS | 12 | | 11 | | 7.4 | |

e Estimated

CONNECTICUT RIVER BASIN
01169900 SOUTH RIVER NEAR CONWAY, MA--Continued

WATER QUALITY RECORDS

PERIOD OF RECORD.--Intermittent water-quality samples, water years 1967-69, 1994-95, 2003-04.

| DATE | TIME | INSTAN- TANEOUS DISCHARGE, CFS (00061) | DISSOLVED OXYGEN, MG/L (00300) | DISSOLVED OXYGEN, PERCENT OF SATURATION (00301) | PH, WATER, UNFLTRD FIELD, STD UNITS (00400) | SPECIF. CONDUCTANCE, WAT UNF US/CM 25 DEG C (00095) | TEMPERATURE, WATER, DEG C (00010) |
|----------|------|--|---|---|---|--|--|
| OCT 2003 | | | | | | | |
| 22... | 1000 | 46 | 11.3 | 99 | 7.7 | 149 | 8.6 |
| NOV | | | | | | | |
| 21... | 1015 | 111 | 12.2 | 98 | 7.4 | 111 | 5.3 |
| DEC | | | | | | | |
| 08... | 1545 | 63 | 13.6 | 94 | 7.0 | 130 | .0 |
| JAN 2004 | | | | | | | |
| 28... | 0915 | E39 | 13.7 | 96 | 6.7 | 155 | .0 |
| FEB | | | | | | | |
| 19... | 0850 | 24 | 13.9 | 97 | 7.1 | 173 | .0 |
| MAR | | | | | | | |
| 10... | 0825 | 48 | 14.1 | 99 | 7.1 | 172 | 1.1 |
| 24... | 0900 | 35 | 14.1 | 99 | 7.0 | 175 | .8 |
| APR | | | | | | | |
| 07... | 1630 | 104 | 12.3 | 100 | 7.5 | 103 | 5.2 |
| 15... | 0940 | 145 | 12.4 | 99 | 7.1 | 114 | 5.3 |
| MAY | | | | | | | |
| 12... | 1020 | 46 | 10.4 | 101 | 7.4 | 151 | 14.0 |
| JUN | | | | | | | |
| 15... | 1400 | 21 | 8.8 | 104 | 7.7 | 181 | 23.0 |
| JUL | | | | | | | |
| 20... | 1145 | 11 | 9.0 | 102 | 7.6 | 187 | 21.0 |
| AUG | | | | | | | |
| 11... | 1250 | 5.0 | 9.1 | 103 | 8.5 | 212 | 21.3 |
| SEP | | | | | | | |
| 03... | 1020 | 13 | 9.8 | 99 | 8.0 | 205 | 16.0 |

CONNECTICUT RIVER BASIN

01169900 SOUTH RIVER NEAR CONWAY, MA--Continued

| DATE | AMMONIA + ORG-N, WATER, UNFLTRD MG/L AS N (00625) | AMMONIA WATER, FLTRD, MG/L AS N (00608) | NITRITE + NITRATE WATER FLTRD, MG/L AS N (00631) | NITRITE WATER, FLTRD, MG/L AS N (00613) | ORTHO- PHOSPHATE, WATER, FLTRD, MG/L AS P (00671) | PHOSPHORUS, WATER, UNFLTRD MG/L (00665) | SUSPENDED SEDIMENT CONCENTRATION MG/L (80154) |
|----------|--|---|---|---|--|---|---|
| OCT 2003 | | | | | | | |
| 22... | E0.10 | <0.010 | 0.277 | <0.008 | <0.02 | 0.004 | 1 |
| NOV | | | | | | | |
| 21... | .14 | <.010 | .232 | <.008 | <.02 | .011 | 7 |
| DEC | | | | | | | |
| 08... | E.07 | <.010 | .360 | <.008 | <.02 | .007 | 4 |
| JAN 2004 | | | | | | | |
| 28... | E.08 | <.010 | .635 | <.008 | <.02 | .008 | 3 |
| FEB | | | | | | | |
| 19... | .11 | <.010 | .618 | <.008 | <.02 | .006 | 1 |
| MAR | | | | | | | |
| 10... | E.06 | <.010 | .480 | <.008 | <.02 | .005 | 1 |
| 24... | E.06 | <.010 | .507 | <.008 | <.02 | E.004 | 1 |
| APR | | | | | | | |
| 07... | E.08 | <.010 | .366 | <.008 | <.02 | .010 | 5 |
| 15... | E.10 | <.010 | .303 | <.008 | <.02 | .018 | 17 |
| MAY | | | | | | | |
| 12... | .10 | <.010 | .264 | <.008 | <.02 | E.002 | 2 |
| JUN | | | | | | | |
| 15... | .12 | <.010 | .375 | <.008 | <.02 | .010 | 1 |
| JUL | | | | | | | |
| 20... | .13 | <.010 | .326 | <.008 | <.02 | .007 | 17 |
| AUG | | | | | | | |
| 11... | .15 | <.010 | .254 | <.008 | <.02 | .005 | 1 |
| SEP | | | | | | | |
| 03... | .14 | E.006 | .332 | <.008 | <.02 | .005 | -- |

< Less than
E Estimated value

CONNECTICUT RIVER BASIN

01170000 DEERFIELD RIVER NEAR WEST DEERFIELD, MA

LOCATION.--Lat 42° 32' 09", long 72° 39' 14", Franklin County, Hydrologic Unit 01080203, on right bank 0.4 mi downstream from South River, 1.2 mi west of West Deerfield, 2.5 mi west of Deerfield, and 9.2 mi upstream from mouth.

DRAINAGE AREA.--557 mi².

PERIOD OF RECORD.--Discharge: March to November 1904, January 1905, March to December 1905, October 1940 to current year, published as "at Deerfield" 1904-05.

Water-quality records: June 1994.

REVISED RECORDS.--WDR MA-RI-84-1: Drainage area. WDR MA-RI-92-1: 1991.

GAGE.--Water-stage recorder. Elevation of gage is 155 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Dec. 16, 1905, nonrecording gage at site 1.5 mi downstream at different datum.

REMARKS.--Records good. Flow regulated since 1913 by Somerset Reservoir, since 1924 by Harriman Reservoir, and by several powerplants upstream. Satellite gage-height telemeter at station.

AVERAGE DISCHARGE.--64 years (water years 1941-2004), 1,318 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 61,700 ft³/s, Apr. 5, 1987, gage height, 17.71 ft; minimum daily discharge, 28 ft³/s, July 29, 1962.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 22,500 ft³/s, Apr. 2, gage height, 10.07 ft; minimum discharge, 172 ft³/s, Mar. 17.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 1770 | 3260 | 2560 | 1650 | 1320 | 589 | 10300 | 1360 | 1620 | 435 | 744 | 788 |
| 2 | 1540 | 2120 | 2320 | 1650 | 1120 | 673 | 12800 | 1300 | 1810 | 387 | 733 | 600 |
| 3 | 1210 | 2300 | 1700 | 1650 | 1340 | 1130 | 3770 | 1250 | 1680 | 424 | 687 | 674 |
| 4 | 1290 | 2440 | 1410 | 1720 | 1220 | 870 | 3210 | 1860 | 1580 | 441 | 849 | 588 |
| 5 | 1300 | 2450 | 1250 | 1780 | 1240 | 795 | 3930 | 1630 | 1200 | 399 | 1000 | 454 |
| 6 | 1250 | 2360 | 1310 | 1710 | 1120 | 1280 | 2740 | 1390 | 851 | 351 | 614 | 709 |
| 7 | 1310 | 2390 | 1360 | 1520 | 1200 | 1650 | 2450 | 1120 | 857 | 333 | 496 | 626 |
| 8 | 1140 | 2150 | 947 | 1680 | 1290 | 1010 | 2110 | 939 | 726 | 304 | 503 | 748 |
| 9 | 1070 | 1980 | 846 | 1750 | 1250 | 739 | 1680 | 861 | 591 | 333 | 441 | 2390 |
| 10 | 1020 | 1820 | 835 | 1810 | 1200 | 707 | 1840 | 891 | 679 | 372 | 367 | 2000 |
| 11 | 1000 | 1790 | 2740 | 1820 | 1310 | 690 | 2020 | 884 | 685 | 378 | 463 | 1390 |
| 12 | 1080 | 1380 | 4030 | 1460 | 1290 | 667 | 1760 | 881 | 575 | 318 | 844 | 1010 |
| 13 | 904 | 1800 | 2310 | 1490 | 1000 | 436 | 2570 | 843 | 520 | 309 | 1590 | 951 |
| 14 | 944 | 1830 | 1610 | 1510 | 934 | 405 | 6450 | 563 | 500 | 326 | 1530 | 575 |
| 15 | 2380 | 1480 | 1600 | 1690 | 896 | 547 | 4420 | 610 | 498 | 518 | 737 | 627 |
| 16 | 1840 | 1260 | 1790 | 1520 | 792 | 415 | 3170 | 895 | 475 | 585 | 494 | 795 |
| 17 | 1410 | 1260 | 3560 | 1530 | 805 | 443 | 2440 | 697 | 511 | 536 | 947 | 855 |
| 18 | 1420 | 822 | 6350 | 1380 | 977 | 690 | 1700 | 624 | 626 | 490 | 924 | 8330 |
| 19 | 1390 | 946 | 3110 | 1500 | 798 | 436 | 2110 | 775 | 499 | 452 | 908 | 4010 |
| 20 | 1290 | 5020 | 2310 | 1510 | 872 | 400 | 1730 | 600 | 435 | 649 | 876 | 2190 |
| 21 | 908 | 3410 | 2060 | 1620 | 856 | 597 | 1950 | 536 | 464 | 636 | 2070 | 1660 |
| 22 | 865 | 2510 | 1730 | 1450 | 662 | 471 | 1350 | 560 | 405 | 509 | 2140 | 1470 |
| 23 | 743 | 1900 | 1690 | 1410 | 684 | 447 | 1590 | 543 | 469 | 486 | 1220 | 1450 |
| 24 | 959 | 1550 | 3280 | 1260 | 620 | 513 | 1710 | 989 | 435 | 437 | 856 | 1370 |
| 25 | 878 | 1410 | 6750 | 1330 | 826 | 525 | 1320 | 4630 | 635 | 415 | 740 | 1370 |
| 26 | 832 | 1300 | 3960 | 1230 | 609 | 876 | 2630 | 3940 | 623 | 400 | 725 | 1310 |
| 27 | 3060 | 1220 | 2880 | 1370 | 570 | 2950 | 3650 | 4000 | 475 | 475 | 766 | 1020 |
| 28 | 5630 | 1410 | 2380 | 1390 | 418 | 3010 | 2560 | 2530 | 513 | 1750 | 635 | 1240 |
| 29 | 10800 | 4490 | 2240 | 1540 | 378 | 2070 | 1900 | 2040 | 578 | 1350 | 843 | 2050 |
| 30 | 7650 | 3100 | 2010 | 1140 | --- | 1560 | 1530 | 1450 | 507 | 846 | 844 | 1370 |
| 31 | 4520 | --- | 1830 | 1330 | --- | 2880 | --- | 1250 | --- | 701 | 1090 | --- |
| TOTAL | 63403 | 63158 | 74758 | 47400 | 27597 | 30471 | 93390 | 42441 | 22022 | 16345 | 27676 | 44620 |
| MEAN | 2045 | 2105 | 2412 | 1529 | 952 | 983 | 3113 | 1369 | 734 | 527 | 893 | 1487 |
| MAX | 10800 | 5020 | 6750 | 1820 | 1340 | 3010 | 12800 | 4630 | 1810 | 1750 | 2140 | 8330 |
| MIN | 743 | 822 | 835 | 1140 | 378 | 400 | 1320 | 536 | 405 | 304 | 367 | 454 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1904 - 2004, BY WATER YEAR (WY)

| | | | | | | | | | | | | |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 850 | 1219 | 1443 | 1408 | 1428 | 2094 | 2921 | 1701 | 988 | 585 | 586 | 628 |
| MAX | 4632 | 3302 | 3156 | 2801 | 3890 | 4771 | 5320 | 4094 | 2693 | 1955 | 2142 | 2112 |
| (WY) | 1956 | 1956 | 1997 | 1978 | 1981 | 1953 | 1993 | 1984 | 1998 | 2000 | 1976 | 1905 |
| MIN | 228 | 244 | 385 | 622 | 693 | 983 | 928 | 484 | 307 | 119 | 167 | 94.5 |
| (WY) | 1983 | 1965 | 1965 | 1965 | 1944 | 2004 | 1995 | 1995 | 1964 | 1962 | 1964 | 1953 |

SUMMARY STATISTICS

| | FOR 2003 CALENDAR YEAR | FOR 2004 WATER YEAR | ^a WATER YEARS 1904 - 2004 | |
|--------------------------|------------------------|---------------------|--------------------------------------|--------|
| ANNUAL TOTAL | 616553 | 553281 | | |
| ANNUAL MEAN | 1689 | 1512 | 1318 | |
| HIGHEST ANNUAL MEAN | | | 1840 | 1996 |
| LOWEST ANNUAL MEAN | | | 629 | 1965 |
| HIGHEST DAILY MEAN | 10800 | Oct 29 | 12800 | Apr 2 |
| LOWEST DAILY MEAN | 300 | Jul 10 | 304 | Jul 8 |
| ANNUAL SEVEN-DAY MINIMUM | 359 | Jul 25 | 334 | Jul 8 |
| MAXIMUM PEAK FLOW | | | 22500 | Apr 2 |
| MAXIMUM PEAK STAGE | | | 10.07 | Apr 2 |
| INSTANTANEOUS LOW FLOW | | | 172 | Mar 17 |
| 10 PERCENT EXCEEDS | 3100 | 2740 | 2620 | |
| 50 PERCENT EXCEEDS | 1350 | 1240 | 988 | |
| 90 PERCENT EXCEEDS | 665 | 470 | 276 | |

^a Years of operation not continuous; see Period of Record for actual years of operation.

CONNECTICUT RIVER BASIN

01170100 GREEN RIVER NEAR COLRAIN, MA

LOCATION.--Lat 42° 42' 12", long 72° 40' 16", Franklin County, Hydrologic Unit 01080203, on right bank 0.5 mi upstream from bridge on West Leyden Road and 2.5 mi northeast of Colrain.

DRAINAGE AREA.--41.4 mi².

WATER DISCHARGE RECORDS

PERIOD OF RECORD.--Discharge: October 1967 to current year.

Water-quality records: Water years 1968-69, 1993-95, 2002-04.

REVISED RECORDS.--WDR MA-NH-RI-VT-71-1: 1968(M), 1969.

GAGE.--Water-stage recorder. Elevation of gage is 435 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--37 years (water years 1968-2004), 90.5 ft³/s, 29.71 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,560 ft³/s, Dec. 21, 1973, gage height, 8.2 ft, from floodmarks, from rating curve extended above 1,500 ft³/s on basis of slope area measurement of peak flow and conveyance-slope study; maximum gage height, 12.71 ft, Feb. 23, 1997 (ice jam); minimum discharge, 1.9 ft³/s, Aug. 1, 1968, caused by unusual regulation.

EXTREMES FOR CURRENT YEAR.--Maximum discharge 3,700 ft³/s, Apr. 1, gage height, 7.59 ft; minimum daily discharge, 9.9 ft³/s (estimated), Aug. 10.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004 DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|------|------|------|------|------|------|------|------|--------|------|
| 1 | 178 | 233 | 202 | 170 | e38 | 45 | 1620 | 117 | 160 | 19 | 39 | e25 |
| 2 | 148 | 206 | 172 | 158 | e37 | 74 | 1220 | 110 | 181 | 24 | 32 | e20 |
| 3 | 122 | 239 | 141 | 165 | e35 | 211 | 453 | 117 | 148 | 20 | 23 | e18 |
| 4 | 113 | 219 | 156 | 182 | e36 | 132 | 370 | 183 | 128 | 17 | e17 | e16 |
| 5 | 122 | 248 | 140 | 177 | e36 | 98 | 297 | 136 | 101 | 17 | e16 | e15 |
| 6 | 96 | 247 | 142 | 155 | e36 | 237 | 238 | 119 | 83 | 24 | e16 | e14 |
| 7 | 84 | 201 | 148 | 129 | e39 | 215 | 209 | 104 | 75 | 18 | e14 | e14 |
| 8 | 76 | 170 | 150 | e95 | e43 | 126 | 187 | 87 | 66 | 22 | e13 | e14 |
| 9 | 69 | 150 | 142 | e84 | e40 | 95 | 172 | 97 | 58 | 32 | e13 | 190 |
| 10 | 66 | 141 | 126 | e83 | e37 | 83 | 156 | 95 | 82 | 19 | e9.9 | 180 |
| 11 | 64 | 136 | 382 | e78 | e36 | 82 | 144 | 82 | 62 | 17 | e10 | 90 |
| 12 | 73 | 145 | 392 | e74 | e35 | 83 | 133 | 71 | 50 | 15 | e23 | 72 |
| 13 | 76 | 182 | 230 | e73 | e33 | 70 | 289 | 63 | 44 | 15 | e70 | 61 |
| 14 | 62 | 151 | 178 | e71 | e32 | 66 | 466 | 58 | 41 | 23 | e55 | 50 |
| 15 | 301 | 127 | 192 | e69 | e32 | 67 | 254 | 57 | 39 | 30 | e31 | 45 |
| 16 | 190 | 116 | 176 | e65 | e32 | 61 | 197 | 71 | 35 | 29 | e32 | 42 |
| 17 | 133 | 112 | 443 | e63 | e32 | 61 | 169 | 57 | 33 | 21 | e65 | 51 |
| 18 | 110 | 106 | 577 | e58 | e32 | 61 | 152 | 51 | 34 | 17 | e35 | 633 |
| 19 | 97 | 128 | 305 | e53 | e31 | 56 | 142 | 77 | 31 | 21 | e27 | 211 |
| 20 | 87 | 560 | 242 | e48 | e30 | 58 | 125 | 55 | 29 | 28 | e25 | 127 |
| 21 | 83 | 285 | 209 | e45 | e30 | 84 | 113 | 47 | 26 | 22 | e208 | 100 |
| 22 | 79 | 213 | 201 | e44 | e29 | 68 | 104 | 44 | 25 | 17 | e130 | 84 |
| 23 | 78 | 179 | 177 | e42 | e29 | 62 | 138 | 70 | 25 | 15 | e57 | 74 |
| 24 | 70 | 161 | 395 | e40 | e28 | 63 | 140 | 190 | 23 | 25 | e37 | 68 |
| 25 | 65 | 155 | 568 | e39 | e28 | 70 | 114 | 369 | 21 | 18 | e29 | 64 |
| 26 | 64 | 140 | 324 | e38 | e27 | 118 | 245 | 248 | 30 | 14 | e25 | 60 |
| 27 | 365 | 131 | 254 | e37 | e27 | 301 | 253 | 318 | 29 | 20 | e22 | 55 |
| 28 | 427 | 174 | 222 | e39 | e28 | 294 | 171 | 206 | 23 | 210 | e21 | 75 |
| 29 | 1020 | 448 | 204 | e40 | e33 | 229 | 145 | 156 | 29 | 64 | e20 | 91 |
| 30 | 428 | 243 | 197 | e40 | --- | 186 | 128 | 122 | 22 | 35 | e21 | 72 |
| 31 | 283 | --- | 187 | e39 | --- | 350 | --- | 99 | --- | 26 | e38 | --- |
| TOTAL | 5229 | 5946 | 7574 | 2493 | 961 | 3806 | 8544 | 3676 | 1733 | 894 | 1173.9 | 2631 |
| MEAN | 169 | 198 | 244 | 80.4 | 33.1 | 123 | 285 | 119 | 57.8 | 28.8 | 37.9 | 87.7 |
| MAX | 1020 | 560 | 577 | 182 | 43 | 350 | 1620 | 369 | 181 | 210 | 208 | 633 |
| MIN | 62 | 106 | 126 | 37 | 27 | 45 | 104 | 44 | 21 | 14 | 9.9 | 14 |
| CFSM | 4.07 | 4.79 | 5.90 | 1.94 | 0.80 | 2.97 | 6.88 | 2.86 | 1.40 | 0.70 | 0.91 | 2.12 |
| IN. | 4.70 | 5.34 | 6.81 | 2.24 | 0.86 | 3.42 | 7.68 | 3.30 | 1.56 | 0.80 | 1.05 | 2.36 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1968 - 2004, BY WATER YEAR (WY)

| | MEAN | 52.1 | 87.6 | 90.5 | 72.0 | 76.6 | 162 | 251 | 129 | 74.3 | 35.3 | 28.1 | 29.2 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MAX | 190 | 214 | 244 | 178 | 277 | 355 | 442 | 287 | 188 | 105 | 126 | 116 | |
| (WY) | 1976 | 1996 | 2004 | 1996 | 1981 | 1979 | 1969 | 1984 | 1973 | 1973 | 2000 | 2003 | |
| MIN | 11.4 | 12.3 | 21.9 | 11.6 | 18.1 | 53.2 | 77.6 | 42.1 | 21.7 | 10.6 | 6.32 | 6.55 | |
| (WY) | 1983 | 2002 | 1999 | 1981 | 1980 | 1971 | 1995 | 1986 | 1999 | 1995 | 1999 | 1983 | |

SUMMARY STATISTICS

| | FOR 2003 CALENDAR YEAR | | FOR 2004 WATER YEAR | | WATER YEARS 1968 - 2004 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|-------------|
| ANNUAL TOTAL | 47206 | | 44660.9 | | | |
| ANNUAL MEAN | 129 | | 122 | | 90.5 | |
| HIGHEST ANNUAL MEAN | | | | | 136 1973 | |
| LOWEST ANNUAL MEAN | | | | | 44.4 1985 | |
| HIGHEST DAILY MEAN | 1020 | Oct 29 | 1620 | Apr 1 | 2420 | Mar 31 1987 |
| LOWEST DAILY MEAN | 10 | Jul 31 | 9.9 | Aug 10 | 3.3 | Sep 16 1983 |
| ANNUAL SEVEN-DAY MINIMUM | 14 | Jul 25 | 13 | Aug 5 | 3.6 | Sep 11 1983 |
| MAXIMUM PEAK FLOW | | | 3700 | Apr 1 | 4560 | Dec 21 1973 |
| MAXIMUM PEAK STAGE | | | 7.59 | Apr 1 | 8.87 | Jan 27 1976 |
| INSTANTANEOUS LOW FLOW | | | | | 1.9 | Aug 1 1968 |
| ANNUAL RUNOFF (CFSM) | 3.12 | | 2.95 | | 2.19 | |
| ANNUAL RUNOFF (INCHES) | 42.42 | | 40.13 | | 29.71 | |
| 10 PERCENT EXCEEDS | 281 | | 246 | | 205 | |
| 50 PERCENT EXCEEDS | 76 | | 74 | | 50 | |
| 90 PERCENT EXCEEDS | 25 | | 22 | | 11 | |

e Estimated

CONNECTICUT RIVER BASIN

01170100 GREEN RIVER NEAR COLRAIN, MA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Intermittent water-quality samples, water years 1968-69, 1993-95, 2002-04; continuous water-quality records, water years 2002 and 2003.

PERIOD OF DAILY RECORD.--December 2001 to October 2002 (discontinued).

INSTRUMENTATION.--Specific conductance and water temperature water-quality monitor.

EXTREMES FOR PERIOD OF DAILY RECORD, DECEMBER 2001 TO OCTOBER 2002.--

SPECIFIC CONDUCTANCE: Maximum recorded, 129 μ S/cm, Oct. 10, 2002; minimum, 46 μ S/cm, Sept. 17, 2002.

WATER TEMPERATURE: Maximum recorded, 27.9°C, Aug. 16, 2002; minimum, 0.0°C, many days during winter period.

| DATE | TIME | INSTAN- TANEOUS DISCHARGE, CFS (00061) | DISSOLVED OXYGEN, MG/L (00300) | DISSOLVED OXYGEN, PERCENT OF SATURATION (00301) | PH, WATER, UNFLTRD FIELD, STD UNITS (00400) | SPECIF. CONDUCTANCE, WAT UNF US/CM 25 DEG C (00095) | TEMPERATURE, WATER, DEG C (00010) |
|----------|------|--|---|---|---|--|--|
| OCT 2003 | | | | | | | |
| 21... | 1340 | 83 | 11.0 | 99 | 7.9 | 97 | 9.1 |
| NOV | | | | | | | |
| 20... | 1330 | 602 | 11.7 | 99 | 6.8 | 48 | 7.2 |
| DEC | | | | | | | |
| 08... | 1315 | 159 | 14.2 | 98 | 7.0 | 80 | .0 |
| JAN 2004 | | | | | | | |
| 27... | 1400 | E37 | 14.6 | 101 | 7.2 | 91 | .0 |
| FEB | | | | | | | |
| 18... | 1205 | E32 | 14.2 | 97 | 7.5 | 92 | .0 |
| MAR | | | | | | | |
| 09... | 1230 | 94 | 13.9 | 100 | 7.1 | 74 | 1.7 |
| 23... | 1300 | 102 | 13.9 | 98 | 7.0 | 94 | .5 |
| APR | | | | | | | |
| 07... | 1315 | 200 | 12.6 | 99 | 7.5 | 57 | 4.2 |
| 14... | 1730 | 360 | 11.9 | 97 | 6.9 | 58 | 5.8 |
| MAY | | | | | | | |
| 12... | 0840 | 72 | 10.8 | 100 | 7.4 | 90 | 12.0 |
| JUN | | | | | | | |
| 15... | 0850 | 40 | 9.7 | 99 | 7.4 | 97 | 15.7 |
| JUL | | | | | | | |
| 20... | 0825 | 25 | 9.2 | 98 | 7.1 | 107 | 18.1 |
| AUG | | | | | | | |
| 11... | 0835 | E10 | 9.2 | 99 | 8.1 | 110 | 18.4 |
| SEP | | | | | | | |
| 02... | 1615 | E20 | 8.8 | 95 | 8.1 | 91 | 19.4 |

CONNECTICUT RIVER BASIN
01170100 GREEN RIVER NEAR COLRAIN, MA--Continued

| DATE | AMMONIA + ORG-N, WATER, UNFLTRD MG/L AS N (00625) | AMMONIA WATER, FLTRD, MG/L AS N (00608) | NITRITE + NITRATE WATER FLTRD, MG/L AS N (00631) | NITRITE WATER, FLTRD, MG/L AS N (00613) | ORTHO- PHOSPHATE, WATER, FLTRD, MG/L AS P (00671) | PHOSPHORUS, WATER, UNFLTRD MG/L (00665) | SUSPENDED SEDIMENT CONCEN- TRATION MG/L (80154) |
|-----------------|--|---|---|---|--|---|--|
| OCT 2003 | | | | | | | |
| 21... | E.07 | <.010 | .028 | <.008 | <.02 | <.004 | 1 |
| NOV | | | | | | | |
| 20... | .28 | <.010 | .067 | <.008 | <.02 | .027 | 20 |
| DEC | | | | | | | |
| 08... | E.07 | <.010 | .097 | <.008 | <.02 | E.004 | 2 |
| JAN 2004 | | | | | | | |
| 27... | <.10 | <.010 | .140 | <.008 | <.02 | <.004 | 1 |
| FEB | | | | | | | |
| 18... | <.10 | <.010 | .166 | <.008 | <.02 | <.004 | 0 |
| MAR | | | | | | | |
| 09... | <.10 | <.010 | .201 | <.008 | <.02 | E.002 | 0 |
| 23... | E.09 | <.010 | .186 | <.008 | <.02 | .009 | 6 |
| APR | | | | | | | |
| 07... | E.05 | <.010 | .162 | <.008 | <.02 | .006 | 3 |
| 14... | E.09 | <.010 | .113 | <.008 | <.02 | .009 | 6 |
| MAY | | | | | | | |
| 12... | E.06 | <.010 | .032 | E.006 | <.02 | <.004 | 0 |
| JUN | | | | | | | |
| 15... | .10 | <.010 | .057 | <.008 | <.02 | E.003 | 1 |
| JUL | | | | | | | |
| 20... | .13 | <.010 | .057 | <.008 | <.02 | .005 | 2 |
| AUG | | | | | | | |
| 11... | E.08 | <.010 | .039 | <.008 | <.02 | E.002 | 1 |
| SEP | | | | | | | |
| 02... | .10 | E.006 | .018 | <.008 | <.02 | E.004 | -- |

< Less than
E Estimated value

CONNECTICUT RIVER BASIN

01170500 CONNECTICUT RIVER AT MONTAGUE CITY, MA

LOCATION.--Lat 42° 34'43", long 72° 34'30", Franklin County, Hydrologic Unit 01080201, on left bank 75 ft downstream from railroad bridge at Montague City, 1,000 ft downstream from Deerfield River, and at mile 119.0.

DRAINAGE AREA.--7,860 mi².

PERIOD OF RECORD.--Discharge: March 1904 to current year. Prior to October 1929, published as "at Sunderland." Records published for both sites October 1929 to September 1932.

Water-quality records: Water years 1994-95.

REVISED RECORDS.--WSP 471: 1904-17. WSP 741: 1930-32. WSP 781: 1928(M). WSP 1051: 1905, 1909-10, 1912-14, 1920, 1922-23, 1925-26, 1928, drainage area at Sunderland. WSP 1301: 1905(M), 1914-19(M), 1930-31(M). WDR MA-RI-84-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 99.87 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1917, nonrecording gage; Oct. 1, 1917, to Oct. 8, 1921, water-stage recorder used for low stages, nonrecording gage otherwise; and Oct. 9, 1921, to Sept. 30, 1932, water-stage recorder; all at site 9 mi downstream at datum 1.00 ft lower. Since Oct. 1, 1929, water-stage recorder at present site and datum.

REMARKS.--Records good except those for estimated daily discharge, which are poor. Flow regulated by powerplants and by First Connecticut and Second Connecticut Lakes, Lake Francis, Moore and Comerford Reservoirs, and other reservoirs, combined usable capacity, about 43,400,000,000 ft³.

Telephone and satellite gage-height telemeters at station.

AVERAGE DISCHARGE.--100 years (water years 1905-2004), 13,970 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 236,000 ft³/s, Mar. 19, 1936, gage height, 49.2 ft, from floodmarks; minimum daily discharge, 215 ft³/s, Aug. 31, Sept. 1, 1958.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 86,700 ft³/s, Apr. 2, gage height, 29.45 ft; minimum discharge, 1,760 ft³/s, July 31, Aug. 4.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|--------|--------|---------|--------|--------|--------|---------|--------|--------|--------|--------|--------|
| 1 | 18000 | 55900 | 33500 | 27400 | 9540 | 4930 | 56700 | 16400 | 20300 | 4400 | 5980 | 22900 |
| 2 | 12900 | 39800 | 28600 | 25700 | 9110 | 4590 | 82700 | 14200 | 17200 | 5200 | 6630 | 20300 |
| 3 | 11700 | 32100 | 24900 | 26300 | 8930 | 8030 | 69000 | 15500 | 20000 | 3300 | 7020 | 14300 |
| 4 | 12400 | 32000 | 21800 | 22000 | 9170 | 14200 | 59000 | 16100 | 19400 | 3000 | 7630 | 12500 |
| 5 | 8100 | 29900 | 17000 | 24900 | 7780 | 14300 | 52600 | 24300 | 17800 | 5420 | 8060 | 6120 |
| 6 | 12000 | 28600 | 18200 | 24700 | 8880 | 12900 | 43800 | 24100 | 15100 | 5380 | 4300 | 6540 |
| 7 | 10200 | 27400 | 15200 | 20100 | 7630 | 15100 | 32900 | 22700 | 12600 | 2090 | 3230 | 8120 |
| 8 | 9400 | 23700 | 14700 | 18400 | 7270 | 19400 | 29100 | 17900 | 9800 | 4840 | 2400 | e11400 |
| 9 | 9330 | 20700 | 15300 | 15800 | 8440 | 18500 | 24900 | 15400 | 9460 | 7210 | 4400 | e16600 |
| 10 | 8500 | 18600 | 15100 | 12800 | 7180 | 14800 | 23600 | 15000 | 11100 | 7570 | 5270 | 26000 |
| 11 | 7310 | 19100 | 18900 | 17600 | 6390 | 13300 | 20100 | 13900 | 11900 | e8810 | 5790 | 25900 |
| 12 | 5480 | 16800 | 32500 | 17800 | 8280 | 13300 | 23200 | 14100 | 10200 | 6910 | 8620 | 19100 |
| 13 | 5850 | 17800 | 36400 | 17000 | 7050 | 12400 | 23600 | 13500 | 7990 | 7100 | 11800 | 16200 |
| 14 | 7650 | 21900 | 27200 | 16500 | 6030 | 11200 | 39300 | 6880 | 7050 | 6420 | 13900 | 11200 |
| 15 | 15500 | 20700 | 21600 | 21100 | 6830 | 10900 | 43200 | 7960 | 8860 | 8130 | 10300 | 11100 |
| 16 | 16000 | 18300 | 20700 | 22500 | 5950 | 11900 | 41600 | 12700 | 6840 | 6840 | 5990 | 10600 |
| 17 | 20000 | 16700 | 27100 | 19400 | 6690 | 12700 | 34000 | 12100 | 4460 | 6880 | 8610 | 7770 |
| 18 | 13900 | 13700 | 53200 | 19700 | 7830 | 9540 | 27500 | 11400 | 6320 | 3090 | 8570 | 27500 |
| 19 | 10200 | 15000 | 58600 | 16400 | 6070 | 9380 | 27200 | 12800 | 4610 | 4830 | 11000 | 35900 |
| 20 | 11600 | 34000 | 52500 | 14900 | 6880 | 7240 | 26100 | 13200 | 3480 | 5760 | 10900 | 25000 |
| 21 | 9280 | 52400 | 43700 | 13000 | 4050 | 6690 | 25200 | 10000 | 6100 | 6360 | 9300 | 17000 |
| 22 | 11700 | 49300 | 35900 | 13300 | 4820 | 10300 | 24600 | 9530 | 4220 | 5400 | 16000 | 15800 |
| 23 | 21100 | 41600 | 32500 | 13500 | 6300 | 10700 | 22300 | 8750 | 4460 | 4010 | 17900 | 14100 |
| 24 | 18300 | 33300 | 35200 | 11900 | 5890 | 8770 | 23600 | 24300 | 4730 | 7010 | 15300 | 11500 |
| 25 | 16000 | 27500 | 58000 | 11100 | 5640 | 8120 | 20800 | 49800 | 6150 | 9500 | 11700 | 7950 |
| 26 | 13600 | 25600 | 68600 | 12700 | 5760 | 9490 | 23500 | 46100 | 4540 | 8070 | 8720 | 8820 |
| 27 | 22800 | 22500 | 58200 | 10200 | 5970 | 21300 | 29000 | 38400 | 2660 | 7070 | 8360 | 9010 |
| 28 | 46600 | 23200 | 46200 | 11300 | 6900 | 34800 | 26200 | 31600 | 3160 | 11300 | 7900 | 7790 |
| 29 | 66700 | 35800 | 38800 | 10400 | 5480 | 34300 | 22200 | 28900 | 3990 | 12000 | 6120 | 10300 |
| 30 | 80500 | 42600 | 33100 | 10200 | --- | 36000 | 20000 | 25300 | 5500 | 9200 | 9190 | 9130 |
| 31 | 70700 | --- | 28400 | 7920 | --- | 39600 | --- | 20600 | --- | 7250 | 20000 | --- |
| TOTAL | 603300 | 856500 | 1031600 | 526520 | 202740 | 458680 | 1017500 | 593420 | 269980 | 200350 | 280890 | 446450 |
| MEAN | 19460 | 28550 | 33280 | 16980 | 6991 | 14800 | 33920 | 19140 | 8999 | 6463 | 9061 | 14880 |
| MAX | 80500 | 55900 | 68600 | 27400 | 9540 | 39600 | 82700 | 49800 | 20300 | 12000 | 20000 | 35900 |
| MIN | 5480 | 13700 | 14700 | 7920 | 4050 | 4590 | 20000 | 6880 | 2660 | 2090 | 2400 | 6120 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1904 - 2004, BY WATER YEAR (WY)

| | 8568 | 12430 | 12660 | 11060 | 10420 | 20730 | 38810 | 23200 | 11460 | 6689 | 5690 | 6041 |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| MEAN | 8568 | 12430 | 12660 | 11060 | 10420 | 20730 | 38810 | 23200 | 11460 | 6689 | 5690 | 6041 |
| MAX | 25750 | 42270 | 33280 | 23890 | 33650 | 71920 | 66290 | 47000 | 30730 | 25680 | 18550 | 32660 |
| (WY) | 1978 | 1928 | 2004 | 1978 | 1981 | 1936 | 1960 | 1940 | 1984 | 1973 | 1990 | 1938 |
| MIN | 1829 | 2053 | 2810 | 2732 | 2086 | 4316 | 11390 | 8080 | 4270 | 2250 | 2412 | 1834 |
| (WY) | 1909 | 1909 | 1911 | 1905 | 1905 | 1940 | 1995 | 1941 | 1964 | 1911 | 1965 | 1908 |

| SUMMARY STATISTICS | FOR 2003 CALENDAR YEAR | | FOR 2004 WATER YEAR | | WATER YEARS 1904 - 2004 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|-------------|
| ANNUAL TOTAL | 6409580 | | 6487930 | | | |
| ANNUAL MEAN | 17560 | | 17730 | | 13970 | |
| HIGHEST ANNUAL MEAN | | | | | 20680 | |
| LOWEST ANNUAL MEAN | | | | | 6768 | |
| HIGHEST DAILY MEAN | 80500 | Oct 30 | 82700 | Apr 2 | 233000 | Mar 19 1936 |
| LOWEST DAILY MEAN | 1760 | Jul 10 | 2090 | Jul 7 | 215 | Aug 31 1958 |
| ANNUAL SEVEN-DAY MINIMUM | 3730 | Jul 9 | 4030 | Jun 27 | 1300 | Jul 29 1965 |
| MAXIMUM PEAK FLOW | | | 86700 | Apr 2 | 236000 | Mar 19 1936 |
| MAXIMUM PEAK STAGE | | | 29.45 | Apr 2 | 49.20 | Mar 19 1936 |
| INSTANTANEOUS LOW FLOW | | | 1760 | Jul 31 | | |
| 10 PERCENT EXCEEDS | 37200 | | 35800 | | 31700 | |
| 50 PERCENT EXCEEDS | 11400 | | 13300 | | 9000 | |
| 90 PERCENT EXCEEDS | 4850 | | 5760 | | 3030 | |

e Estimated

CONNECTICUT RIVER BASIN

01171500 MILL RIVER AT NORTHAMPTON, MA

LOCATION.--Lat 42° 19'08", long 72° 39'56", Hampshire County, Hydrologic Unit 01080201, on left bank, 5 ft downstream from Clement Street bridge near Northampton, and about 4 mi upstream from mouth. Prior to October 1, 2002, gage located at lat 42°19'05", long 72°39'21", on right bank about 2.5 mi downstream, at different datum.

DRAINAGE AREA.--52.6 mi².

WATER DISCHARGE RECORDS

PERIOD OF RECORD.--Discharge: October 1938 to current year. October 1938 monthly discharge only, published in WSP 1301.

Water-quality records: Water years 1957-59, 1971, 1973, 1994, 2003-04.

REVISED RECORDS.--WSP 921: 1940. WSP 1231: 1940-42(M), 1944-45(M), 1948(M), 1949;WDR MA-RI-03-1: Drainage area.

GAGE.--Water-stage recorder and satellite telemeter. Elevation of gage is 170 ft above National Geodetic Vertical Datum of 1929 (from topographic map). Prior to Oct. 1, 2002, gage was at 140 ft elevation, at different datum, and was discontinued due to unstable channel conditions.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Prior to Oct. 1, 2002, flow regulated by mill upstream of original gage location.

AVERAGE DISCHARGE.--66 years (water years 1939-2004), 98.9 ft³/s, 25.55 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,300 ft³/s, Aug. 19, 1955, gage height, 11.78 ft, from rating curve extended above 3,700 ft³/s on basis of computation of peak flow over dam; minimum discharge, 2.2 ft³/s, Oct. 1, 1950; minimum daily discharge, 4.2 ft³/s, Aug. 21, 23, 24, 1957.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,130 ft³/s, Apr. 2, gage height, 13.42 ft; minimum discharge, 11 ft³/s, Sept. 7, 8.

**DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES**

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1 | 158 | 222 | 175 | 171 | e80 | 60 | 1300 | 119 | 118 | 19 | 48 | 20 |
| 2 | 133 | 186 | 152 | 156 | e75 | 91 | 1470 | 112 | 171 | 24 | 43 | 17 |
| 3 | 111 | 171 | 126 | 167 | e75 | 168 | 458 | 126 | 138 | 18 | 28 | 14 |
| 4 | 98 | 148 | 124 | 203 | e70 | 132 | 341 | 256 | 92 | 14 | 24 | 15 |
| 5 | 103 | 199 | 119 | 207 | e70 | 107 | 272 | 152 | 74 | 25 | 44 | 14 |
| 6 | 88 | 251 | 118 | 166 | e65 | 167 | 209 | 129 | 65 | 77 | 35 | 12 |
| 7 | 80 | 173 | 125 | 133 | 70 | 158 | 181 | 111 | 63 | 35 | 23 | 11 |
| 8 | 74 | 144 | 119 | e125 | e63 | 118 | 162 | 96 | 57 | 41 | 20 | 14 |
| 9 | 70 | 125 | 116 | e135 | e54 | 95 | 145 | 104 | 52 | 31 | 18 | 229 |
| 10 | 66 | 119 | 107 | e140 | 53 | 86 | 131 | 110 | 69 | 22 | 15 | 141 |
| 11 | 64 | 117 | 468 | e140 | 52 | 91 | 119 | 96 | 60 | 17 | 16 | 60 |
| 12 | 60 | 133 | 481 | e140 | e50 | 97 | 113 | 84 | 47 | 15 | 35 | 41 |
| 13 | 65 | 149 | 226 | e135 | 49 | 83 | 376 | 76 | 41 | 17 | 54 | 33 |
| 14 | 59 | 122 | 171 | e125 | 49 | 76 | 745 | 69 | 41 | 21 | 71 | 27 |
| 15 | 424 | 106 | 182 | e115 | e47 | 80 | 312 | 67 | 41 | 30 | 47 | 24 |
| 16 | 175 | 101 | 170 | e110 | e46 | 82 | 211 | 67 | 34 | 31 | 46 | 22 |
| 17 | 112 | 99 | 443 | e105 | e45 | 79 | 177 | 60 | 31 | 20 | 60 | 25 |
| 18 | 94 | 96 | 750 | e100 | 44 | 75 | 157 | 58 | 31 | 16 | 40 | 523 |
| 19 | 89 | 123 | 328 | e95 | 43 | 71 | 143 | 76 | 35 | 45 | 31 | 219 |
| 20 | 86 | 700 | 240 | e90 | e42 | 70 | 128 | 60 | 29 | 57 | 27 | 99 |
| 21 | 83 | 270 | 197 | e85 | 42 | 104 | 116 | 55 | 26 | 31 | 186 | 72 |
| 22 | 78 | 185 | 178 | e80 | 43 | 101 | 109 | 54 | 23 | 23 | 118 | 57 |
| 23 | 76 | 157 | 167 | e80 | e42 | 79 | 191 | 59 | 25 | 21 | 57 | 48 |
| 24 | 71 | 142 | 462 | e75 | 42 | 82 | 173 | 70 | 21 | 22 | 39 | 43 |
| 25 | 67 | 154 | 769 | e70 | e44 | 101 | 132 | 146 | 18 | 17 | 31 | 40 |
| 26 | 66 | 134 | 386 | e75 | e42 | 149 | 324 | 106 | 29 | 14 | 27 | 37 |
| 27 | 217 | 122 | 275 | e80 | e42 | 272 | 319 | 218 | 30 | 16 | 24 | 32 |
| 28 | 426 | 149 | 228 | e90 | e43 | 230 | 181 | 140 | 22 | 65 | 21 | 175 |
| 29 | 1190 | 484 | 204 | e95 | 48 | 168 | 145 | 111 | 23 | 43 | 20 | 470 |
| 30 | 496 | 220 | 196 | e90 | --- | 137 | 130 | 79 | 20 | 28 | 20 | 169 |
| 31 | 282 | --- | 192 | e80 | --- | 393 | --- | 67 | --- | 22 | 26 | --- |
| TOTAL | 5261 | 5501 | 7994 | 3658 | 1530 | 3802 | 8970 | 3133 | 1526 | 877 | 1294 | 2703 |
| MEAN | 170 | 183 | 258 | 118 | 52.8 | 123 | 299 | 101 | 50.9 | 28.3 | 41.7 | 90.1 |
| MAX | 1190 | 700 | 769 | 207 | 80 | 393 | 1470 | 256 | 171 | 77 | 186 | 523 |
| MIN | 59 | 96 | 107 | 70 | 42 | 60 | 109 | 54 | 18 | 14 | 15 | 11 |
| CFSM | 3.23 | 3.49 | 4.90 | 2.24 | 1.00 | 2.33 | 5.68 | 1.92 | 0.97 | 0.54 | 0.79 | 1.71 |
| IN. | 3.72 | 3.89 | 5.65 | 2.59 | 1.08 | 2.69 | 6.34 | 2.22 | 1.08 | 0.62 | 0.92 | 1.91 |

| STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 2004, BY WATER YEAR (WY) | | | | | | | | | | | | |
|---|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 56.6 | 89.1 | 101 | 91.5 | 102 | 193 | 233 | 132 | 79.5 | 39.1 | 35.4 | 37.6 |
| MAX | 456 | 334 | 307 | 287 | 338 | 475 | 478 | 326 | 300 | 146 | 254 | 215 |
| (WY) | 1956 | 1956 | 1997 | 1978 | 1981 | 1953 | 1993 | 1984 | 1982 | 2000 | 1955 | 1999 |
| MIN | 8.52 | 13.2 | 23.9 | 15.5 | 24.1 | 63.9 | 53.5 | 45.9 | 15.9 | 9.13 | 4.96 | 5.48 |
| (WY) | 1965 | 1965 | 1947 | 1981 | 1940 | 1989 | 1985 | 1985 | 1964 | 1957 | 1957 | 1957 |

| SUMMARY STATISTICS | | FOR 2003 CALENDAR YEAR | | | FOR 2004 WATER YEAR | | | WATER YEARS 1939 - 2004 | | |
|--------------------------|--|------------------------|--|--|---------------------|--|--|-------------------------|--|--|
| ANNUAL TOTAL | | 52029 | | | 46249 | | | | | |
| ANNUAL MEAN | | 143 | | | 126 | | | 98.9 | | |
| HIGHEST ANNUAL MEAN | | | | | | | | 157 | | |
| LOWEST ANNUAL MEAN | | | | | | | | 39.1 | | |
| HIGHEST DAILY MEAN | | 1190 | | | Oct 29 | | | 1470 | | |
| LOWEST DAILY MEAN | | 12 | | | Jul 31 | | | 11 | | |
| ANNUAL SEVEN-DAY MINIMUM | | 16 | | | Jul 26 | | | 14 | | |
| MAXIMUM PEAK FLOW | | | | | | | | 4130 | | |
| MAXIMUM PEAK STAGE | | | | | | | | 13.42 | | |
| INSTANTANEOUS LOW FLOW | | | | | | | | 11 | | |
| ANNUAL RUNOFF (CFSM) | | 2.71 | | | 2.40 | | | 1.88 | | |
| ANNUAL RUNOFF (INCHES) | | 36.80 | | | 32.71 | | | 25.55 | | |
| 10 PERCENT EXCEEDS | | 294 | | | 228 | | | 218 | | |
| 50 PERCENT EXCEEDS | | 97 | | | 84 | | | 57 | | |
| 90 PERCENT EXCEEDS | | 26 | | | 23 | | | 14 | | |

e Estimated

CONNECTICUT RIVER BASIN

01171500 MILL RIVER AT NORTHAMPTON, MA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Intermittent water-quality samples, water years 1957-59, 1971, 1973, 1994, 2003-04.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | TIME | INSTAN- TANEOUS DISCHARGE, CFS (00061) | DISSOLVED OXYGEN, MG/L (00300) | DISSOLVED OXYGEN, PERCENT OF SATURATION (00301) | PH, WATER, UNFLTRD FIELD, STD UNITS (00400) | SPECIF. CONDUCTANCE, WAT UNF US/CM 25 DEG C (00095) | TEMPERATURE, WATER, DEG C (00010) |
|----------|------|--|---|---|---|--|--|
| OCT 2003 | | | | | | | |
| 22... | 0800 | 78 | 10.8 | 96 | 7.2 | 97 | 9.6 |
| NOV | | | | | | | |
| 21... | 0800 | 287 | 12.1 | 98 | 6.8 | 65 | 6.0 |
| DEC | | | | | | | |
| 09... | 0900 | 121 | 14.0 | 95 | 6.8 | 90 | .0 |
| JAN 2004 | | | | | | | |
| 27... | 1050 | E80 | 15.1 | 103 | 6.7 | 107 | .0 |
| FEB | | | | | | | |
| 19... | 1045 | 42 | 14.1 | 99 | 6.9 | 116 | .8 |
| MAR | | | | | | | |
| 10... | 1015 | 85 | -- | -- | 6.7 | 113 | 2.4 |
| 24... | 1210 | 77 | 13.5 | 103 | 7.0 | 110 | 4.2 |
| APR | | | | | | | |
| 08... | 0715 | 164 | 12.9 | 99 | 7.0 | 68 | 3.6 |
| 15... | 1200 | 313 | 12.1 | 99 | 6.8 | 70 | 6.5 |
| MAY | | | | | | | |
| 12... | 1345 | 85 | 9.9 | 103 | 7.4 | 97 | 17.5 |
| JUN | | | | | | | |
| 15... | 1545 | 41 | 8.8 | 99 | 7.1 | 112 | 21.0 |
| JUL | | | | | | | |
| 20... | 1500 | 49 | 8.9 | 102 | 7.0 | 107 | 21.9 |
| AUG | | | | | | | |
| 11... | 1450 | 17 | 9.2 | 102 | 7.9 | 138 | 20.8 |
| SEP | | | | | | | |
| 03... | 0830 | 12 | 9.3 | 96 | 7.7 | 136 | 17.5 |

CONNECTICUT RIVER BASIN

01171500 MILL RIVER AT NORTHAMPTON, MA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | AMMONIA + ORG-N, WATER, UNFLTRD MG/L AS N (00625) | AMMONIA WATER, FLTRD, MG/L AS N (00608) | NITRITE + NITRATE WATER FLTRD, MG/L AS N (00631) | NITRITE WATER, FLTRD, MG/L AS N (00613) | ORTHO- PHOSPHATE, WATER, FLTRD, MG/L AS P (00671) | PHOSPHORUS, WATER, UNFLTRD MG/L (00665) | SUSPENDED SEDIMENT CONCENTRATION MG/L (80154) |
|----------|--|---|---|---|--|---|---|
| OCT 2003 | | | | | | | |
| 22... | 0.18 | <0.010 | 0.289 | <0.008 | <0.02 | 0.009 | 2 |
| NOV | | | | | | | |
| 21... | .28 | <.010 | .160 | <.008 | <.02 | .016 | 9 |
| DEC | | | | | | | |
| 09... | E.07 | <.010 | .357 | <.008 | <.02 | .009 | 3 |
| JAN 2004 | | | | | | | |
| 27... | .10 | E.007 | .570 | <.008 | <.02 | .009 | 1 |
| FEB | | | | | | | |
| 19... | .12 | .015 | .566 | <.008 | <.02 | .009 | 1 |
| MAR | | | | | | | |
| 10... | .12 | .016 | .395 | <.008 | <.02 | .011 | 1 |
| 24... | .13 | <.010 | .405 | <.008 | <.02 | .011 | 1 |
| APR | | | | | | | |
| 08... | E.09 | E.005 | .308 | <.008 | <.02 | .008 | 3 |
| 15... | .13 | <.010 | .220 | <.008 | <.02 | .012 | 9 |
| MAY | | | | | | | |
| 12... | .16 | <.010 | .219 | <.008 | <.02 | .009 | 1 |
| JUN | | | | | | | |
| 15... | .18 | E.005 | .351 | <.008 | <.02 | .018 | 3 |
| JUL | | | | | | | |
| 20... | .28 | <.010 | .225 | E.004 | <.02 | .020 | 7 |
| AUG | | | | | | | |
| 11... | .18 | <.010 | .401 | <.008 | <.02 | .020 | 3 |
| SEP | | | | | | | |
| 03... | .18 | .011 | .415 | <.008 | <.02 | .021 | -- |

< Less than
E Estimated value

CONNECTICUT RIVER BASIN

01172010 CONNECTICUT RIVER AT I-391 BRIDGE AT HOLYOKE, MA

LOCATION.--Lat 42° 11'26", long 72° 36'32", Hampden County, Hydrologic Unit 01080201, on right bank, 300 ft upstream from the Interstate 391 bridge behind the flood barrier near water access through wall at flood barrier mile 85.

DRAINAGE AREA.--8,332 mi².

PERIOD OF RECORD.--October 2002 to current year. December 1983 to September 2002, at site 1 mi upstream; discharge record not equivalent because diversion through canal was not included.

GAGE.--Water-stage recorder. Satellite and telephone telemeters at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Flow regulated by powerplants, by First Connecticut and Second Connecticut Lakes, Lake Francis, Moore and Comerford Reservoirs, and other reservoirs, combined usable capacity, about 47 billion ft³.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 91,700 ft³/s, Apr. 2, 2004, gage height, 25.20 ft; minimum discharge, 1,960 ft³/s, July 10, 2003.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge since at least 1854, 244,000 ft³/s, March 20, 1936, gage height, 35.0 ft, from floodmarks.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 91,700 ft³/s, Apr. 2, gage height, 25.20 ft; minimum discharge, 2,680 ft³/s, Aug. 9.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|--------|--------|---------|--------|--------|--------|---------|--------|--------|--------|--------|--------|
| 1 | 20600 | 60700 | 38600 | 26800 | e11000 | 6320 | 54700 | 21700 | 18600 | 5350 | 7620 | 18400 |
| 2 | 13900 | 43900 | 29500 | 26900 | e12700 | 7100 | 84500 | 19000 | 17200 | 5090 | 5380 | 19100 |
| 3 | 11600 | 35000 | 26100 | 25100 | e11600 | 7830 | 81400 | 18600 | 16900 | 4800 | 6570 | 15100 |
| 4 | 12300 | 30400 | 23100 | 24900 | e11700 | 12800 | 70500 | 19700 | 18300 | 3850 | 5750 | 11900 |
| 5 | 9580 | 31000 | 18900 | 23600 | 13000 | 17200 | 62600 | 24700 | 17300 | 4060 | 7310 | 7550 |
| 6 | 10400 | 28300 | 17000 | 27200 | 11400 | 14700 | 54200 | 27300 | 15100 | 6660 | 6500 | 5970 |
| 7 | 10700 | 27900 | 16800 | 24100 | e13400 | 17600 | 43300 | 26300 | 12500 | 5200 | 3690 | 6740 |
| 8 | 9410 | 24200 | 14900 | 20500 | e14000 | 20000 | 36100 | 22400 | 9900 | 3380 | 3290 | 8400 |
| 9 | 8610 | 21200 | 14900 | 18500 | 13200 | 19200 | 30700 | 19700 | 8830 | 6690 | 3060 | 12100 |
| 10 | 8390 | 18500 | 15000 | 14400 | e11800 | 19300 | 28100 | 17000 | 9640 | 6840 | 4590 | 21200 |
| 11 | 7310 | 18700 | 16600 | 15600 | e10800 | 15200 | 24700 | 16600 | 10500 | 7670 | 5170 | 23700 |
| 12 | 5900 | 17700 | 28300 | 18900 | e10600 | 15300 | 25800 | 15700 | 10400 | 6600 | 5840 | 21100 |
| 13 | 6260 | 17400 | 35000 | 18000 | e11400 | 14800 | 27800 | 15400 | 8560 | 7960 | 9180 | 15700 |
| 14 | 6530 | 18300 | 32400 | 19300 | 10300 | 13100 | 42500 | 11400 | 7450 | 5750 | 12400 | 11700 |
| 15 | 13900 | 20900 | 22700 | 22100 | 9060 | 12300 | 51700 | 8990 | 7660 | 6610 | 11000 | 10100 |
| 16 | 16300 | 19100 | 21300 | 26500 | 9110 | 13100 | 49200 | 11700 | 7910 | 7290 | 6700 | 10100 |
| 17 | 19100 | 17400 | 23800 | e23000 | 8590 | 13600 | 43600 | 12700 | 6110 | 6330 | 6270 | 7850 |
| 18 | 14600 | 15000 | 45100 | e19700 | 10600 | 12400 | 34300 | 12100 | 5570 | 6160 | 7900 | 17400 |
| 19 | 11400 | 14200 | 59200 | e16500 | 9630 | 10500 | 31900 | 12200 | 5930 | 4340 | 8420 | 39900 |
| 20 | 10700 | 24200 | 55600 | e14700 | 8400 | 10500 | 31600 | 11400 | 4650 | 5630 | 9030 | 29400 |
| 21 | 9690 | 46900 | 47200 | e13700 | 7150 | 8920 | 28900 | 8630 | 5170 | 6080 | 9210 | 20700 |
| 22 | 10900 | 50400 | 39500 | e13200 | 3780 | 9420 | 29300 | 8150 | 5760 | 6330 | 13500 | 16200 |
| 23 | 16500 | 44400 | 33400 | e12300 | 6910 | 13900 | 27700 | 6440 | 4780 | 5420 | 16100 | 14500 |
| 24 | 18700 | 36300 | 32800 | e11700 | 7160 | 11200 | 27900 | 13500 | 5530 | 4830 | 14000 | 11900 |
| 25 | 15700 | 29500 | 49400 | e11500 | 7130 | 10000 | 26000 | 34200 | 5540 | 8370 | 11900 | 8980 |
| 26 | 12700 | 25400 | 66400 | e10600 | 6330 | 9770 | 26800 | 45200 | 6000 | 7540 | 8880 | 8390 |
| 27 | 18100 | 23800 | 63400 | e10300 | 6840 | 16000 | 32800 | 38100 | 4720 | 7410 | 6970 | 8390 |
| 28 | 40100 | 20600 | 52000 | e10200 | 7530 | 30900 | 33100 | 32800 | 4020 | 8320 | 7450 | 9110 |
| 29 | 60800 | 30200 | 41300 | e9650 | 7520 | 36400 | 28600 | 27200 | 3690 | 11300 | 6960 | 12100 |
| 30 | 79100 | 40100 | 35400 | e9550 | --- | 35800 | 25800 | 24800 | 5270 | 9220 | 6450 | 12800 |
| 31 | 72800 | --- | 32000 | e9650 | --- | 39800 | --- | 20300 | --- | 6460 | 12700 | --- |
| TOTAL | 582580 | 851600 | 1047600 | 548650 | 282640 | 494960 | 1196100 | 603910 | 269490 | 197540 | 249790 | 436480 |
| MEAN | 18790 | 28390 | 33790 | 17700 | 9746 | 15970 | 39870 | 19480 | 8983 | 6372 | 8058 | 14550 |
| MAX | 79100 | 60700 | 66400 | 27200 | 14000 | 39800 | 84500 | 45200 | 18600 | 11300 | 16100 | 39900 |
| MIN | 5900 | 14200 | 14900 | 9550 | 3780 | 6320 | 24700 | 6440 | 3690 | 3380 | 3060 | 5970 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2003 - 2004, BY WATER YEAR (WY)

| | 2003 | 2004 | 2003 | 2004 | 2003 | 2004 | 2003 | 2004 | 2003 | 2004 | 2003 | 2004 |
|------|-------|-------|-------|-------|------|-------|-------|-------|-------|------|-------|-------|
| MEAN | 11980 | 20500 | 21480 | 13350 | 9017 | 20230 | 36620 | 19670 | 9952 | 5451 | 9835 | 11740 |
| MAX | 18790 | 28390 | 33790 | 17700 | 9746 | 24500 | 39870 | 19850 | 10920 | 6372 | 11610 | 14550 |
| (WY) | 2004 | 2004 | 2004 | 2004 | 2004 | 2003 | 2004 | 2003 | 2003 | 2004 | 2003 | 2004 |
| MIN | 5175 | 12620 | 9169 | 8993 | 8262 | 15970 | 33380 | 19480 | 8983 | 4529 | 8058 | 8928 |
| (WY) | 2003 | 2003 | 2003 | 2003 | 2003 | 2004 | 2003 | 2004 | 2004 | 2003 | 2004 | 2003 |

SUMMARY STATISTICS

| | FOR 2003 CALENDAR YEAR | FOR 2004 WATER YEAR | FOR 2003 WATER YEAR | FOR 2004 WATER YEAR | FOR WATER YEARS 2003 - 2004 |
|--------------------------|------------------------|---------------------|---------------------|---------------------|-----------------------------|
| ANNUAL TOTAL | 6463990 | 6761340 | 6463990 | 6761340 | 6463990 |
| ANNUAL MEAN | 17710 | 18470 | 17710 | 18470 | 17710 |
| HIGHEST ANNUAL MEAN | | | | | 2004 |
| LOWEST ANNUAL MEAN | | | | | 2003 |
| HIGHEST DAILY MEAN | 79100 | Oct 30 | 84500 | Apr 2 | Apr 2 2004 |
| LOWEST DAILY MEAN | 2490 | Jul 10 | 3060 | Aug 9 | Oct 6 2002 |
| ANNUAL SEVEN-DAY MINIMUM | 3750 | Jul 10 | 4580 | Jun 28 | Oct 5 2002 |
| MAXIMUM PEAK FLOW | | | 91700 | Apr 2 | Apr 2 2004 |
| MAXIMUM PEAK STAGE | | | 25.20 | Apr 2 | Apr 2 2004 |
| INSTANTANEOUS LOW FLOW | | | 2680 | Aug 9 | Jul 10 2003 |
| 10 PERCENT EXCEEDS | 39700 | | 36900 | | 32800 |
| 50 PERCENT EXCEEDS | 11000 | | 13600 | | 10700 |
| 90 PERCENT EXCEEDS | 4750 | | 6060 | | 4950 |

e Estimated

CONNECTICUT RIVER BASIN

01172500 WARE RIVER NEAR BARRE, MA

LOCATION.--Lat 42° 25' 34", long 72° 01' 30" Worcester County, Hydrologic Unit 01080204, on left bank 700 ft downstream from Barre Falls Reservoir, 1.6 mi upstream from Burnshirt River, 4 mi east of Barre, and at mile 33.3.

DRAINAGE AREA.--55.1 mi².

PERIOD OF RECORD.--Discharge: July 1946 to current year.

Water-quality records: Water years 1957, 1994.

REVISED RECORDS.--WDR MA-RI-84-1: Drainage area. WDR MA-RI-89-1: 1984-88.

GAGE.--Water-stage recorder. Elevation of gage is 745 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Prior to August 1955, slight regulation at low flow at times by Long Pond. Flow regulated by Barre Falls Reservoir since 1958. Diversion at times since 1955 from 6.5 mi² upstream of station for municipal supply of Fitchburg. Telephone and satellite gage-height telemeters at station.

AVERAGE DISCHARGE.--58 years (water years 1947-2004), 95.0 ft³/s, 23.42 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,890 ft³/s, Oct. 16, 1955, gage height, 6.31 ft; no flow part of each day Sept. 3-8, 13, 1996; minimum daily discharge, 0.1 ft³/s, Sept. 8, 11, 1995. Maximum discharge since construction of Barre Falls Reservoir in 1958, 1,630 ft³/s, Apr. 13, 1987, gage height, 5.56 ft; maximum gage height, 5.62 ft, Mar. 14, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 695 ft³/s, Apr. 8, gage height, 4.67 ft; minimum discharge, 3.7 ft³/s, Sept. 7.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|------|------|------|------|------|------|------|-------|-------|--------|
| 1 | 100 | 475 | 93 | 262 | 43 | 32 | 279 | 154 | 63 | 10 | 9.2 | 11 |
| 2 | 77 | 394 | 85 | 191 | 42 | 33 | 302 | 140 | 64 | 20 | 8.1 | 11 |
| 3 | 60 | 165 | e80 | 145 | 42 | 81 | 405 | 143 | 65 | 18 | 8.0 | 8.1 |
| 4 | 53 | 159 | e70 | 146 | 43 | 153 | 461 | 233 | 64 | 13 | 7.7 | 6.8 |
| 5 | 54 | 147 | e65 | 209 | 53 | 132 | 548 | 246 | 57 | 11 | 14 | 5.6 |
| 6 | 45 | 163 | 61 | 257 | 51 | 114 | 573 | 219 | 50 | 11 | 15 | 5.4 |
| 7 | 38 | 159 | 67 | 169 | 44 | 116 | 602 | 193 | 49 | 10 | 11 | 4.8 |
| 8 | 33 | 137 | 75 | 136 | 45 | 156 | 632 | 169 | 42 | 9.2 | 8.9 | 13 |
| 9 | 37 | 117 | 76 | 103 | 67 | 190 | 285 | 142 | 39 | 12 | 6.4 | 4.2 |
| 10 | 32 | 104 | 67 | 85 | 85 | 148 | 174 | 146 | 45 | 15 | 5.4 | 4.8 |
| 11 | 27 | 99 | 70 | 85 | 69 | 91 | 154 | 135 | 46 | 19 | 5.5 | 3.6 |
| 12 | 25 | 100 | 76 | 105 | 49 | 76 | 140 | 122 | 44 | 16 | 7.1 | 2.6 |
| 13 | 29 | 104 | 79 | 94 | 46 | 77 | 163 | 110 | 38 | 19 | 8.5 | 2.0 |
| 14 | 28 | 99 | 81 | e85 | 46 | 78 | 312 | 96 | 36 | 18 | 6.2 | 1.5 |
| 15 | 46 | 92 | 212 | e75 | 46 | 79 | 421 | 88 | 40 | 18 | 8.3 | 1.4 |
| 16 | 89 | 85 | 456 | e60 | e47 | 80 | 505 | 88 | 35 | 17 | 11 | 1.3 |
| 17 | 85 | 83 | 326 | 59 | 45 | 80 | 485 | 84 | 32 | 14 | 12 | 1.3 |
| 18 | 67 | 80 | 129 | 58 | 44 | 80 | 375 | 87 | 29 | 12 | 2.0 | 9.1 |
| 19 | 58 | 79 | 431 | 59 | 37 | 75 | 260 | 82 | 32 | 14 | 1.0 | 1.29 |
| 20 | 49 | 99 | 589 | 69 | 34 | 68 | 192 | 77 | 27 | 19 | 9.3 | 2.24 |
| 21 | 45 | 113 | 581 | 76 | 34 | 68 | 194 | 82 | 23 | 16 | 2.7 | 2.63 |
| 22 | 42 | 108 | 588 | 75 | 34 | 95 | 162 | 76 | 21 | 13 | 5.8 | 1.82 |
| 23 | 40 | 104 | 405 | 56 | 43 | 120 | 175 | 71 | 20 | 11 | 4.4 | 7.3 |
| 24 | 41 | 95 | 212 | 41 | 37 | 119 | 205 | 71 | 17 | 13 | 3.1 | 5.2 |
| 25 | 40 | 92 | 74 | 42 | 32 | 117 | 186 | 81 | 15 | 15 | 2.3 | 4.0 |
| 26 | 42 | 86 | 206 | 50 | 32 | 96 | 196 | 77 | 15 | 12 | 1.8 | 3.2 |
| 27 | 92 | 89 | 298 | 48 | 32 | 89 | 263 | 94 | 15 | 9.1 | 1.5 | 2.7 |
| 28 | 231 | 85 | 295 | 42 | 32 | 91 | 257 | 106 | 13 | 15 | 1.2 | 6.1 |
| 29 | 258 | 93 | 383 | 42 | 32 | 133 | 218 | 108 | 13 | 15 | 1.1 | 1.11 |
| 30 | 272 | 93 | 415 | 42 | --- | 199 | 183 | 88 | 12 | 13 | 1.1 | 1.68 |
| 31 | 398 | --- | 342 | 42 | --- | 254 | --- | 70 | --- | 11 | 1.1 | --- |
| TOTAL | 2533 | 3898 | 6987 | 3008 | 1286 | 3320 | 9307 | 3678 | 1061 | 438.3 | 452.6 | 1745.7 |
| MEAN | 81.7 | 130 | 225 | 97.0 | 44.3 | 107 | 310 | 119 | 35.4 | 14.1 | 14.6 | 58.2 |
| MAX | 398 | 475 | 589 | 262 | 85 | 254 | 632 | 246 | 65 | 20 | 5.8 | 2.63 |
| MIN | 25 | 79 | 61 | 41 | 32 | 32 | 140 | 70 | 12 | 9.1 | 5.4 | 4.8 |
| IN. | 1.71 | 2.63 | 4.72 | 2.03 | 0.87 | 2.24 | 6.28 | 2.48 | 0.72 | 0.30 | 0.31 | 1.18 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 2004, BY WATER YEAR (WY)

| | MEAN | MAX | MIN |
|------|------|------|------|
| MEAN | 52.1 | 81.4 | 104 |
| MAX | 275 | 233 | 327 |
| (WY) | 1956 | 1956 | 1997 |
| MIN | 4.17 | 6.78 | 13.1 |
| (WY) | 1965 | 1965 | 1981 |

SUMMARY STATISTICS FOR 2003 CALENDAR YEAR FOR 2004 WATER YEAR WATER YEARS 1946 - 2004

| | | | |
|--------------------------|---------|---------|-------|
| ANNUAL TOTAL | 44936.6 | 37714.6 | |
| ANNUAL MEAN | 123 | 103 | 95.0 |
| HIGHEST ANNUAL MEAN | | | 157 |
| LOWEST ANNUAL MEAN | | | 29.5 |
| HIGHEST DAILY MEAN | 693 | Apr 2 | 632 |
| LOWEST DAILY MEAN | 8.3 | Sep 14 | 4.8 |
| ANNUAL SEVEN-DAY MINIMUM | 9.8 | Sep 9 | 6.8 |
| MAXIMUM PEAK FLOW | | | 695 |
| MAXIMUM PEAK STAGE | | | 4.67 |
| INSTANTANEOUS LOW FLOW | | | 3.7 |
| ANNUAL RUNOFF (INCHES) | 30.34 | 25.46 | 23.42 |
| 10 PERCENT EXCEEDS | 282 | 257 | 220 |
| 50 PERCENT EXCEEDS | 87 | 68 | 59 |
| 90 PERCENT EXCEEDS | 18 | 12 | 7.4 |

e Estimated

CONNECTICUT RIVER BASIN

01173000 WARE RIVER AT INTAKE WORKS NEAR BARRE, MA

LOCATION.--Lat 42° 23'26", long 72° 03'39", Worcester County, Hydrologic Unit 01080204, on right bank above diversion dam at Ware River intake works, 2.7 mi downstream from Burnshirt River, 3 mi southeast of Barre, and at mile 29.1.

DRAINAGE AREA.--96.3 mi².

PERIOD OF RECORD.--January 1928 to current year. Prior to October 1977, published as Ware River at Coldbrook.

REVISED RECORDS.--WSP 1031: 1944. WDR MA-RI-84-1: Drainage area.

GAGE.--Venturi meters and water-stage recorder. Datum of gage is 5.65 ft below sea level. Prior to Feb. 1, 1936, water-stage recorder at site 0.2 mi downstream at datum 631.91 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Figures of discharge include diversion as needed for Boston metropolitan district during period Oct. 15 to June 14 of each year and at other times for emergency flood-control purposes as authorized by U.S. Army Corps of Engineers; diversion began in March 1931. Flow regulated by Barre Falls Reservoir 4.3 mi upstream (see table with station 01172500) since 1958. Diversion at times since 1955 from 6.5 mi² upstream for municipal supply of Fitchburg. Computations of daily discharge are made in cooperation with Department of Conservation and Recreation, Division of Water-Supply Protection, and Massachusetts Water Resources Authority, which collected gage-height and venturi-meter records.

AVERAGE DISCHARGE.--76 years (water years 1929--2004) 168 ft³/s, 23.63 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,000 ft³/s, Sept. 21, 1938, gage height, 664.28 ft, by computation of flow over dam; minimum daily discharge, 0.46 ft³/s, Sept. 15, 1987, caused by unusual regulation. Maximum daily discharge since construction of Barre Falls Reservoir in 1958, 1,590 ft³/s, Apr. 14, 1987.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 830 ft³/s, Dec. 20; minimum daily discharge, 11 ft³/s, Sept. 6, 7.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|-------|------|------|------|-------|------|------|------|------|------|
| 1 | 110 | 552 | 158 | 381 | 92 | 76 | 713 | 239 | 123 | 15 | 20 | 14 |
| 2 | 87 | 438 | 137 | 298 | 90 | 96 | 781 | 228 | 119 | 39 | 29 | 13 |
| 3 | 71 | 207 | 132 | 263 | 90 | 153 | 682 | 261 | 122 | 34 | 25 | 12 |
| 4 | 68 | 216 | 127 | 277 | 94 | 263 | 679 | 413 | 112 | 28 | 18 | 12 |
| 5 | 66 | 211 | 118 | 346 | 101 | 226 | 732 | 378 | 99 | 26 | 26 | 12 |
| 6 | 58 | 243 | 125 | 355 | 105 | 247 | 716 | 324 | 108 | 25 | 24 | 11 |
| 7 | 52 | 228 | 125 | 249 | 105 | 243 | 743 | 281 | 108 | 23 | 19 | 11 |
| 8 | 48 | 191 | 128 | 244 | 104 | 252 | 773 | 244 | 87 | 23 | 16 | 12 |
| 9 | 49 | 167 | 129 | 256 | 115 | 272 | 370 | 237 | 81 | 39 | 14 | 65 |
| 10 | 44 | 151 | 129 | 200 | 132 | 219 | 253 | 240 | 99 | 39 | 12 | 59 |
| 11 | 39 | 148 | 157 | 200 | 111 | 167 | 244 | 210 | 95 | 42 | 12 | 43 |
| 12 | 39 | 152 | 235 | 184 | 98 | 149 | 203 | 194 | 82 | 34 | 17 | 30 |
| 13 | 44 | 162 | 195 | 242 | 93 | 143 | 371 | 174 | 75 | 30 | 18 | 23 |
| 14 | 44 | 149 | 178 | 181 | 93 | 141 | 734 | 155 | 71 | 30 | 14 | 18 |
| 15 | 89 | 137 | 293 | 154 | 94 | 148 | 688 | 143 | 72 | 30 | 19 | 15 |
| 16 | 111 | 131 | 485 | 144 | 94 | 142 | 672 | 144 | 68 | 27 | 22 | 15 |
| 17 | 100 | 134 | 559 | 130 | 86 | 144 | 629 | 139 | 62 | 24 | 22 | 24 |
| 18 | 82 | 134 | 708 | 127 | 83 | 146 | 430 | 140 | 58 | 22 | 25 | 296 |
| 19 | 73 | 131 | 789 | 124 | 73 | 138 | 350 | 139 | 58 | 24 | 18 | 223 |
| 20 | 67 | 169 | 830 | 124 | 70 | 139 | 289 | 139 | 57 | 35 | 16 | 263 |
| 21 | 64 | 198 | 758 | 132 | 70 | 141 | 267 | 139 | 50 | 25 | 34 | 258 |
| 22 | 61 | 183 | 750 | 132 | 71 | 168 | 234 | 135 | 45 | 22 | 80 | 154 |
| 23 | 62 | 171 | 516 | 125 | 83 | 192 | 249 | 133 | 43 | 20 | 15 | 71 |
| 24 | 61 | 155 | 420 | 88 | 76 | 182 | 307 | 122 | 34 | 25 | 24 | 56 |
| 25 | 57 | 150 | 451 | 85 | 72 | 184 | 270 | 136 | 28 | 30 | 38 | 54 |
| 26 | 60 | 140 | 499 | 96 | 71 | 189 | 347 | 139 | 26 | 23 | 28 | 43 |
| 27 | 162 | 145 | 507 | 100 | 73 | 243 | 443 | 162 | 26 | 20 | 26 | 35 |
| 28 | 364 | 172 | 464 | 95 | 72 | 285 | 393 | 197 | 24 | 25 | 23 | 105 |
| 29 | 545 | 185 | 526 | 95 | 72 | 282 | 320 | 185 | 25 | 24 | 22 | 250 |
| 30 | 552 | 173 | 533 | 93 | --- | 300 | 274 | 153 | 25 | 24 | 18 | 263 |
| 31 | 512 | --- | 461 | 93 | --- | 434 | --- | 138 | --- | 21 | 15 | --- |
| TOTAL | 3841 | 5723 | 11622 | 5613 | 2583 | 6104 | 14156 | 6061 | 2082 | 848 | 709 | 2460 |
| MEAN | 124 | 191 | 375 | 181 | 89.1 | 197 | 472 | 196 | 69.4 | 27.4 | 22.9 | 82.0 |
| MAX | 552 | 552 | 830 | 381 | 132 | 434 | 781 | 413 | 123 | 42 | 80 | 296 |
| MIN | 39 | 131 | 118 | 85 | 70 | 76 | 203 | 122 | 24 | 15 | 12 | 11 |
| CFSM | 1.29 | 1.98 | 3.89 | 1.88 | 0.92 | 2.04 | 4.90 | 2.03 | 0.72 | 0.28 | 0.24 | 0.85 |
| IN. | 1.48 | 2.21 | 4.49 | 2.17 | 1.00 | 2.36 | 5.47 | 2.34 | 0.80 | 0.33 | 0.27 | 0.95 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1928 - 2004, BY WATER YEAR (WY)

| | | | | | | | | | | | | |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 86.6 | 135 | 172 | 177 | 176 | 323 | 406 | 216 | 140 | 67.2 | 53.4 | 63.4 |
| MAX | 465 | 445 | 570 | 499 | 488 | 1066 | 963 | 438 | 503 | 337 | 319 | 893 |
| (WY) | 1956 | 1956 | 1997 | 1979 | 1976 | 1936 | 1940 | 1989 | 1984 | 1938 | 1955 | 1938 |
| MIN | 7.86 | 13.9 | 29.1 | 17.2 | 37.5 | 118 | 129 | 73.8 | 18.2 | 9.00 | 4.94 | 6.12 |
| (WY) | 1965 | 1965 | 1966 | 1981 | 1980 | 1940 | 1985 | 1999 | 1999 | 1999 | 1999 | 1995 |

SUMMARY STATISTICS

| | FOR 2003 CALENDAR YEAR | | FOR 2004 WATER YEAR | | WATER YEARS 1928 - 2004 | |
|--------------------------|------------------------|--|---------------------|--|-------------------------|--|
| ANNUAL TOTAL | 76440.3 | | 61802 | | | |
| ANNUAL MEAN | 209 | | 169 | | 168 | |
| HIGHEST ANNUAL MEAN | | | | | 277 | |
| LOWEST ANNUAL MEAN | | | | | 56.4 | |
| HIGHEST DAILY MEAN | 1050 | | Mar 27 | | 8740 | |
| LOWEST DAILY MEAN | 9.3 | | Sep 10 | | 0.46 | |
| ANNUAL SEVEN-DAY MINIMUM | 14 | | Sep 9 | | 2.3 | |
| MAXIMUM PEAK FLOW | | | | | 14000 | |
| MAXIMUM PEAK STAGE | | | | | 664.28 | |
| INSTANTANEOUS LOW FLOW | | | | | 11 | |
| ANNUAL RUNOFF (CFSM) | 2.17 | | | | 1.74 | |
| ANNUAL RUNOFF (INCHES) | 29.53 | | | | 23.87 | |
| 10 PERCENT EXCEEDS | 484 | | | | 383 | |
| 50 PERCENT EXCEEDS | 142 | | | | 109 | |
| 90 PERCENT EXCEEDS | 37 | | | | 19 | |

CONNECTICUT RIVER BASIN

01173500 WARE RIVER AT GIBBS CROSSING, MA

LOCATION.--Lat 42° 14'10", long 72° 16'23", Hampshire County, Hydrologic Unit 01080204, on right bank 0.5 mi upstream from Gibbs Crossing, 1.8 mi upstream from Beaver Brook, 2.5 mi southwest of Ware, and 8.8 mi upstream from mouth.

DRAINAGE AREA.--197 mi².

PERIOD OF RECORD.--Discharge: August 1912 to current year.

Water-quality records: Water years 1953-54.

REVISED RECORDS.--WSP 1031: 1944.

WSP 1301: 1914(M). WDR MA-RI-84-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 379.79 ft above National Geodetic Vertical Datum of 1929. Prior to Mar. 1, 1930, at site 0.5 mi downstream at different datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Diversion at times: Since March 1931 from 96.3 mi² for supply of Boston metropolitan district and since 1955 from 6.5 mi² for municipal supply of Fitchburg. Flow regulated by mills upstream and by Barre Falls Reservoir (see station 01172500) since 1958. Satellite gage-height telemeter at station.

AVERAGE DISCHARGE.--18 years (water years 1913-30), 313 ft³/s, 21.36 in/yr; 74 years (water years 1931-2004), affected by diversion and storage, 292 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 22,700 ft³/s, Sept. 21, 1938, gage height, 18.2 ft, from floodmarks, from rating curve extended above 4,600 ft³/s on basis of contracted-opening measurement at gage height 12.83 ft and slope-area measurement at gage height 18.2 ft; minimum discharge, 4.2 ft³/s, Aug. 24, 1995; minimum daily discharge, 6.0 ft³/s, Oct. 4, 1914. Maximum discharge since construction of Barre Falls Reservoir in 1958, 5,050 ft³/s, Mar. 6, 1979, gage height, 7.94 ft.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,690 ft³/s, Dec. 18, gage height, 5.84 ft; minimum discharge, 17 ft³/s, Sept. 7.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|-------|-------|------|-------|-------|-------|------|------|------|------|
| 1 | 244 | 422 | 312 | 761 | 154 | 177 | 1170 | 532 | 269 | 53 | 70 | 43 |
| 2 | 209 | 362 | 286 | 666 | 160 | 229 | 1340 | 454 | 268 | 71 | 41 | 45 |
| 3 | 164 | 325 | 249 | 556 | 155 | 451 | 865 | 424 | 273 | 92 | 52 | 43 |
| 4 | 155 | 371 | 237 | 593 | 153 | 502 | 627 | 729 | 259 | 76 | 64 | 43 |
| 5 | 146 | 372 | e230 | 669 | 166 | 533 | 579 | 850 | 237 | 58 | 66 | 44 |
| 6 | 137 | 439 | 206 | 716 | 176 | 527 | 488 | 684 | 211 | 88 | 61 | 37 |
| 7 | 123 | 429 | 232 | e640 | e225 | 621 | 412 | 579 | 201 | 68 | 51 | 19 |
| 8 | 117 | 380 | e280 | e620 | 196 | 524 | 333 | 522 | 187 | 74 | 40 | 32 |
| 9 | 78 | 325 | e300 | e560 | e180 | 472 | 351 | 430 | 142 | 51 | 33 | 128 |
| 10 | 68 | 306 | 262 | e500 | 189 | 445 | 363 | 460 | 164 | 94 | 43 | 183 |
| 11 | 120 | 278 | 358 | e420 | 212 | 360 | 302 | 437 | 204 | 90 | 29 | 128 |
| 12 | 73 | 287 | 789 | e360 | 208 | 320 | 316 | 377 | 170 | 83 | 31 | 96 |
| 13 | 95 | 301 | e630 | 343 | 182 | 304 | 404 | 338 | 148 | 69 | 33 | 60 |
| 14 | 82 | 300 | e600 | e430 | 166 | 283 | 1560 | 295 | 137 | 68 | 36 | 69 |
| 15 | 166 | 288 | 481 | e460 | e175 | 280 | 1070 | 267 | 131 | 35 | 48 | 43 |
| 16 | 228 | 265 | e640 | e430 | e160 | 294 | 700 | 263 | 129 | 71 | 42 | 47 |
| 17 | 207 | 263 | 969 | e370 | e155 | 293 | 548 | 260 | 120 | 53 | 70 | 61 |
| 18 | 175 | 258 | 2370 | e310 | e160 | 266 | 454 | 253 | 120 | 66 | 38 | 716 |
| 19 | 142 | 250 | 1180 | e250 | e150 | 277 | 641 | 288 | 129 | 44 | 60 | 1140 |
| 20 | 138 | 367 | 736 | 223 | e135 | 254 | 645 | 260 | 121 | 67 | 38 | 517 |
| 21 | 115 | 425 | 602 | 204 | 147 | 336 | 526 | 224 | 116 | 73 | 102 | 498 |
| 22 | 122 | 411 | 493 | 166 | 143 | 379 | 487 | 246 | 126 | 39 | 182 | 404 |
| 23 | 132 | 348 | 450 | 232 | e135 | 358 | 540 | 262 | 84 | 62 | 139 | 269 |
| 24 | 122 | 323 | 806 | e205 | e150 | 355 | 647 | 238 | 73 | 55 | 67 | 166 |
| 25 | 121 | 299 | 1710 | e178 | e140 | 340 | 566 | 275 | 91 | 41 | 73 | 128 |
| 26 | 115 | 290 | 1290 | e170 | e140 | 368 | 578 | 264 | 87 | 74 | 57 | 129 |
| 27 | 238 | 281 | 1100 | 121 | e140 | 457 | 970 | 324 | 87 | 33 | 53 | 96 |
| 28 | 829 | 287 | 942 | e165 | e145 | 524 | 952 | 361 | 88 | 65 | 51 | 166 |
| 29 | 1180 | 371 | 847 | 157 | 149 | 447 | 766 | 367 | 55 | 54 | 47 | 476 |
| 30 | 1370 | 352 | 899 | 160 | --- | 321 | 620 | 300 | 75 | 38 | 44 | 593 |
| 31 | 586 | --- | 886 | 158 | --- | 398 | --- | 249 | --- | 43 | 43 | --- |
| TOTAL | 7797 | 9975 | 21372 | 11793 | 4746 | 11695 | 19820 | 11812 | 4502 | 1948 | 1804 | 6419 |
| MEAN | 252 | 332 | 689 | 380 | 164 | 377 | 661 | 381 | 150 | 62.8 | 58.2 | 214 |
| MAX | 1370 | 439 | 2370 | 761 | 225 | 621 | 1560 | 850 | 273 | 94 | 182 | 1140 |
| MIN | 68 | 250 | 206 | 121 | 135 | 177 | 302 | 224 | 55 | 33 | 29 | 19 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931 - 2004, BY WATER YEAR (WY)

| | | | | | | | | | | | | |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 166 | 250 | 307 | 326 | 321 | 520 | 597 | 373 | 258 | 139 | 121 | 135 |
| MAX | 750 | 922 | 1295 | 794 | 802 | 1838 | 1394 | 830 | 746 | 714 | 890 | 1707 |
| (WY) | 1956 | 1956 | 1997 | 1996 | 1976 | 1936 | 1956 | 1996 | 1984 | 1938 | 1955 | 1938 |
| MIN | 29.0 | 37.6 | 68.5 | 29.6 | 77.7 | 210 | 231 | 167 | 60.4 | 30.9 | 16.0 | 14.5 |
| (WY) | 1965 | 2002 | 1966 | 1981 | 1980 | 1989 | 1966 | 1965 | 1999 | 1999 | 1999 | 1953 |

SUMMARY STATISTICS FOR 2003 CALENDAR YEAR FOR 2004 WATER YEAR WATER YEARS 1931 - 2004

| | | | | | | | | | | | | |
|--------------------------|--------|--------|------|--------|-------|--------|------|--|--|--|--|------|
| ANNUAL TOTAL | 130646 | 113683 | | | | | | | | | | |
| ANNUAL MEAN | 358 | 311 | | | | | | | | | | |
| HIGHEST ANNUAL MEAN | | | 292 | | | | | | | | | |
| LOWEST ANNUAL MEAN | | | 581 | | | | | | | | | 1938 |
| HIGHEST DAILY MEAN | 2370 | Dec 18 | 2370 | Dec 18 | 16700 | Sep 21 | 1938 | | | | | |
| LOWEST DAILY MEAN | 38 | Sep 22 | 19 | Sep 7 | 7.0 | Sep 12 | 1953 | | | | | |
| ANNUAL SEVEN-DAY MINIMUM | 55 | Sep 9 | 35 | Aug 8 | 9.4 | Sep 8 | 1953 | | | | | |
| MAXIMUM PEAK FLOW | | | 2690 | Dec 18 | 22700 | Sep 21 | 1938 | | | | | |
| MAXIMUM PEAK STAGE | | | 5.84 | Dec 18 | 18.20 | Sep 21 | 1938 | | | | | |
| INSTANTANEOUS LOW FLOW | | | 17 | Sep 7 | 4.2 | Aug 24 | 1995 | | | | | |
| 10 PERCENT EXCEEDS | 740 | | 642 | | 613 | | | | | | | |
| 50 PERCENT EXCEEDS | 295 | | 238 | | 213 | | | | | | | |
| 90 PERCENT EXCEEDS | 95 | | 53 | | 48 | | | | | | | |

e Estimated

CONNECTICUT RIVER BASIN

01174500 EAST BRANCH SWIFT RIVER NEAR HARDWICK, MA

LOCATION.--Lat 42° 23'36", long 72° 14'21", Worcester County, Hydrologic Unit 01080204, on left bank 100 ft above spillway of regulating dam and 4.6 mi northwest of Hardwick.

DRAINAGE AREA.--43.7 mi².

PERIOD OF RECORD.--Discharge: January 1937 to current year. Published as "near Dana" January 1937 to September 1939.

Water-quality records: Water year 1957.

GAGE.--Water-stage recorder. Concrete spillway since Mar. 12, 1940. Datum of gage is 504.70 ft above National Geodetic Vertical Datum of 1929. Satellite gage-height telemeter at station.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--67 years (water years 1938-2004), 71.7 ft³/s, 22.26 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,780 ft³/s, Sept. 21, 1938, average of slope-area and contracted-opening measurements; maximum gage height since construction of concrete spillway in 1940; 22.49 ft, June 25, 1944; no flow at times during several years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 844 ft³/s, Dec. 18, gage height, 20.93 ft; minimum discharge, 0.55 ft³/s, Sept. 6-8.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004 DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|------|------|------|------|------|------|------|-------|-------|---------|
| 1 | 67 | 171 | 100 | 167 | 51 | 42 | 339 | 98 | 53 | 12 | 9.2 | 5.1 |
| 2 | 56 | 131 | 88 | 155 | 50 | 53 | 510 | 88 | 57 | 17 | 8.8 | 3.9 |
| 3 | 45 | 117 | 81 | 153 | 52 | 86 | 385 | 84 | 68 | 17 | 7.6 | 2.8 |
| 4 | 38 | 99 | 75 | 170 | 63 | 117 | 274 | 124 | 67 | 14 | 8.2 | 2.3 |
| 5 | 38 | 93 | 68 | 181 | 57 | 120 | 233 | 132 | 54 | 13 | 11 | 1.6 |
| 6 | 35 | 120 | 72 | 175 | 66 | 139 | 190 | 109 | 43 | 14 | 11 | 0.88 |
| 7 | 31 | 123 | 88 | 149 | 77 | 164 | 156 | 90 | 38 | 12 | 8.4 | 0.68 |
| 8 | 30 | 99 | 84 | 121 | 70 | 149 | 132 | 69 | 37 | 12 | 6.7 | 1.6 |
| 9 | 28 | 84 | 75 | 93 | 64 | 123 | 114 | 65 | 34 | 19 | 5.7 | 13 |
| 10 | 25 | 78 | 74 | 77 | 62 | 103 | 97 | 74 | 42 | 23 | 4.6 | 28 |
| 11 | 23 | 74 | 107 | 73 | 59 | 91 | 85 | 70 | 43 | 24 | 4.0 | 26 |
| 12 | 21 | 81 | 229 | 82 | 55 | 88 | 80 | 60 | 35 | 19 | 4.3 | 21 |
| 13 | 22 | 83 | 211 | 88 | 54 | 81 | 109 | 53 | 28 | 17 | 4.4 | 16 |
| 14 | 23 | 75 | 165 | 79 | 52 | 74 | 494 | 43 | 26 | 16 | 4.2 | 12 |
| 15 | 48 | 75 | 170 | 74 | 50 | 72 | 422 | 40 | 27 | 14 | 6.5 | 8.8 |
| 16 | 58 | 73 | 148 | 67 | 46 | 74 | 270 | 43 | 26 | 12 | 8.2 | 7.7 |
| 17 | 53 | 72 | 174 | 67 | 46 | 78 | 196 | 41 | 23 | 12 | 9.3 | 7.0 |
| 18 | 47 | 70 | 737 | 72 | 47 | 75 | 167 | 38 | 22 | 11 | 8.3 | 122 |
| 19 | 41 | 79 | 514 | 72 | 47 | 72 | 132 | 47 | 22 | 14 | 8.0 | 259 |
| 20 | 37 | 148 | 322 | 69 | 46 | 69 | 113 | 43 | 19 | 19 | 8.1 | 142 |
| 21 | 35 | 180 | 226 | 67 | 47 | 80 | 94 | 38 | 16 | 19 | 20 | 82 |
| 22 | 32 | 152 | 193 | 65 | 48 | 88 | 86 | 37 | 15 | 17 | 37 | 53 |
| 23 | 31 | 124 | 174 | 61 | 44 | 81 | 105 | 37 | 15 | 15 | 32 | 36 |
| 24 | 30 | 107 | 198 | 56 | 43 | 78 | 141 | 40 | 14 | 18 | 23 | 25 |
| 25 | 27 | 98 | 519 | 52 | 41 | 79 | 124 | 52 | 13 | 15 | 17 | 20 |
| 26 | 30 | 91 | 454 | 48 | 39 | 90 | 143 | 57 | 14 | 12 | 13 | 17 |
| 27 | 64 | 90 | 319 | 46 | 38 | 138 | 207 | 80 | 13 | 11 | 10 | 13 |
| 28 | 250 | 95 | 240 | 53 | 38 | 171 | 179 | 93 | 12 | 12 | 9.2 | 24 |
| 29 | 357 | 108 | 199 | 53 | 39 | 149 | 135 | 86 | 14 | 13 | 8.1 | 97 |
| 30 | 401 | 106 | 186 | 52 | --- | 123 | 112 | 65 | 13 | 11 | 6.9 | 129 |
| 31 | 242 | --- | 180 | 51 | --- | 135 | --- | 49 | --- | 9.6 | 6.4 | --- |
| TOTAL | 2265 | 3096 | 6470 | 2788 | 1491 | 3082 | 5824 | 2045 | 903 | 463.6 | 329.1 | 1177.36 |
| MEAN | 73.1 | 103 | 209 | 89.9 | 51.4 | 99.4 | 194 | 66.0 | 30.1 | 15.0 | 10.6 | 39.2 |
| MAX | 401 | 180 | 737 | 181 | 77 | 171 | 510 | 132 | 68 | 24 | 37 | 259 |
| MIN | 21 | 70 | 68 | 46 | 38 | 42 | 80 | 37 | 12 | 9.6 | 4.0 | 0.68 |
| CFSM | 1.67 | 2.36 | 4.78 | 2.06 | 1.18 | 2.28 | 4.44 | 1.51 | 0.69 | 0.34 | 0.24 | 0.90 |
| IN. | 1.93 | 2.64 | 5.51 | 2.37 | 1.27 | 2.62 | 4.96 | 1.74 | 0.77 | 0.39 | 0.28 | 1.00 |

| STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1937 - 2004, BY WATER YEAR (WY) | | | | | | | | | | | | |
|---|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 38.3 | 62.4 | 77.7 | 80.0 | 79.5 | 135 | 161 | 91.2 | 60.6 | 28.5 | 22.8 | 25.9 |
| MAX | 155 | 177 | 264 | 240 | 207 | 266 | 420 | 189 | 175 | 179 | 127 | 390 |
| (WY) | 1980 | 1956 | 1997 | 1999 | 1984 | 1979 | 1940 | 1984 | 1984 | 1938 | 1955 | 1938 |
| MIN | 0.72 | 4.17 | 15.6 | 5.30 | 18.5 | 46.4 | 34.8 | 30.5 | 6.87 | 3.23 | 0.00 | 0.00 |
| (WY) | 2002 | 2002 | 2002 | 1981 | 1940 | 2002 | 1985 | 1985 | 1999 | 1949 | 1999 | 1995 |

| SUMMARY STATISTICS | FOR 2003 CALENDAR YEAR | | | | FOR 2004 WATER YEAR | | | | WATER YEARS 1937 - 2004 | | | |
|--------------------------|------------------------|--|--|--|---------------------|--|--|--|-------------------------|--|--|--|
| ANNUAL TOTAL | 39649.4 | | | | 29934.06 | | | | | | | |
| ANNUAL MEAN | 109 | | | | 81.8 | | | | 71.6 | | | |
| HIGHEST ANNUAL MEAN | | | | | | | | | 123 | | | |
| LOWEST ANNUAL MEAN | | | | | | | | | 22.8 | | | |
| HIGHEST DAILY MEAN | 737 | | | | Dec 18 | | | | 737 | | | |
| LOWEST DAILY MEAN | 7.0 | | | | Sep 1 | | | | 0.68 | | | |
| ANNUAL SEVEN-DAY MINIMUM | 9.6 | | | | Sep 9 | | | | 2.0 | | | |
| MAXIMUM PEAK FLOW | | | | | | | | | 844 | | | |
| MAXIMUM PEAK STAGE | | | | | | | | | 20.93 | | | |
| INSTANTANEOUS LOW FLOW | | | | | | | | | 0.55 | | | |
| ANNUAL RUNOFF (CFSM) | 2.49 | | | | | | | | 1.87 | | | |
| ANNUAL RUNOFF (INCHES) | 33.75 | | | | | | | | 25.48 | | | |
| 10 PERCENT EXCEEDS | 236 | | | | | | | | 174 | | | |
| 50 PERCENT EXCEEDS | 78 | | | | | | | | 57 | | | |
| 90 PERCENT EXCEEDS | 22 | | | | | | | | 11 | | | |
| | | | | | | | | | 6.5 | | | |

CONNECTICUT RIVER BASIN

01174565 WEST BRANCH SWIFT RIVER NEAR SHUTESBURY, MA

LOCATION.--Lat 42° 27'18", long 72° 22'56", Franklin County, Hydrologic Unit 01080204, on left bank 800 ft downstream from State Highway 202 and 1.4 mi east of Shutesbury.

DRAINAGE AREA.--12.6 mi².

PERIOD OF RECORD.--November 1983 to September 1985, April 1995 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 540 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records fair except those for estimated daily discharges and those for discharges greater than 100 ft³/s, which are poor.

AVERAGE DISCHARGE.--10 years (water years 1985, 1996--2004), 22.1 ft³/s, 23.78 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,490 ft³/s, Sept. 17, 1999, gage height, 5.96 ft, from rating curve extended above 310 ft³/s on basis of slope-area measurement at gage height 4.28 ft; minimum, about 0.35 ft³/s, mid-September 1995.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 463 ft³/s, Apr. 1, gage height, 3.75 ft; minimum discharge, 1.1 ft³/s, Sept. 7.

**DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES**

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|------|------|------|-------|------|------|------|-------|-------|-------|-------|
| 1 | 26 | 51 | 35 | 45 | 11 | 11 | 258 | 36 | 28 | 4.4 | 4.0 | 1.9 |
| 2 | 23 | 45 | 28 | e35 | 11 | 17 | 129 | 33 | 28 | 4.6 | 3.4 | 1.6 |
| 3 | 19 | 41 | 23 | e31 | 11 | 30 | 82 | 40 | 26 | 3.8 | 3.0 | 1.5 |
| 4 | 20 | 36 | 22 | e33 | 11 | 32 | 71 | 71 | 22 | 3.5 | 3.0 | 1.6 |
| 5 | 24 | 50 | 21 | e41 | 11 | 34 | 64 | 48 | 18 | 3.7 | 5.0 | 1.4 |
| 6 | 19 | 56 | 21 | 44 | 12 | 52 | 54 | 40 | 16 | 3.8 | 3.4 | 1.3 |
| 7 | 16 | 45 | 23 | 34 | 14 | 53 | 46 | 36 | 15 | 3.4 | 2.9 | 1.4 |
| 8 | 15 | 34 | 21 | e27 | 13 | 42 | 41 | 31 | 13 | 19 | 2.5 | 2.6 |
| 9 | 13 | 29 | 20 | e24 | 14 | 32 | 38 | 33 | 13 | 19 | 2.3 | 1.9 |
| 10 | 12 | 27 | 20 | e26 | 12 | 28 | 35 | 33 | 18 | 9.3 | 2.3 | 1.7 |
| 11 | 12 | 28 | 49 | e27 | 11 | 28 | 32 | 30 | 14 | 6.3 | 2.5 | 7.8 |
| 12 | 11 | 29 | 60 | e27 | 11 | 27 | 31 | 27 | 11 | 5.0 | 2.6 | 5.0 |
| 13 | 10 | 31 | 39 | e26 | 11 | 25 | 95 | 25 | 9.4 | 4.7 | 2.6 | 3.9 |
| 14 | 9.6 | 26 | 31 | e26 | 11 | 23 | 130 | 23 | 9.3 | 4.7 | 2.5 | 3.0 |
| 15 | 62 | 23 | 34 | e24 | e7.2 | 24 | 80 | 23 | 8.8 | 4.8 | 3.2 | 3.0 |
| 16 | 34 | 22 | 28 | e23 | e6.9 | 23 | 60 | 22 | 7.8 | 4.1 | 3.2 | 2.5 |
| 17 | 23 | 21 | 143 | 23 | e6.9 | 23 | 51 | 20 | 7.3 | 3.7 | 3.1 | 3.2 |
| 18 | 19 | 21 | 159 | 21 | 10 | 21 | 45 | 22 | 7.6 | 3.5 | 2.7 | 167 |
| 19 | 17 | 37 | 76 | 17 | 10 | 20 | 42 | 24 | 6.8 | 6.7 | 2.4 | 56 |
| 20 | 15 | 91 | 58 | 15 | 9.3 | 21 | 39 | 20 | 5.7 | 5.8 | 2.7 | 28 |
| 21 | 15 | 55 | 48 | 14 | 9.9 | 27 | 36 | 19 | 5.4 | 4.5 | 2.3 | 20 |
| 22 | 14 | 42 | 45 | 14 | 9.7 | 24 | 36 | 18 | 5.2 | 3.9 | 1.6 | 14 |
| 23 | 14 | 34 | 42 | 13 | 9.4 | 25 | 52 | 18 | 5.0 | 3.9 | 8.0 | 10 |
| 24 | 14 | 30 | 103 | 13 | 9.1 | 23 | 46 | 24 | 4.6 | 3.7 | 5.1 | 7.4 |
| 25 | 12 | 29 | 131 | 13 | 8.9 | 28 | 39 | 29 | 4.6 | 3.6 | 3.9 | 6.5 |
| 26 | 13 | 26 | 80 | 12 | 8.7 | 47 | 67 | 28 | 5.5 | 2.5 | 3.4 | 5.9 |
| 27 | 43 | 25 | 63 | 11 | 8.7 | 79 | 78 | 40 | 4.7 | 3.1 | 3.2 | 5.0 |
| 28 | 66 | 34 | 56 | 11 | 8.8 | 68 | 53 | 37 | 4.2 | 6.1 | 2.8 | 20 |
| 29 | 173 | 64 | 51 | 11 | 9.5 | 54 | 44 | 28 | 4.9 | 4.4 | 2.6 | 79 |
| 30 | 86 | 44 | 50 | 11 | --- | 46 | 39 | 23 | 4.3 | 3.7 | 2.3 | 41 |
| 31 | 59 | --- | 48 | 11 | --- | 123 | --- | 21 | --- | 3.3 | 2.1 | --- |
| TOTAL | 908.6 | 1126 | 1628 | 703 | 297.0 | 1110 | 1913 | 922 | 333.1 | 166.5 | 131.7 | 537.5 |
| MEAN | 29.3 | 37.5 | 52.5 | 22.7 | 10.2 | 35.8 | 63.8 | 29.7 | 11.1 | 5.37 | 4.25 | 17.9 |
| MAX | 173 | 91 | 159 | 45 | 14 | 123 | 258 | 71 | 28 | 19 | 23 | 167 |
| MIN | 9.6 | 21 | 20 | 11 | 6.9 | 11 | 31 | 18 | 4.2 | 2.5 | 2.1 | 1.3 |
| CFSM | 2.33 | 2.98 | 4.17 | 1.80 | 0.81 | 2.84 | 5.06 | 2.36 | 0.88 | 0.43 | 0.34 | 1.42 |
| IN. | 2.68 | 3.32 | 4.81 | 2.08 | 0.88 | 3.28 | 5.65 | 2.72 | 0.98 | 0.49 | 0.39 | 1.59 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 2004, BY WATER YEAR (WY)

| | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--|
| MEAN | 12.8 | 19.3 | 27.1 | 24.0 | 27.0 | 41.1 | 44.1 | 29.2 | 23.5 | 8.91 | 6.63 | 10.2 | | | | | | | | | | |
| MAX | 29.5 | 39.2 | 75.3 | 51.0 | 70.6 | 60.1 | 83.0 | 78.1 | 52.8 | 24.3 | 29.3 | 52.9 | | | | | | | | | | |
| (WY) | 2000 | 1996 | 1997 | 1996 | 1984 | 1999 | 1984 | 1984 | 1998 | 1996 | 2000 | 1999 | | | | | | | | | | |
| MIN | 1.84 | 1.72 | 4.11 | 2.61 | 7.15 | 19.7 | 15.3 | 10.5 | 3.73 | 1.98 | 1.70 | 1.02 | | | | | | | | | | |
| (WY) | 2002 | 2002 | 2002 | 2002 | 2002 | 2002 | 1985 | 1985 | 1999 | 1999 | 2002 | 1998 | | | | | | | | | | |

SUMMARY STATISTICS FOR 2003 CALENDAR YEAR FOR 2004 WATER YEAR ^aWATER YEARS 1984 - 2004

| | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------|---------|--------|--|--|--|-------|-------|--|--|-------|--------|--|--|--|--|--|--|--|--|--|--|------|
| ANNUAL TOTAL | 10588.5 | 9776.4 | | | | | | | | | | | | | | | | | | | | |
| ANNUAL MEAN | 29.0 | 26.7 | | | | | | | | 22.1 | | | | | | | | | | | | |
| HIGHEST ANNUAL MEAN | | | | | | | | | | 33.0 | | | | | | | | | | | | 1996 |
| LOWEST ANNUAL MEAN | | | | | | | | | | 9.76 | | | | | | | | | | | | 2002 |
| HIGHEST DAILY MEAN | 173 | Oct 29 | | | | 258 | Apr 1 | | | 636 | Sep 17 | | | | | | | | | | | 1999 |
| LOWEST DAILY MEAN | 3.0 | Sep 13 | | | | 1.3 | Sep 6 | | | 0.35 | Sep 7 | | | | | | | | | | | 1995 |
| ANNUAL SEVEN-DAY MINIMUM | 3.6 | Sep 9 | | | | 1.5 | Sep 1 | | | 0.38 | Sep 7 | | | | | | | | | | | 1995 |
| MAXIMUM PEAK FLOW | | | | | | 463 | Apr 1 | | | 1490 | Sep 17 | | | | | | | | | | | 1999 |
| MAXIMUM PEAK STAGE | | | | | | 3.75 | Apr 1 | | | 5.87 | Jun 14 | | | | | | | | | | | 1996 |
| INSTANTANEOUS LOW FLOW | | | | | | 1.1 | Sep 7 | | | 0.35 | Sep 7 | | | | | | | | | | | 1995 |
| ANNUAL RUNOFF (CFSM) | 2.30 | | | | | 2.12 | | | | 1.75 | | | | | | | | | | | | |
| ANNUAL RUNOFF (INCHES) | 31.26 | | | | | 28.86 | | | | 23.78 | | | | | | | | | | | | |
| 10 PERCENT EXCEEDS | 61 | | | | | 55 | | | | 48 | | | | | | | | | | | | |
| 50 PERCENT EXCEEDS | 21 | | | | | 20 | | | | 13 | | | | | | | | | | | | |
| 90 PERCENT EXCEEDS | 6.2 | | | | | 3.4 | | | | 2.0 | | | | | | | | | | | | |

^a Years of operation not continuous; see Period of Record for actual years of operation.

e Estimated

CONNECTICUT RIVER BASIN

01175500 SWIFT RIVER AT WEST WARE, MA

LOCATION.--Lat 42° 16'04", long 72° 19'59", Hampshire County, Hydrologic Unit 01080204, on left bank at West Ware, 1.4 mi downstream from Quabbin Reservoir, 3.5 mi east of Belchertown, and 8.0 mi upstream from mouth.

DRAINAGE AREA.--189 mi², includes 1.6 mi² drained by Beaver Brook, flow of which is diverted from Ware River basin. Prior to January 1937, 186 mi².

PERIOD OF RECORD.--Discharge: July 1910 to September 1912 (twice-daily gage heights and corresponding discharge), October 1912 to current year.

Water-quality records: Water years 1952–54.

REVISED RECORDS.--WSP 451: 1916. WSP 871: 1919. WSP 1031: 1944 (changes in reservoir contents and adjusted figures only). WSP 1301: 1925(M). WDR MA-RI-84-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 365.18 ft above National Geodetic Vertical Datum of 1929. Prior to Aug. 25, 1912, nonrecording gage at site 400 ft upstream at same datum.

REMARKS.--Records good except those for estimated daily discharge and those greater than 200 ft³/s, which are fair. Flow regulated since August 1939 by Quabbin Reservoir, usable capacity, 53.8 billion ft³ (see table below for monthend contents). Diversion from Ware River to Quabbin Reservoir since 1940, from Quabbin Reservoir to Wachusett Reservoir since 1941, from Quabbin Reservoir to Chicopee Valley aqueduct since 1950, and from Quabbin Reservoir to city of Worcester at times since 1966.

AVERAGE DISCHARGE.--27 years (water years 1913–39) prior to completion of Quabbin Reservoir, 314 ft³/s, 22.56 in/yr; 65 years (water years 1940–2004), affected by storage and diversions, 93.8 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,590 ft³/s, Mar. 19, 1936, gage height, 15.00 ft; minimum daily discharge, 9.1 ft³/s, Dec. 15, 1968. Maximum discharge since construction of Quabbin Reservoir in 1939, 3,070 ft³/s, June 1, 1984, gage height, 11.58 ft.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 148 ft³/s, May 19, gage height, 2.83 ft; minimum discharge, 36 ft³/s, June 25.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 38 | 42 | 40 | 42 | 40 | 41 | 56 | 88 | 117 | 122 | 42 | 44 |
| 2 | 38 | 41 | 41 | 42 | 40 | 42 | 56 | 91 | 117 | 123 | 42 | 44 |
| 3 | 38 | 41 | 40 | 43 | 40 | 43 | 55 | 97 | 119 | 123 | 42 | 44 |
| 4 | 39 | 41 | 40 | 43 | 40 | 42 | 55 | 111 | 115 | 122 | 42 | 44 |
| 5 | 39 | 42 | 40 | 45 | 40 | 43 | 58 | 112 | 112 | 123 | 44 | 44 |
| 6 | 38 | 41 | 40 | 44 | 41 | 45 | 58 | 115 | 110 | 123 | 42 | 44 |
| 7 | 38 | 41 | 40 | 44 | 41 | 45 | 51 | 118 | 104 | 76 | 42 | 44 |
| 8 | 38 | 41 | 40 | 44 | 39 | 45 | 45 | 120 | 99 | 74 | 42 | 44 |
| 9 | 38 | 41 | 44 | 43 | 40 | 43 | 47 | 121 | 95 | 78 | 87 | 47 |
| 10 | 38 | 41 | 49 | 43 | 41 | 41 | 49 | 127 | 96 | 42 | 105 | 45 |
| 11 | 38 | 41 | 54 | 43 | 41 | 42 | 52 | 129 | 93 | 42 | 60 | 45 |
| 12 | 38 | 42 | 53 | 44 | 40 | 42 | 53 | 131 | 87 | 41 | 44 | 45 |
| 13 | 38 | 42 | 52 | 44 | 40 | 42 | 56 | 133 | 79 | 42 | 42 | 44 |
| 14 | 38 | 40 | 52 | 44 | 40 | 42 | 51 | 132 | 73 | 41 | 42 | 45 |
| 15 | 42 | 40 | 52 | 43 | 40 | 42 | 44 | 131 | 72 | 41 | 43 | 44 |
| 16 | 40 | 40 | 49 | 42 | 40 | 42 | 43 | 138 | 69 | 41 | 43 | 44 |
| 17 | 40 | 40 | 53 | 40 | 40 | 42 | 43 | 138 | 64 | 41 | 42 | 44 |
| 18 | 40 | 44 | 52 | 41 | 41 | 42 | 46 | 137 | 62 | 41 | 42 | 58 |
| 19 | 40 | 47 | 47 | 41 | 41 | 42 | 48 | 146 | 59 | 42 | 42 | 46 |
| 20 | 39 | 47 | 44 | 41 | 41 | 42 | 50 | 140 | 56 | 41 | 42 | 45 |
| 21 | 40 | 41 | 43 | 40 | 41 | 45 | 51 | 130 | 88 | 41 | 48 | 44 |
| 22 | 40 | 41 | 43 | 40 | 41 | 43 | 52 | 131 | 87 | 41 | 44 | 44 |
| 23 | 40 | 41 | 43 | 40 | 41 | 43 | 59 | 124 | 47 | 41 | 43 | 44 |
| 24 | 40 | 41 | 46 | 40 | 41 | 42 | 62 | 122 | 38 | 41 | 42 | 44 |
| 25 | 39 | 41 | 47 | 40 | 41 | 42 | 64 | 122 | 38 | 41 | 42 | 44 |
| 26 | 40 | 41 | 44 | 39 | 40 | 43 | 72 | 118 | 44 | 41 | 42 | 44 |
| 27 | 45 | 40 | 43 | 39 | 40 | 45 | 80 | 123 | 44 | 41 | 42 | 44 |
| 28 | 43 | 41 | 43 | 40 | 40 | 46 | 83 | 123 | 88 | 41 | 42 | 47 |
| 29 | 48 | 42 | 43 | 40 | 40 | 46 | 83 | 125 | 122 | 41 | 42 | 49 |
| 30 | 43 | 41 | 43 | 40 | --- | 47 | 86 | 117 | 122 | 41 | 42 | 46 |
| 31 | 42 | --- | 43 | 40 | --- | 49 | --- | 114 | --- | 41 | 43 | --- |
| TOTAL | 1235 | 1245 | 1403 | 1294 | 1171 | 1341 | 1708 | 3804 | 2516 | 1870 | 1444 | 1354 |
| MEAN | 39.8 | 41.5 | 45.3 | 41.7 | 40.4 | 43.3 | 56.9 | 123 | 83.9 | 60.3 | 46.6 | 45.1 |
| MAX | 48 | 47 | 54 | 45 | 41 | 49 | 86 | 146 | 122 | 123 | 105 | 58 |
| MIN | 38 | 40 | 40 | 39 | 39 | 41 | 43 | 88 | 38 | 41 | 42 | 44 |
| † | 48315 | 48656 | 50521 | 50862 | 50451 | 51193 | 53721 | 53974 | 52767 | 51555 | 50280 | 50130 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2004, BY WATER YEAR (WY)

| | 1940 | 1941 | 1942 | 1943 | 1944 | 1945 | 1946 | 1947 | 1948 | 1949 | 1950 | 1951 | 1952 | 1953 | 1954 | 1955 | 1956 | 1957 | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 | 1970 | 1971 | 1972 | 1973 | 1974 | 1975 | 1976 | 1977 | 1978 | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 71.3 | 76.0 | 71.5 | 70.7 | 75.9 | 81.8 | 164 | 159 | 123 | 76.3 | 78.4 | 78.8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MAX | 222 | 858 | 656 | 572 | 467 | 511 | 1099 | 775 | 1192 | 301 | 149 | 139 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| (WY) | 1956 | 1956 | 1997 | 1997 | 1997 | 1997 | 1953 | 1953 | 1984 | 1948 | 1961 | 1963 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MIN | 30.3 | 31.3 | 28.0 | 27.5 | 27.6 | 27.7 | 26.2 | 27.4 | 28.6 | 31.2 | 30.7 | 30.3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| (WY) | 1945 | 1945 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1945 | 1944 | 1944 | 1990 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

SUMMARY STATISTICS

| | FOR 2003 CALENDAR YEAR | FOR 2004 WATER YEAR | WATER YEARS 1940 - 2004 |
|--------------------------|------------------------|---------------------|----------------------------|
| ANNUAL TOTAL | 15911 | 20385 | |
| ANNUAL MEAN | 43.6 | 55.7 | 93.8 |
| HIGHEST ANNUAL MEAN | | | 369 1997 |
| LOWEST ANNUAL MEAN | | | 30.7 1945 |
| HIGHEST DAILY MEAN | 128 | Jul 1 | 146 May 19 3040 Jun 1 1984 |
| LOWEST DAILY MEAN | 28 | Jun 20 | 38 Oct 1 9.1 Dec 15 1968 |
| ANNUAL SEVEN-DAY MINIMUM | 31 | Jan 22 | 38 Oct 6 24 Nov 11 1996 |
| MAXIMUM PEAK FLOW | | | 148 May 19 3070 Jun 1 1984 |
| MAXIMUM PEAK STAGE | | 2.83 | May 19 11.58 Jun 1 1984 |
| INSTANTANEOUS LOW FLOW | | | 36 Jun 25 |
| 10 PERCENT EXCEEDS | 67 | | 115 144 |
| 50 PERCENT EXCEEDS | 37 | | 43 45 |
| 90 PERCENT EXCEEDS | 31 | | 40 32 |

† Monthend contents, in millions of cubic feet (mcf) in Quabbin Reservoir. Records furnished by Water Supply Protection Division of the Department of Conservation and Recreation.

CONNECTICUT RIVER BASIN

01175670 SEVENMILE RIVER NEAR SPENCER, MA

LOCATION.--Lat 42° 15'54", long 72° 00'19", Worcester County, Hydrologic Unit 01080204, on right bank 40 ft upstream from bridge on Cooney Road and 1.5 mi north of Spencer.

DRAINAGE AREA.--8.81 mi².

PERIOD OF RECORD.--Occasional low-flow measurements, water year 1960. October 1960 to current year. October and November 1960 monthly discharge only, published in WSP 1901.

REVISED RECORDS.--WDR MA-RI-84-1, WDR MA-RI-03-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 630 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Sept. 25, 1984, at datum 8.83 ft higher.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Occasional regulation by ponds upstream since 1971.

AVERAGE DISCHARGE.--44 years (water years 1961--2004), 14.9 ft³/s, 22.92 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 412 ft³/s, Mar. 18, 1968, gage height, 5.19 ft, datum then in use; maximum gage height, unknown, Apr. 1, 1987, present datum; minimum discharge, 0.03 ft³/s, Sept. 6, 7, 9, 18, 2001 (regulation); minimum daily discharge, 0.07 ft³/s, Aug. 28, Sept. 11, 15, 21, 22.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 236 ft³/s, Dec. 18 gage height, 11.99 ft; minimum discharge, 0.07 ft³/s, Sept. 8.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|------|--------|-------|-------|-------|------|-------|-------|-------|-------|--------|
| 1 | 6.1 | 30 | 11 | 20 | 9.4 | 7.1 | 77 | 20 | 8.0 | 2.8 | 1.3 | 0.87 |
| 2 | 5.5 | 23 | 10 | 18 | 8.8 | 11 | 119 | 17 | 8.8 | 2.7 | 1.6 | .79 |
| 3 | 4.7 | 19 | 9.4 | 19 | 9.2 | 17 | 77 | 18 | 9.2 | 2.5 | 1.1 | .61 |
| 4 | 4.4 | 15 | 9.8 | 21 | 13 | 15 | 55 | 42 | 9.0 | 2.5 | .95 | .53 |
| 5 | 4.6 | 16 | e8.6 | 27 | 9.0 | 15 | 46 | 35 | 7.7 | 2.5 | 2.2 | .43 |
| 6 | 3.8 | 22 | e8.9 | 23 | 11 | 20 | 39 | 30 | 6.7 | 2.2 | 1.8 | .37 |
| 7 | 3.4 | 19 | 17 | 18 | 18 | 19 | 31 | 24 | 5.4 | 2.5 | 1.7 | .77 |
| 8 | 3.8 | 16 | e11 | e16 | e12 | 17 | 25 | 19 | 5.8 | 2.1 | 1.5 | .93 |
| 9 | 3.9 | 13 | e11 | e13 | e10 | 15 | 21 | 19 | 5.6 | 2.0 | 1.1 | 5.0 |
| 10 | 3.7 | 12 | 10 | e12 | 9.0 | 14 | 21 | 18 | 8.8 | 1.6 | .72 | 5.5 |
| 11 | 3.6 | 11 | 34 | e11 | 8.4 | 13 | 18 | 17 | 7.7 | 1.7 | .43 | 4.0 |
| 12 | 4.1 | 12 | 53 | 11 | e7.5 | 12 | 22 | 15 | 6.9 | 1.2 | .29 | 2.6 |
| 13 | 4.2 | 13 | 40 | 11 | 7.4 | 11 | 37 | 13 | 6.5 | .86 | .36 | 2.0 |
| 14 | 3.8 | 12 | e25 | e11 | 7.1 | 10 | 102 | 12 | 6.1 | 1.3 | .54 | 1.4 |
| 15 | 15 | 11 | 36 | e11 | 7.5 | 11 | 79 | 11 | 6.3 | 1.7 | 1.6 | 1.1 |
| 16 | 11 | 11 | 29 | e11 | e7.0 | 11 | 60 | 10 | 6.4 | 1.3 | 1.4 | 1.0 |
| 17 | 7.5 | 11 | 60 | 11 | 7.2 | 11 | 47 | 8.6 | 6.5 | 1.3 | 2.0 | 1.1 |
| 18 | 6.8 | 11 | 157 | 12 | 6.5 | 10 | 39 | 8.2 | 6.8 | 1.3 | 2.4 | 24 |
| 19 | 6.1 | 10 | 81 | 12 | 6.6 | 10 | 30 | 11 | 6.5 | 1.2 | 2.1 | 28 |
| 20 | 5.9 | 14 | 53 | 11 | 6.3 | 10 | 24 | 14 | 5.6 | 1.1 | 2.0 | 12 |
| 21 | 5.6 | 14 | 41 | e10 | 6.1 | 16 | 20 | 9.8 | 4.7 | .87 | 13 | 7.6 |
| 22 | 5.9 | 13 | 33 | 10 | 6.0 | 16 | 17 | 8.5 | 4.2 | .61 | 11 | 5.5 |
| 23 | 7.2 | 12 | 30 | 9.6 | 5.9 | 14 | 24 | 9.5 | 4.1 | .52 | 5.8 | 3.7 |
| 24 | 6.1 | 11 | 37 | 11 | e6.0 | 13 | 26 | 8.8 | 4.0 | 8.3 | 3.9 | 3.0 |
| 25 | 10 | 11 | 60 | 14 | e5.5 | 13 | 21 | 9.1 | 4.1 | 5.4 | 2.8 | 2.6 |
| 26 | 12 | 10 | 49 | 15 | e5.5 | 13 | 32 | 9.6 | 4.7 | 3.6 | 2.3 | 2.2 |
| 27 | 23 | 10 | 39 | 14 | e5.0 | 16 | 47 | 14 | 4.0 | 2.5 | 1.7 | 1.8 |
| 28 | 39 | 11 | e33 | 15 | 5.9 | 17 | 37 | 13 | 3.3 | 3.2 | 1.6 | 6.7 |
| 29 | 75 | 13 | 28 | 14 | 6.2 | 17 | 29 | 12 | 3.2 | 2.8 | 1.3 | 18 |
| 30 | 65 | 12 | 25 | 12 | --- | 15 | 23 | 9.2 | 2.9 | 2.0 | .96 | 13 |
| 31 | 43 | --- | 22 | 10 | --- | 25 | --- | 7.9 | --- | 1.5 | 1.0 | --- |
| TOTAL | 403.7 | 418 | 1071.7 | 433.6 | 233.0 | 434.1 | 1245 | 473.2 | 179.5 | 67.66 | 72.45 | 157.10 |
| MEAN | 13.0 | 13.9 | 34.6 | 14.0 | 8.03 | 14.0 | 41.5 | 15.3 | 5.98 | 2.18 | 2.34 | 5.24 |
| MAX | 75 | 30 | 157 | 27 | 18 | 25 | 119 | 42 | 9.2 | 8.3 | 13 | 28 |
| MIN | 3.4 | 10 | 8.6 | 9.6 | 5.0 | 7.1 | 17 | 7.9 | 2.9 | 0.52 | 0.29 | 0.37 |
| CFSM | 1.48 | 1.58 | 3.92 | 1.59 | 0.91 | 1.59 | 4.71 | 1.73 | 0.68 | 0.25 | 0.27 | 0.59 |
| IN. | 1.70 | 1.76 | 4.53 | 1.83 | 0.98 | 1.83 | 5.26 | 2.00 | 0.76 | 0.29 | 0.31 | 0.66 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961 - 2004, BY WATER YEAR (WY)

| | MEAN | MAX | (WY) | MIN | (WY) |
|--|------|------|------|------|------|
| | 7.69 | 29.2 | 1997 | 0.74 | 2002 |
| | 11.8 | 28.0 | 1976 | 1.18 | 2002 |
| | 17.6 | 56.2 | 1997 | 2.80 | 1999 |
| | 17.7 | 56.5 | 1979 | 2.75 | 1981 |
| | 17.9 | 44.8 | 1970 | 3.87 | 1977 |
| | 30.7 | 66.2 | 1983 | 12.9 | 1967 |
| | 32.1 | 69.5 | 1987 | 9.91 | 1999 |
| | 18.0 | 40.5 | 1967 | 6.00 | 1982 |
| | 12.2 | 46.5 | 1982 | 1.09 | 1999 |
| | 4.99 | 20.3 | 1996 | 0.80 | 1965 |
| | 4.01 | 14.4 | 1979 | 0.39 | 1999 |
| | 3.75 | 15.7 | 1975 | 0.32 | 1964 |

SUMMARY STATISTICS

| | FOR 2003 CALENDAR YEAR | FOR 2004 WATER YEAR | FOR 2004 WATER YEAR | WATER YEARS 1961 - 2004 |
|--------------------------|------------------------|---------------------|---------------------|-------------------------|
| ANNUAL TOTAL | 6963.95 | 5189.01 | | |
| ANNUAL MEAN | 19.1 | 14.2 | 14.9 | |
| HIGHEST ANNUAL MEAN | | | 22.3 | 1996 |
| LOWEST ANNUAL MEAN | | | 5.40 | 1965 |
| HIGHEST DAILY MEAN | 157 | Dec 18 | 284 | Mar 19 1968 |
| LOWEST DAILY MEAN | 0.76 | Sep 13 | 0.05 | Sep 6 2001 |
| ANNUAL SEVEN-DAY MINIMUM | 1.4 | Sep 9 | 0.10 | Sep 1 2001 |
| MAXIMUM PEAK FLOW | | | 412 | Mar 18 1968 |
| MAXIMUM PEAK STAGE | | | 11.99 | Dec 18 1992 |
| INSTANTANEOUS LOW FLOW | | | 0.07 | Sep 8 1997 |
| ANNUAL RUNOFF (CFSM) | 2.17 | 1.61 | 1.69 | |
| ANNUAL RUNOFF (INCHES) | 29.41 | 21.91 | 22.92 | |
| 10 PERCENT EXCEEDS | 40 | 31 | 34 | |
| 50 PERCENT EXCEEDS | 12 | 10 | 9.2 | |
| 90 PERCENT EXCEEDS | 3.8 | 1.5 | 1.1 | |

e Estimated

CONNECTICUT RIVER BASIN

01177000 CHICOPEE RIVER AT INDIAN ORCHARD, MA

LOCATION.--Lat 42° 09'38", long 72° 30'52", Hampden County, Hydrologic Unit 01080204, on left bank 1,000 ft downstream from West Street Bridge at Indian Orchard, 1.1 mi upstream from Fuller Brook, and 7.2 mi upstream from mouth.

DRAINAGE AREA.--689 mi².

PERIOD OF RECORD.--Discharge: August 1928 to current year. Published as "at Bircham Bend" prior to November 1938.

Water-quality records: Water years 1953, 1957, 1994.

REVISED RECORDS.--WSP 1231: 1934. WDR MA-RI-84-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 125 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Nov. 1, 1938, water-stage recorder at site 1.8 mi downstream at different datum.

REMARKS.--Records good except those for estimated daily discharge, which are poor. Diversion since 1941 from 186 mi² in Swift River basin and at times since 1931 from 97 mi² in Ware River basin for Boston metropolitan district; since 1950, for Chicopee; since 1952, for South Hadley; at times since 1966 for Worcester; at times since 1955 from 6.5 mi² in Ware River basin for Fitchburg. Diversion from Ludlow Reservoir for Springfield and, prior to 1952, for Chicopee. Flow regulated by powerplants upstream, by Quabbin Reservoir 21 mi upstream on Swift River since 1939, by Barre Falls Reservoir on Ware River since 1958, by Conant Brook Reservoir since 1966, and by smaller reservoirs. Telephone and satellite gage-height telemeters at station.

AVERAGE DISCHARGE.--76 years (water years 1929--2004) 907 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 45,200 ft³/s, Sept. 21, 1938, by computation of flow over dam; minimum daily discharge, 16 ft³/s, several times in 1929--31.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,910 ft³/s, Dec. 18, gage height, 9.02 ft; minimum discharge, 100 ft³/s, Nov. 18.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 711 | 1160 | 880 | 1910 | 859 | 526 | 2410 | 1620 | 954 | e422 | 296 | 315 |
| 2 | 521 | 936 | 809 | 1780 | 830 | 672 | 3130 | 1520 | 1040 | 217 | 468 | 225 |
| 3 | 525 | 874 | 776 | 1720 | 843 | 1130 | 2590 | 1390 | 987 | 439 | 285 | 236 |
| 4 | 494 | 746 | 747 | 1720 | 859 | 1380 | e1880 | 1810 | 946 | 436 | 295 | 242 |
| 5 | 472 | 911 | 720 | 1950 | 576 | 1340 | e1720 | 2080 | 848 | 409 | 312 | 248 |
| 6 | 451 | 908 | 717 | 2000 | 685 | 1350 | e1570 | e1890 | 814 | 633 | 381 | 246 |
| 7 | 435 | 954 | 580 | 1810 | 834 | 1450 | 1540 | 1700 | 672 | 339 | 271 | 240 |
| 8 | 415 | 808 | 610 | 1440 | 840 | e1460 | 1410 | 1570 | 719 | 407 | 313 | 236 |
| 9 | 368 | 712 | 763 | 1260 | 796 | 1240 | 1210 | 1480 | 676 | 350 | 319 | 236 |
| 10 | 368 | 734 | 750 | 1040 | 728 | 1170 | 1200 | 1420 | 651 | 411 | 267 | 427 |
| 11 | 273 | 696 | 856 | 987 | 747 | 1040 | 1150 | 1470 | 660 | e319 | 360 | 457 |
| 12 | 331 | 770 | 1840 | 996 | 630 | 1000 | 1060 | 1260 | 665 | 337 | 312 | 351 |
| 13 | 325 | 590 | 1720 | 1060 | 709 | 965 | 1270 | 1190 | 638 | 299 | 238 | 415 |
| 14 | 257 | 618 | 1360 | 1030 | 662 | 881 | 3390 | e1020 | 409 | 355 | 246 | 292 |
| 15 | 576 | 662 | 1350 | 1220 | 629 | 813 | 3220 | 1060 | 542 | 279 | 237 | 257 |
| 16 | 778 | 577 | 1490 | 1730 | 588 | 835 | 2530 | 943 | 456 | 269 | 234 | 246 |
| 17 | 507 | 570 | 1760 | 1670 | 526 | 784 | 2130 | 963 | 445 | 273 | 298 | 224 |
| 18 | e640 | 472 | e4420 | 1000 | 547 | 846 | 1960 | 936 | 465 | 292 | 326 | 1290 |
| 19 | e533 | 606 | 3600 | 1020 | 627 | 807 | 1840 | 1060 | 478 | 317 | 321 | 2420 |
| 20 | e623 | 814 | e2190 | 1030 | 466 | 777 | 1860 | 1020 | 441 | 292 | 213 | 1530 |
| 21 | 484 | e1010 | e1850 | 955 | 447 | 857 | 1640 | 941 | 419 | 293 | 373 | 1090 |
| 22 | 476 | 1080 | e1630 | 830 | 577 | 1040 | 1580 | 861 | 452 | 285 | e636 | 1030 |
| 23 | e482 | 973 | e1620 | 867 | 516 | 1080 | 1520 | 879 | 441 | e245 | e657 | 890 |
| 24 | e850 | 914 | e1990 | 967 | 517 | 992 | e1870 | 894 | 461 | 320 | e465 | 679 |
| 25 | e545 | 859 | e2810 | 1190 | 508 | 931 | 1680 | 1060 | 202 | 462 | e411 | 555 |
| 26 | e454 | 787 | e2830 | 934 | 487 | 924 | 1750 | 1030 | 151 | 459 | e383 | 500 |
| 27 | 641 | 804 | e2360 | 773 | 512 | 1020 | 2330 | 997 | 311 | 384 | e342 | 358 |
| 28 | 1490 | 792 | e2200 | 696 | 444 | 1220 | 2260 | 1120 | 500 | 329 | e323 | 547 |
| 29 | e1950 | 934 | e2060 | 778 | 520 | 1260 | 1970 | 1220 | 378 | 367 | e304 | 1490 |
| 30 | 2320 | 961 | e2020 | 1070 | --- | 988 | 1770 | 1080 | 476 | 366 | e286 | 1440 |
| 31 | 1580 | --- | 2050 | 969 | --- | 1020 | --- | 971 | --- | 303 | e284 | --- |
| TOTAL | 20875 | 24232 | 51358 | 38402 | 18509 | 31798 | 57440 | 38455 | 17297 | 10908 | 10456 | 18712 |
| MEAN | 673 | 808 | 1657 | 1239 | 638 | 1026 | 1915 | 1240 | 577 | 352 | 337 | 624 |
| MAX | 2320 | 1160 | 4420 | 2000 | 859 | 1460 | 3390 | 2080 | 1040 | 633 | 657 | 2420 |
| MIN | 257 | 472 | 580 | 696 | 444 | 526 | 1060 | 861 | 151 | 217 | 213 | 224 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1928 - 2004, BY WATER YEAR (WY)

| | | | | | | | | | | | | |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 523 | 723 | 900 | 971 | 990 | 1579 | 1812 | 1180 | 821 | 479 | 445 | 477 |
| MAX | 1953 | 3022 | 3207 | 2447 | 2374 | 5993 | 4117 | 2680 | 3519 | 2458 | 3719 | 5474 |
| (WY) | 1956 | 1956 | 1997 | 1937 | 1976 | 1936 | 1933 | 1953 | 1984 | 1938 | 1955 | 1938 |
| MIN | 131 | 154 | 241 | 191 | 332 | 619 | 636 | 471 | 229 | 159 | 176 | 160 |
| (WY) | 1942 | 1966 | 1966 | 1981 | 1931 | 2002 | 1966 | 1965 | 1964 | 1966 | 1949 | 1953 |

| SUMMARY STATISTICS | FOR 2003 CALENDAR YEAR | | FOR 2004 WATER YEAR | | WATER YEARS 1928 - 2004 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|-------------|
| ANNUAL TOTAL | 385102 | | 338442 | | | |
| ANNUAL MEAN | 1055 | | 925 | | 907 | |
| HIGHEST ANNUAL MEAN | | | | | 1952 | |
| LOWEST ANNUAL MEAN | | | | | 1966 | |
| HIGHEST DAILY MEAN | 4420 | Dec 18 | 4420 | Dec 18 | 37000 | Sep 21 1938 |
| LOWEST DAILY MEAN | 138 | Sep 13 | 151 | Jun 26 | 16 | Sep 1 1929 |
| ANNUAL SEVEN-DAY MINIMUM | 217 | Sep 9 | 239 | Sep 2 | 96 | Oct 31 1965 |
| MAXIMUM PEAK FLOW | | | 4910 | Dec 18 | 45200 | Sep 21 1938 |
| MAXIMUM PEAK STAGE | | | 9.02 | Dec 18 | 0.00 | Sep 21 1938 |
| INSTANTANEOUS LOW FLOW | | | 100 | Nov 18 | | |
| 10 PERCENT EXCEEDS | 2010 | | 1820 | | 1850 | |
| 50 PERCENT EXCEEDS | 838 | | 786 | | 653 | |
| 90 PERCENT EXCEEDS | 391 | | 296 | | 221 | |

e Estimated

CONNECTICUT RIVER BASIN

01179500 WESTFIELD RIVER AT KNIGHTVILLE, MA

LOCATION.--Lat 42° 17'16", long 72° 51'53", Hampshire County, Hydrologic Unit 01080206, on left bank at Knightville, 0.2 mi downstream from Knightville Dam, 0.2 mi upstream from Sykes Brook, 2.4 mi upstream from Middle branch, 3.5 mi north of Huntington, and at mile 29.7.

DRAINAGE AREA.--161 mi².

PERIOD OF RECORD.--Discharge: August 1909 to September 1990, October 1995 to current year.

Water-quality records: Water year 1953.

REVISED RECORDS.--WSP 415: 1909-12. WSP 1001: 1941-43. WSP 1231: 1910, 1912, 1913(M), 1914-15, 1916-19(M), 1921-23(M), 1925-27(M), 1929-33(M), 1935(M). WDR MA-RI-84-1: Drainage area.

GAGE.--Water-stage recorder. Concrete control since Dec. 20, 1940. Datum of gage is 461.25 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Army Corps of Engineers). Prior to Jan. 11, 1936, nonrecording gage at site 0.5 mi upstream at different datum. Jan. 11, 1935, to May 20, 1940, water-stage recorder at site 700 ft upstream at datum 10.57 ft higher. May 21 to Dec. 19, 1940, nonrecording gage at site 700 ft upstream at datum 18.75 ft higher.

REMARKS.--Records good except those for estimated daily discharge, which are fair. Flow regulated by Knightville Reservoir since 1941. Telephone and satellite gage-height telemeter at station.

AVERAGE DISCHARGE.--90 years (water years 1910-90, 1996-2004), 333 ft³/s, 28.09 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 37,900 ft³/s, Sept. 21, 1938, gage height, 29.58 ft, from floodmarks, site and datum then in use, from rating curve extended above 3,800 ft³/s on basis of slope-area measurements at gage heights 24.07 ft and 29.58 ft; minimum discharge, 0.1 ft³/s, Apr. 3, 1965; minimum daily discharge, 1.1 ft³/s, Apr. 2, 1965. Maximum discharge since construction of Knightville Reservoir in 1941, 6,660 ft³/s, Mar. 21, 1945, gage height, 7.45 ft.

EXTREMES FOR CURRENT YEAR.-- Maximum discharge, 3,460 ft³/s, Apr. 5, gage height, 7.27 ft; minimum discharge, 4.4 ft³/s, Aug. 31.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|-------|------|------|-------|-------|------|------|------|------|-------|
| 1 | 512 | 1750 | 669 | 879 | 125 | 102 | 900 | 375 | 270 | 60 | 110 | 81 |
| 2 | 412 | 720 | 550 | 823 | 126 | 105 | 1530 | 339 | 529 | 59 | 99 | 69 |
| 3 | 348 | 519 | 421 | 757 | 127 | 113 | 2970 | 346 | 559 | 64 | 76 | 61 |
| 4 | 301 | 410 | 353 | 724 | 127 | 228 | 2780 | 561 | 417 | 52 | 67 | 56 |
| 5 | 396 | 483 | 363 | 620 | 128 | 318 | 3030 | 520 | 300 | 61 | 97 | 54 |
| 6 | 298 | 680 | 355 | 535 | 129 | 324 | 1950 | 397 | 231 | 264 | 104 | 52 |
| 7 | 227 | 533 | 336 | 521 | 129 | 344 | 768 | 336 | 205 | 143 | 74 | 49 |
| 8 | 261 | 438 | 363 | 272 | 130 | e470 | 597 | 285 | 186 | 102 | 55 | 48 |
| 9 | 217 | 377 | 352 | 170 | 131 | 410 | 516 | 275 | 168 | 97 | 45 | 491 |
| 10 | 203 | 350 | 350 | 173 | 131 | 449 | 462 | 327 | 234 | 77 | 41 | 786 |
| 11 | 192 | 337 | 415 | 174 | 131 | 769 | 425 | 280 | 214 | 64 | 41 | 322 |
| 12 | 194 | 389 | 980 | 198 | 199 | 725 | 375 | 230 | 157 | 55 | 187 | 195 |
| 13 | 366 | e450 | 1150 | 268 | 222 | 663 | 637 | 201 | 132 | 53 | 464 | 145 |
| 14 | 254 | 380 | 1070 | 340 | 213 | 565 | 1990 | 199 | 121 | 58 | 563 | 112 |
| 15 | 430 | 330 | 935 | 329 | 204 | 287 | 939 | 184 | 111 | 70 | 287 | 95 |
| 16 | 962 | 302 | 769 | 312 | 195 | 217 | 466 | 196 | 100 | 88 | 226 | 85 |
| 17 | 834 | 297 | 525 | 288 | 125 | 212 | 661 | 198 | 91 | 74 | 292 | 81 |
| 18 | 386 | 297 | 1020 | 272 | 93 | 213 | 824 | 170 | 89 | 62 | 212 | 578 |
| 19 | 332 | 320 | 1250 | 139 | 96 | 213 | 672 | 188 | 96 | 59 | 148 | 835 |
| 20 | 322 | 1930 | 1220 | 87 | 97 | 208 | 379 | 182 | 92 | 66 | 116 | 1330 |
| 21 | 293 | 1270 | 1170 | 82 | 97 | 213 | 347 | 153 | 77 | 63 | 919 | 1480 |
| 22 | 281 | 692 | 1080 | 172 | 98 | 112 | 321 | 142 | 70 | 54 | 953 | 841 |
| 23 | 275 | 537 | 862 | 224 | 99 | 318 | 428 | 141 | 75 | 50 | 381 | 234 |
| 24 | 261 | 461 | 770 | 219 | 101 | 197 | 582 | 167 | 69 | 57 | 226 | 193 |
| 25 | 241 | 439 | 985 | 210 | 101 | 143 | 413 | 410 | 61 | 54 | 157 | 167 |
| 26 | 230 | 416 | 1040 | 161 | 101 | 157 | 651 | 450 | 68 | 45 | 129 | 151 |
| 27 | 314 | 378 | 1030 | 117 | 101 | 782 | 1220 | 713 | 88 | 42 | 109 | 130 |
| 28 | 943 | 416 | 1010 | 120 | 101 | 1130 | 716 | 640 | 69 | 193 | 98 | 401 |
| 29 | 1250 | 1560 | 986 | 119 | 101 | 1330 | 622 | 472 | 68 | 167 | 91 | 1500 |
| 30 | 1740 | 1190 | 953 | 121 | --- | 1400 | 463 | 333 | 72 | 103 | 87 | 1110 |
| 31 | 2200 | --- | 921 | 124 | --- | 1250 | --- | 243 | --- | 74 | 86 | --- |
| TOTAL | 15475 | 18651 | 24253 | 9550 | 3758 | 13967 | 28634 | 9653 | 5019 | 2530 | 6540 | 11732 |
| MEAN | 499 | 622 | 782 | 308 | 130 | 451 | 954 | 311 | 167 | 81.6 | 211 | 391 |
| MAX | 2200 | 1930 | 1250 | 879 | 222 | 1400 | 3030 | 713 | 559 | 264 | 953 | 1500 |
| MIN | 192 | 297 | 336 | 82 | 93 | 102 | 321 | 141 | 61 | 42 | 41 | 48 |
| IN. | 3.58 | 4.31 | 5.60 | 2.21 | 0.87 | 3.23 | 6.62 | 2.23 | 1.16 | 0.58 | 1.51 | 2.71 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1909 - 2004, BY WATER YEAR (WY)

| | 1909 | 1910 | 1911 | 1912 | 1913 | 1914 | 1915 | 1916 | 1917 | 1918 | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 | 1925 | 1926 | 1927 | 1928 | 1929 | 1930 | 1931 | 1932 | 1933 | 1934 | 1935 | 1936 | 1937 | 1938 | 1939 | 1940 | 1941 | 1942 | 1943 | 1944 | 1945 | 1946 | 1947 | 1948 | 1949 | 1950 | 1951 | 1952 | 1953 | 1954 | 1955 | 1956 | 1957 | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 | 1970 | 1971 | 1972 | 1973 | 1974 | 1975 | 1976 | 1977 | 1978 | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 |
|----------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 183 | 307 | 310 | 295 | 285 | 615 | 932 | 442 | 260 | 129 | 111 | 130 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MAX (WY) | 1394 | 1155 | 989 | 1305 | 1001 | 2050 | 1853 | 912 | 1158 | 494 | 745 | 986 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MIN (WY) | 1956 | 1956 | 1974 | 1949 | 1984 | 1936 | 1987 | 1972 | 1984 | 1972 | 1955 | 1938 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| IN. | 18.3 | 36.4 | 68.5 | 44.7 | 65.0 | 158 | 283 | 143 | 41.1 | 20.7 | 15.7 | 14.8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| (WY) | 1965 | 1965 | 1915 | 1981 | 1920 | 1940 | 1985 | 1986 | 1964 | 1913 | 1913 | 1953 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

SUMMARY STATISTICS

| | FOR 2003 CALENDAR YEAR | FOR 2004 WATER YEAR | ^a WATER YEARS 1909 - 2004 |
|--------------------------|------------------------|---------------------|--------------------------------------|
| ANNUAL TOTAL | 165963 | 149762 | |
| ANNUAL MEAN | 455 | 409 | |
| HIGHEST ANNUAL MEAN | | | 333 |
| LOWEST ANNUAL MEAN | | | 538 |
| HIGHEST DAILY MEAN | 2460 | Apr 1 | 137 |
| LOWEST DAILY MEAN | 38 | Jul 31 | 1928 |
| ANNUAL SEVEN-DAY MINIMUM | 51 | Jul 26 | 13400 |
| MAXIMUM PEAK FLOW | | | 1.1 |
| MAXIMUM PEAK STAGE | | | 8.9 |
| INSTANTANEOUS LOW FLOW | | | 37900 |
| ANNUAL RUNOFF (INCHES) | 38.35 | 34.60 | 28.09 |
| 10 PERCENT EXCEEDS | 1050 | 967 | 804 |
| 50 PERCENT EXCEEDS | 302 | 266 | 169 |
| 90 PERCENT EXCEEDS | 91 | 70 | 36 |

^a Years of operation not continuous; see Period of Record for actual years of operation.

e Estimated

CONNECTICUT RIVER BASIN

01181000 WEST BRANCH WESTFIELD RIVER AT HUNTINGTON, MA

LOCATION.--Lat 42° 14'14", long 72° 53'46", Hampshire County, Hydrologic Unit 01080206, on left bank at Huntington, 0.4 mi downstream from Roaring Brook, and 1.5 mi upstream from mouth.

DRAINAGE AREA.--94.0 mi².

PERIOD OF RECORD.--Discharge: September 1935 to current year.

Water-quality records: Water years 1957, 1967-74.

REVISED RECORDS.--WDR MA-RI-84-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 383.60 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1989, at datum 5.00 ft higher.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Prior to 1950, some diurnal fluctuation at low flow caused by small mill upstream. Telephone and satellite gage-height telemeter at station.

AVERAGE DISCHARGE.--69 years (water years 1936-2004), 193 ft³/s, 27.90 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 26,100 ft³/s, Aug. 19, 1955, gage height, 15.27 ft, datum then in use, from rating curve extended above 9,500 ft³/s on basis of slope-area measurement of peak flow; minimum discharge, 3.3 ft³/s, Aug. 9, 1955, Nov. 27, 1957.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,760 ft³/s, Sept. 18, gage height, 8.82 ft; minimum discharge, 22 ft³/s, July 23, 27.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004 DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|-------|------|------|------|-------|------|------|------|------|-------|
| 1 | 311 | 496 | 392 | 316 | e60 | 71 | 2600 | 234 | 208 | 31 | 63 | 57 |
| 2 | 247 | 387 | 326 | 286 | e60 | 119 | 2540 | 221 | 344 | 60 | 81 | 47 |
| 3 | 198 | 336 | 244 | 331 | e65 | 259 | 1020 | 220 | 360 | 50 | 51 | 41 |
| 4 | 179 | 300 | 255 | 561 | e70 | 247 | 724 | 374 | 201 | 35 | 43 | 38 |
| 5 | 258 | 356 | 231 | 528 | e65 | 242 | 546 | 272 | 152 | 33 | 92 | 35 |
| 6 | 187 | 453 | e170 | 378 | e70 | 673 | 390 | 229 | 127 | 77 | 87 | 33 |
| 7 | 159 | 332 | e150 | e240 | e80 | 561 | 331 | 197 | 117 | 54 | 48 | 31 |
| 8 | 150 | 274 | e145 | e170 | e85 | 329 | 290 | 169 | 101 | 46 | 37 | 32 |
| 9 | 132 | 233 | e140 | e130 | e80 | 239 | 259 | 178 | 86 | 41 | 31 | 1080 |
| 10 | 118 | 211 | 194 | e105 | e65 | 196 | 230 | 195 | 137 | 33 | 27 | 803 |
| 11 | 111 | 208 | 850 | e120 | e65 | 188 | 208 | 167 | 119 | 29 | 30 | 291 |
| 12 | 119 | 247 | 964 | e160 | e60 | 202 | 193 | 153 | 88 | 27 | 245 | 174 |
| 13 | 160 | 255 | 482 | e170 | e60 | 167 | 624 | 158 | 71 | 27 | 354 | 131 |
| 14 | 121 | 218 | 336 | e155 | e65 | 147 | 1520 | 133 | 63 | 30 | 255 | 99 |
| 15 | 892 | 186 | 360 | e140 | e60 | 151 | 692 | 120 | 62 | 33 | 145 | 82 |
| 16 | 496 | 173 | 315 | e130 | e65 | 151 | 426 | 119 | 55 | 34 | 156 | 71 |
| 17 | 320 | 171 | 1060 | e125 | e56 | 142 | 335 | 104 | 49 | 30 | 157 | 66 |
| 18 | 219 | 170 | 1600 | e120 | e50 | 136 | 284 | 99 | 48 | 26 | 104 | 2660 |
| 19 | 203 | 188 | 780 | e115 | e49 | 128 | 250 | 230 | 66 | 28 | 75 | 1030 |
| 20 | 205 | 1310 | 503 | e110 | e48 | 122 | 236 | 139 | 53 | 35 | 68 | 444 |
| 21 | 186 | 653 | 382 | e100 | e47 | 165 | 195 | 122 | 43 | 29 | 708 | 251 |
| 22 | 185 | 406 | 335 | e95 | e47 | 155 | 180 | 108 | 40 | 25 | 430 | 194 |
| 23 | 175 | 323 | 313 | e85 | e47 | 132 | 347 | 113 | 41 | 25 | 193 | 163 |
| 24 | 161 | 279 | 1290 | e80 | e46 | 136 | 351 | 121 | 37 | 46 | 122 | 140 |
| 25 | 147 | 292 | 1950 | e70 | e46 | 185 | 249 | 266 | 34 | 34 | 90 | 122 |
| 26 | 152 | 254 | 911 | e65 | e46 | 344 | 636 | 186 | 36 | 26 | 74 | 109 |
| 27 | 457 | 229 | 586 | e60 | e46 | 1020 | 872 | 419 | 39 | 24 | 62 | 96 |
| 28 | 946 | 282 | 443 | e65 | e48 | 775 | 455 | 326 | 33 | 83 | 56 | 806 |
| 29 | 2170 | 1140 | 380 | e70 | e55 | 505 | 326 | 283 | 35 | 60 | 54 | 2170 |
| 30 | 1100 | 547 | 373 | e70 | --- | 366 | 269 | 178 | 34 | 41 | 54 | 863 |
| 31 | 685 | --- | 368 | e65 | --- | 991 | --- | 146 | --- | 32 | 75 | --- |
| TOTAL | 11149 | 10909 | 16828 | 5215 | 1706 | 9244 | 17578 | 5979 | 2879 | 1184 | 4067 | 12159 |
| MEAN | 360 | 364 | 543 | 168 | 58.8 | 298 | 586 | 193 | 96.0 | 38.2 | 131 | 405 |
| MAX | 2170 | 1310 | 1950 | 561 | 85 | 1020 | 2600 | 419 | 360 | 83 | 708 | 2660 |
| MIN | 111 | 170 | 140 | 60 | 46 | 71 | 180 | 99 | 33 | 24 | 27 | 31 |
| CFSM | 3.83 | 3.87 | 5.77 | 1.79 | 0.63 | 3.17 | 6.23 | 2.05 | 1.02 | 0.41 | 1.40 | 4.31 |
| IN. | 4.41 | 4.32 | 6.66 | 2.06 | 0.68 | 3.66 | 6.96 | 2.37 | 1.14 | 0.47 | 1.61 | 4.81 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1935 - 2004, BY WATER YEAR (WY)

| | MEAN | MAX | (WY) | MIN | (WY) | MEAN | MAX | (WY) | MIN | (WY) | MEAN | MAX | (WY) | MIN | (WY) |
|------|------|------|------|------|------|------|-----|------|------|------|------|------|------|------|------|
| 1935 | 109 | 1041 | 1956 | 13.4 | 1958 | 181 | 544 | 1956 | 24.7 | 1965 | 203 | 664 | 1974 | 39.8 | 1947 |
| 1936 | 179 | 537 | 1996 | 24.3 | 1981 | 182 | 712 | 1981 | 35.3 | 1980 | 372 | 1098 | 1993 | 11.2 | 1985 |
| 1937 | 495 | 1176 | 1984 | 75.6 | 1986 | 495 | 761 | 1984 | 75.6 | 1986 | 257 | 684 | 1992 | 8.85 | 1991 |
| 1938 | 257 | 684 | 1972 | 8.85 | 1957 | 144 | 307 | 1972 | 8.85 | 1991 | 66.4 | 307 | 1955 | 8.46 | 1957 |
| 1939 | 66.4 | 307 | 1972 | 8.85 | 1991 | 59.9 | 632 | 1955 | 8.46 | 1957 | 70.5 | 632 | 1938 | 8.93 | 1953 |
| 1940 | 59.9 | 632 | 1955 | 8.46 | 1957 | 70.5 | 632 | 1938 | 8.93 | 1953 | | | | | |

SUMMARY STATISTICS FOR 2003 CALENDAR YEAR FOR 2004 WATER YEAR WATER YEARS 1935 - 2004

| | | | | | |
|--------------------------|--------|--------|-------|--------|-------------------|
| ANNUAL TOTAL | 102371 | 98897 | | | |
| ANNUAL MEAN | 280 | 270 | | | |
| HIGHEST ANNUAL MEAN | | | 193 | | |
| LOWEST ANNUAL MEAN | | | 302 | | 1996 |
| HIGHEST DAILY MEAN | 2170 | Oct 29 | 2660 | Sep 18 | 10500 Aug 19 1955 |
| LOWEST DAILY MEAN | 18 | Jul 31 | 24 | Jul 27 | 3.3 Aug 9 1955 |
| ANNUAL SEVEN-DAY MINIMUM | 23 | Jul 26 | 28 | Jul 17 | 3.8 Aug 4 1955 |
| MAXIMUM PEAK FLOW | | | 5760 | Sep 18 | 26100 Aug 19 1955 |
| MAXIMUM PEAK STAGE | | | 8.82 | Sep 18 | 15.27 Aug 19 1955 |
| INSTANTANEOUS LOW FLOW | | | 22 | Jul 23 | 3.3 Aug 9 1955 |
| ANNUAL RUNOFF (CFSM) | 2.98 | | 2.87 | | 2.05 |
| ANNUAL RUNOFF (INCHES) | 40.51 | | 39.14 | | 27.90 |
| 10 PERCENT EXCEEDS | 653 | | 628 | | 440 |
| 50 PERCENT EXCEEDS | 175 | | 156 | | 98 |
| 90 PERCENT EXCEEDS | 42 | | 39 | | 18 |

e Estimated

CONNECTICUT RIVER BASIN

01183500 WESTFIELD RIVER NEAR WESTFIELD, MA

LOCATION.--Lat 42° 06'24", long 72° 41'58", Hampden County, Hydrologic Unit 01080206, on left bank 0.7 mi downstream from Great Brook, 3 mi east of Westfield, and 8.1 mi upstream from mouth.

DRAINAGE AREA.--497 mi².

PERIOD OF RECORD.--Discharge: June 1914 to current year.

Water Quality: Water years 1952-53, 1957, 1967-74, 1994.

REVISED RECORDS.--WSP 601: 1924(M). WSP 756: Drainage area. WSP 1051: 1919-21(M), 1925(M). WSP 1231: 1915-16(M), 1920.

GAGE.--Water-stage recorder. Datum of gage is 98.25 ft above National Geodetic Vertical Datum of 1929. Prior to Nov. 3, 1933, on right bank at same datum.

REMARKS.--Records fair except those for estimated daily discharge, which are poor. Flow regulated by Borden Brook Reservoir, Cobble Mountain Reservoir since 1931, Knightville Reservoir since 1941, and Littleville Lake since 1965. High flow slightly affected by retarding reservoirs since 1963. Diversion from Little River for municipal supply of Springfield. Telephone and satellite gage-height telemeters at station.

AVERAGE DISCHARGE.--90 years (water years 1915-2004), 934 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 70,300 ft³/s, Aug. 19, 1955, gage height, 34.2 ft, from floodmarks, from rating curve extended above 18,000 ft³/s on basis of computations of flow over dam at gage heights 27.20 ft, 29.40 ft, and 34.2 ft; minimum discharge, 9 ft³/s, Oct. 2, 1921; minimum daily discharge, 40 ft³/s, Dec. 28, 29, 1914.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 8,340 ft³/s, Oct. 29, gage height, 11.39 ft; minimum discharge, 149 ft³/s, July 27.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|-------|
| 1 | 1700 | 3670 | 2030 | 1960 | 422 | 373 | 4320 | 1060 | 713 | 217 | 235 | 334 |
| 2 | 1270 | 2460 | 1900 | 1870 | 421 | 469 | 5450 | 963 | 1140 | 212 | 319 | 340 |
| 3 | 1030 | 1790 | 1570 | 1740 | 446 | 717 | 5320 | 948 | 1330 | 244 | 280 | 331 |
| 4 | 892 | 1690 | 1450 | 1880 | 435 | 809 | 4840 | 1380 | 1060 | 210 | 215 | 241 |
| 5 | 997 | 1460 | 1400 | 2290 | 419 | 947 | 4780 | 1580 | 810 | 192 | 373 | 233 |
| 6 | 912 | 1830 | 1130 | 1840 | 431 | 1200 | 4130 | 1180 | 661 | 410 | 393 | 218 |
| 7 | 685 | 1480 | 1040 | 1560 | 514 | 1510 | 2500 | 954 | 591 | 397 | 278 | 206 |
| 8 | 743 | 1220 | 1020 | 1280 | 520 | 1250 | 1900 | 829 | 596 | 313 | 240 | 208 |
| 9 | 705 | 1070 | 975 | e946 | 458 | 896 | 1400 | 771 | 642 | 290 | 187 | 1170 |
| 10 | 629 | 978 | 990 | e757 | 444 | 999 | 1170 | 861 | 657 | 255 | 160 | 2220 |
| 11 | 586 | 937 | 1690 | e753 | 441 | 1180 | 996 | 803 | 583 | 220 | 161 | 1210 |
| 12 | 548 | 1030 | 3550 | 799 | 429 | 1270 | 925 | 906 | 478 | 192 | 345 | 701 |
| 13 | 774 | 1070 | 2870 | 963 | 496 | 1130 | 1730 | 747 | 403 | 209 | 929 | 505 |
| 14 | 683 | 1120 | 2490 | e1030 | 488 | 992 | 4860 | 609 | 369 | 206 | 1190 | 425 |
| 15 | 1930 | 978 | 2520 | e1020 | 465 | 805 | 3620 | 557 | 362 | 228 | 745 | 328 |
| 16 | 2230 | 826 | 2140 | e960 | 442 | 634 | 2070 | 546 | 365 | 255 | 642 | 305 |
| 17 | 1810 | 952 | 2110 | e1040 | 416 | 609 | 1810 | 537 | 302 | 238 | 658 | 296 |
| 18 | 1090 | 1130 | 4470 | e920 | 346 | 586 | 1700 | 489 | 289 | 203 | 601 | 3070 |
| 19 | 917 | 1180 | 3590 | 771 | 335 | 576 | 2010 | 661 | 313 | 274 | 437 | 3210 |
| 20 | 893 | 3450 | 2930 | 637 | 332 | 551 | 1530 | 593 | 307 | 272 | 626 | 2410 |
| 21 | 817 | 3460 | 2500 | 520 | 327 | 642 | 1250 | 530 | 255 | 215 | 1230 | 2570 |
| 22 | 793 | 2030 | 2380 | 494 | 332 | 600 | 1130 | 493 | 245 | 183 | 2260 | 1770 |
| 23 | 752 | 1540 | 2080 | 606 | 331 | 614 | 1350 | 487 | 240 | 165 | 1160 | 773 |
| 24 | 707 | 1320 | 2420 | 626 | 329 | 677 | 1630 | 537 | 272 | 193 | 736 | 590 |
| 25 | 657 | 1290 | 4950 | 702 | 325 | 569 | 1190 | 992 | 244 | 196 | 525 | 507 |
| 26 | 635 | 1400 | 3460 | 690 | 318 | 682 | 1440 | 980 | 267 | 169 | 438 | 451 |
| 27 | 883 | 1190 | 2990 | 534 | 320 | 1640 | 2660 | 1550 | 255 | 153 | 406 | 397 |
| 28 | 3170 | 1080 | 2560 | 464 | 338 | 2390 | 2040 | 1580 | 238 | 336 | 378 | 1020 |
| 29 | 5050 | 2990 | e2290 | 505 | 352 | 2270 | 1280 | 1350 | 222 | 438 | 333 | 3920 |
| 30 | 5220 | 2800 | e2200 | 482 | --- | 2240 | 1380 | 942 | 220 | 308 | 342 | 3100 |
| 31 | 4700 | --- | e2130 | 429 | --- | 2650 | --- | 729 | --- | 239 | 376 | --- |
| TOTAL | 44408 | 49421 | 71825 | 31068 | 11672 | 32477 | 72411 | 27144 | 14429 | 7632 | 17198 | 33059 |
| MEAN | 1433 | 1647 | 2317 | 1002 | 402 | 1048 | 2414 | 876 | 481 | 246 | 555 | 1102 |
| MAX | 5220 | 3670 | 4950 | 2290 | 520 | 2650 | 5450 | 1580 | 1330 | 438 | 2260 | 3920 |
| MIN | 548 | 826 | 975 | 429 | 318 | 373 | 925 | 487 | 220 | 153 | 160 | 206 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1914 - 2004, BY WATER YEAR (WY)

| | | | | | | | | | | | | |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 532 | 835 | 918 | 880 | 886 | 1682 | 2303 | 1222 | 757 | 402 | 389 | 412 |
| MAX | 4587 | 3344 | 2623 | 2635 | 2663 | 5064 | 5225 | 2630 | 2792 | 1738 | 3237 | 2938 |
| (WY) | 1956 | 1928 | 1997 | 1949 | 1984 | 1936 | 1993 | 1989 | 1982 | 1972 | 1955 | 1938 |
| MIN | 96.7 | 140 | 206 | 155 | 215 | 597 | 586 | 408 | 186 | 118 | 91.2 | 85.0 |
| (WY) | 1965 | 1965 | 1915 | 1981 | 1920 | 1941 | 1985 | 1985 | 1964 | 1962 | 1957 | 1995 |

SUMMARY STATISTICS

| | FOR 2003 CALENDAR YEAR | | FOR 2004 WATER YEAR | | WATER YEARS 1914 - 2004 | |
|--------------------------|------------------------|--|---------------------|--|-------------------------|--|
| ANNUAL TOTAL | 462110 | | 412744 | | | |
| ANNUAL MEAN | 1266 | | 1128 | | 934 | |
| HIGHEST ANNUAL MEAN | | | | | 1594 | |
| LOWEST ANNUAL MEAN | | | | | 368 | |
| HIGHEST DAILY MEAN | 6100 | | 5450 | | 37400 | |
| LOWEST DAILY MEAN | 156 | | 153 | | 40 | |
| ANNUAL SEVEN-DAY MINIMUM | 191 | | 182 | | 50 | |
| MAXIMUM PEAK FLOW | | | 8340 | | 70300 | |
| MAXIMUM PEAK STAGE | | | 11.39 | | 34.20 | |
| INSTANTANEOUS LOW FLOW | | | 149 | | 9.0 | |
| 10 PERCENT EXCEEDS | 2890 | | 2490 | | 2140 | |
| 50 PERCENT EXCEEDS | 925 | | 771 | | 551 | |
| 90 PERCENT EXCEEDS | 292 | | 245 | | 160 | |

e Estimated

CONNECTICUT RIVER BASIN

01185500 WEST BRANCH FARMINGTON RIVER NEAR NEW BOSTON, MA

LOCATION.--Lat 42° 04'45", long 73° 04'24", Berkshire County, Hydrologic Unit 01080207, on left bank 5 ft downstream from highway bridge, 0.3 mi downstream from Clam River, 1 mi south of New Boston, and at mile 65.0.

DRAINAGE AREA.--91.7 mi².

PERIOD OF RECORD.--May 1913 to current year. Prior to October 1948, published as Farmington River near New Boston.

REVISED RECORDS.--WSP 641: 1924(M). WSP 781: 1928(M). WSP 1231: 1914. WDR MA-RI-84-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 758.21 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow regulated by Otis Reservoir 7.0 mi upstream on Fall River. High flow slightly affected by retarding reservoirs since 1966. Satellite and telephone gage-height telemeter at station.

AVERAGE DISCHARGE.--91 years (water years 1914-2004), 184 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 34,300 ft³/s, Aug. 19, 1955, gage height, 14.06 ft, from rating curve extended above 9,600 ft³/s on basis of slope-area measurement of peak flow; minimum daily discharge, 2.4 ft³/s, Aug. 20, 21, 1957.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,380 ft³/s, Sept. 18, gage height, 7.45 ft, minimum discharge, 16 ft³/s, July 5.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|-------|------|------|------|-------|------|------|------|------|-------|
| 1 | 286 | 597 | 330 | 341 | e78 | 58 | 980 | 167 | 169 | 23 | 41 | 100 |
| 2 | 221 | 527 | 276 | 356 | e81 | 89 | 1140 | 150 | 222 | 23 | 88 | 82 |
| 3 | 214 | 479 | 220 | 377 | e83 | 165 | 770 | 146 | 183 | 21 | 73 | 59 |
| 4 | 215 | 457 | 217 | 468 | e83 | 176 | 608 | 235 | 138 | 18 | 95 | 55 |
| 5 | 239 | 465 | 198 | 522 | e81 | 190 | 532 | 196 | 107 | 21 | 150 | 52 |
| 6 | 207 | 514 | 198 | 416 | e75 | 380 | 397 | 174 | 92 | 68 | 115 | 47 |
| 7 | 153 | 457 | 240 | 298 | e81 | 358 | 247 | 151 | 85 | 40 | 81 | 45 |
| 8 | 105 | 406 | 272 | e192 | e103 | 261 | 212 | 138 | 75 | 43 | 65 | 56 |
| 9 | 92 | 374 | 253 | e159 | e104 | 198 | 189 | 138 | 67 | 39 | 53 | 782 |
| 10 | 85 | 359 | 239 | e134 | e82 | 157 | 167 | 135 | 72 | 30 | 45 | 921 |
| 11 | 84 | 353 | 573 | e141 | e74 | 144 | 144 | 127 | 67 | 25 | 49 | 549 |
| 12 | 100 | 366 | 714 | e157 | e61 | 142 | 132 | 105 | 60 | 22 | 539 | 282 |
| 13 | 124 | 385 | 496 | e162 | e66 | 122 | 315 | 101 | 57 | 26 | 664 | 206 |
| 14 | 102 | 353 | 403 | e159 | e57 | 111 | 686 | 91 | 51 | 26 | 533 | 156 |
| 15 | 637 | 334 | 393 | e149 | e63 | 106 | 470 | 86 | 50 | 29 | 340 | 139 |
| 16 | 453 | 328 | 341 | e135 | e68 | 103 | 314 | 81 | 45 | 28 | 321 | 124 |
| 17 | 311 | 333 | 657 | e137 | e63 | 100 | 252 | 73 | 43 | 24 | 345 | 106 |
| 18 | 402 | 322 | 971 | e139 | e56 | 95 | 209 | 70 | 44 | 22 | 222 | 1860 |
| 19 | 332 | 342 | 618 | e139 | e52 | 90 | 170 | 89 | 47 | 26 | 174 | 1450 |
| 20 | 162 | 936 | 471 | e138 | e68 | 87 | 145 | 72 | 38 | 30 | 161 | 835 |
| 21 | 147 | 682 | 392 | e137 | e63 | 106 | 131 | 73 | 34 | 23 | 643 | 527 |
| 22 | 143 | 523 | 326 | e117 | e63 | 103 | 118 | 69 | 34 | 20 | 672 | 338 |
| 23 | 138 | 448 | 291 | e102 | e57 | 99 | 196 | 77 | 35 | 27 | 366 | 259 |
| 24 | 173 | 323 | 695 | e89 | 62 | 94 | 241 | 105 | 30 | 46 | 226 | 204 |
| 25 | 327 | 258 | 1090 | e87 | 62 | 117 | 195 | 283 | 30 | 32 | 164 | 168 |
| 26 | 323 | 232 | 676 | e72 | 69 | 183 | 307 | 171 | 33 | 25 | 133 | 144 |
| 27 | 513 | 211 | 508 | e74 | 56 | 395 | 444 | 393 | 29 | 26 | 107 | 119 |
| 28 | 766 | 241 | 432 | e78 | 55 | 401 | 323 | 356 | 26 | 79 | 96 | 393 |
| 29 | 1530 | 610 | 394 | e78 | 53 | 319 | 235 | 280 | 27 | 57 | 86 | 1080 |
| 30 | 1130 | 427 | 369 | e81 | --- | 269 | 192 | 199 | 25 | 40 | 93 | 734 |
| 31 | 731 | --- | 372 | e80 | --- | 524 | --- | 143 | --- | 34 | 111 | --- |
| TOTAL | 10445 | 12642 | 13625 | 5714 | 2019 | 5742 | 10461 | 4674 | 2015 | 993 | 6851 | 11872 |
| MEAN | 337 | 421 | 440 | 184 | 69.6 | 185 | 349 | 151 | 67.2 | 32.0 | 221 | 396 |
| MAX | 1530 | 936 | 1090 | 522 | 104 | 524 | 1140 | 393 | 222 | 79 | 672 | 1860 |
| MIN | 84 | 211 | 198 | 72 | 52 | 58 | 118 | 69 | 25 | 18 | 41 | 45 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1913 - 2004, BY WATER YEAR (WY)

| | 1913 | 1914 | 1915 | 1916 | 1917 | 1918 | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 | 1925 | 1926 | 1927 | 1928 | 1929 | 1930 | 1931 | 1932 | 1933 | 1934 | 1935 | 1936 | 1937 | 1938 | 1939 | 1940 | 1941 | 1942 | 1943 | 1944 | 1945 | 1946 | 1947 | 1948 | 1949 | 1950 | 1951 | 1952 | 1953 | 1954 | 1955 | 1956 | 1957 | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 | 1970 | 1971 | 1972 | 1973 | 1974 | 1975 | 1976 | 1977 | 1978 | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 144 | 212 | 199 | 179 | 163 | 302 | 402 | 215 | 132 | 79.6 | 86.1 | 93.3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MAX | 774 | 817 | 563 | 529 | 608 | 947 | 934 | 627 | 479 | 290 | 1002 | 644 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| (WY) | 1956 | 1928 | 1997 | 1996 | 1981 | 1936 | 1993 | 1984 | 1982 | 1945 | 1955 | 1938 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MIN | 19.9 | 27.0 | 31.1 | 20.1 | 34.7 | 88.5 | 96.1 | 61.6 | 23.9 | 9.26 | 5.68 | 8.81 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| (WY) | 1915 | 1915 | 1918 | 1981 | 1980 | 1965 | 1985 | 1941 | 1964 | 1962 | 1957 | 1955 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

SUMMARY STATISTICS

| | FOR 2003 CALENDAR YEAR | | FOR 2004 WATER YEAR | | WATER YEARS 1913 - 2004 | |
|--------------------------|------------------------|--|---------------------|--|-------------------------|--|
| ANNUAL TOTAL | 89084 | | 87053 | | | |
| ANNUAL MEAN | 244 | | 238 | | | |
| HIGHEST ANNUAL MEAN | | | | | 184 | |
| LOWEST ANNUAL MEAN | | | | | 341 | |
| HIGHEST DAILY MEAN | 1530 | | Oct 29 | | 16100 | |
| LOWEST DAILY MEAN | 19 | | Jul 31 | | 2.4 | |
| ANNUAL SEVEN-DAY MINIMUM | 26 | | Jul 26 | | 3.1 | |
| MAXIMUM PEAK FLOW | | | 3380 | | 34300 | |
| MAXIMUM PEAK STAGE | | | 7.45 | | 14.06 | |
| INSTANTANEOUS LOW FLOW | | | 16 | | | |
| 10 PERCENT EXCEEDS | 526 | | 528 | | 401 | |
| 50 PERCENT EXCEEDS | 153 | | 146 | | 115 | |
| 90 PERCENT EXCEEDS | 43 | | 40 | | 26 | |

e Estimated

HOUSATONIC RIVER BASIN

01197000 EAST BRANCH HOUSATONIC RIVER AT COLTSMVILLE, MA

LOCATION.--Lat 42° 28' 10", long 73° 11' 49", Berkshire County, Hydrologic Unit 01100005, on right bank 250 ft downstream from Hubbard Avenue Bridge at Coltsville, 1.2 mi upstream from Unkamet Brook, and 2 mi northeast of Pittsfield. Prior to Nov. 8, 1994, at site 200 ft upstream.

DRAINAGE AREA.--57.6 mi².

PERIOD OF RECORD.--Discharge: March 1936 to current year. Prior to October 1945, published as Housatonic River at Coltsville. Water-quality records: Water years 1963-65.

REVISED RECORDS.--WSP 851: 1936(M). WDR MA-RI-82-1: 1976-77, 1979-80. WDR MA-RI-84-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 993.49 ft above National Geodetic Vertical Datum of 1929. Prior to Nov. 8, 1994, at site 200 ft upstream at same datum.

REMARKS.--Records good except those for estimated daily discharge, which are poor. Flow regulated by powerplants upstream and, since 1949, by Cleveland Brook Reservoir, usable capacity, 214,000,000 ft³, 5.4 mi upstream; regulation greater prior to 1955. Diversion upstream from Cleveland Brook Reservoir for municipal supply of Pittsfield since May 1950. Satellite and telephone gage-height telemeter at station.

AVERAGE DISCHARGE.--68 years (water years 1937-2004), 107 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,400 ft³/s, Sept. 21, 1938, gage height, 10.80 ft, from rating curve extended above 2,300 ft³/s on basis of computation of peak flow over dam; minimum daily discharge, 4.4 ft³/s, Aug. 15, 1936.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge since at least 1755, that of Sept. 21, 1938.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,140 ft³/s, Apr. 2, gage height, 4.63 ft; minimum discharge, 22 ft³/s, July 27.

**DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES**

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1 | 178 | 244 | 224 | 134 | 47 | 52 | 944 | 107 | 121 | 29 | 38 | 40 |
| 2 | 143 | 189 | 184 | 122 | 47 | 78 | 1360 | 98 | 231 | 47 | 47 | 37 |
| 3 | 134 | 173 | 152 | 140 | 47 | 144 | 504 | 104 | 212 | 33 | 34 | 38 |
| 4 | 110 | 164 | 159 | 222 | 51 | 155 | 350 | 176 | 154 | 29 | 37 | 36 |
| 5 | 162 | 170 | 153 | 220 | 48 | 120 | 296 | 149 | 120 | 54 | 60 | 33 |
| 6 | 120 | 197 | 131 | 168 | 51 | 271 | 239 | 118 | 105 | 159 | 58 | 32 |
| 7 | 93 | 156 | 123 | 124 | 75 | 297 | 215 | 108 | 98 | 87 | 36 | 32 |
| 8 | 82 | 135 | 120 | 105 | 67 | 172 | 174 | 93 | 72 | 52 | 31 | 43 |
| 9 | 70 | 122 | 113 | 87 | 59 | 115 | 150 | 95 | 60 | 42 | 29 | 156 |
| 10 | 65 | 118 | 112 | 74 | 56 | 97 | 119 | 107 | 85 | 34 | 26 | 210 |
| 11 | 59 | 122 | 248 | e72 | 53 | 95 | 111 | 99 | 78 | 30 | 25 | 124 |
| 12 | 54 | 133 | 466 | e68 | 50 | 101 | 106 | 87 | 58 | 28 | 32 | 79 |
| 13 | 51 | 127 | 249 | e66 | 49 | 85 | 185 | 77 | 47 | 29 | 48 | 64 |
| 14 | 51 | 104 | 151 | e64 | 48 | 76 | 410 | 68 | 43 | 31 | 70 | 59 |
| 15 | 223 | 98 | 148 | e64 | 45 | 79 | 231 | 77 | 42 | 32 | 54 | 56 |
| 16 | 235 | 120 | 135 | e63 | 43 | 75 | 157 | 89 | 38 | 33 | 56 | 55 |
| 17 | 147 | 82 | 359 | e59 | 44 | 72 | 132 | 73 | 37 | 29 | 73 | 58 |
| 18 | 124 | 84 | 686 | e56 | 45 | 67 | 119 | 65 | 35 | 26 | 53 | 777 |
| 19 | 115 | 97 | 447 | e53 | 44 | 64 | 111 | 84 | 43 | 27 | 40 | 740 |
| 20 | 117 | 718 | 289 | e50 | 44 | 62 | 103 | 66 | 36 | 29 | 39 | 255 |
| 21 | 115 | 438 | 218 | e47 | 45 | 87 | 95 | 60 | 32 | 27 | 303 | 156 |
| 22 | 93 | 226 | 190 | e48 | 44 | 83 | 89 | 56 | 31 | 37 | 263 | 110 |
| 23 | 89 | 181 | 178 | e44 | 43 | 72 | 114 | 59 | 34 | 38 | 132 | 88 |
| 24 | 81 | 161 | 509 | e45 | 42 | 74 | 130 | 82 | 29 | 34 | 87 | 81 |
| 25 | 70 | 138 | 989 | 47 | 42 | 96 | 102 | 190 | 28 | 27 | 56 | 76 |
| 26 | 67 | 115 | 456 | 46 | 41 | 160 | 212 | 207 | 36 | 24 | 41 | 72 |
| 27 | 370 | 106 | 319 | 47 | 41 | 571 | 351 | 337 | 33 | 39 | 35 | 66 |
| 28 | 704 | 139 | 260 | 49 | 41 | 526 | 209 | 205 | 29 | 82 | 33 | 153 |
| 29 | 918 | 736 | 202 | 52 | 44 | 354 | 145 | 134 | 36 | 54 | 33 | 372 |
| 30 | 718 | 357 | 153 | 50 | --- | 279 | 119 | 96 | 32 | 37 | 37 | 275 |
| 31 | 336 | --- | 157 | 49 | --- | 449 | --- | 75 | --- | 30 | 51 | --- |
| TOTAL | 5894 | 5950 | 8280 | 2535 | 1396 | 5028 | 7582 | 3441 | 2035 | 1289 | 1957 | 4373 |
| MEAN | 190 | 198 | 267 | 81.8 | 48.1 | 162 | 253 | 111 | 67.8 | 41.6 | 63.1 | 146 |
| MAX | 918 | 736 | 989 | 222 | 75 | 571 | 1360 | 337 | 231 | 159 | 303 | 777 |
| MIN | 51 | 82 | 112 | 44 | 41 | 52 | 89 | 56 | 28 | 24 | 25 | 32 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1936 - 2004, BY WATER YEAR (WY)

| | 1936 | 1937 | 1938 | 1939 | 1940 | 1941 | 1942 | 1943 | 1944 | 1945 | 1946 | 1947 | 1948 | 1949 | 1950 | 1951 | 1952 | 1953 | 1954 | 1955 | 1956 | 1957 | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 | 1970 | 1971 | 1972 | 1973 | 1974 | 1975 | 1976 | 1977 | 1978 | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 71.0 | 96.8 | 103 | 94.5 | 94.3 | 176 | 260 | 139 | 86.3 | 52.4 | 48.8 | 55.9 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MAX | 318 | 279 | 321 | 252 | 274 | 417 | 582 | 366 | 326 | 220 | 188 | 326 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| (WY) | 1956 | 1956 | 1974 | 1949 | 1984 | 1979 | 1993 | 1984 | 1972 | 1945 | 1990 | 1938 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MIN | 19.9 | 19.1 | 31.2 | 15.5 | 16.0 | 50.4 | 66.3 | 37.8 | 25.4 | 12.9 | 14.9 | 14.3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| (WY) | 1965 | 1965 | 1981 | 1981 | 1980 | 1965 | 1985 | 1985 | 1964 | 1962 | 1980 | 1983 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

SUMMARY STATISTICS

| | FOR 2003 CALENDAR YEAR | | | | FOR 2004 WATER YEAR | | | | WATER YEARS 1936 - 2004 | | | |
|--------------------------|------------------------|--|--|--|---------------------|--|--|--|-------------------------|--|--|--|
| ANNUAL TOTAL | 54902 | | | | 49760 | | | | | | | |
| ANNUAL MEAN | 150 | | | | 136 | | | | | | | |
| HIGHEST ANNUAL MEAN | | | | | | | | | 107 | | | |
| LOWEST ANNUAL MEAN | | | | | | | | | 163 | | | |
| HIGHEST DAILY MEAN | 1300 | | | | Mar 30 | | | | 1360 | | | |
| LOWEST DAILY MEAN | 17 | | | | Jul 31 | | | | 24 | | | |
| ANNUAL SEVEN-DAY MINIMUM | 21 | | | | Jul 25 | | | | 29 | | | |
| MAXIMUM PEAK FLOW | | | | | | | | | 2140 | | | |
| MAXIMUM PEAK STAGE | | | | | | | | | 4.63 | | | |
| INSTANTANEOUS LOW FLOW | | | | | | | | | 22 | | | |
| 10 PERCENT EXCEEDS | 326 | | | | 27 | | | | 231 | | | |
| 50 PERCENT EXCEEDS | 90 | | | | 84 | | | | 61 | | | |
| 90 PERCENT EXCEEDS | 34 | | | | 34 | | | | 23 | | | |

e Estimated

HOUSATONIC RIVER BASIN

01197500 HOUSATONIC RIVER NEAR GREAT BARRINGTON, MA

LOCATION.--Lat 42° 13'55", long 73° 21'19", Berkshire County, Hydrologic Unit 01100005, on left bank at upstream side of highway bridge at Van Deusenville, 0.5 mi upstream from Williams River, and 2 mi north of Great Barrington.

DRAINAGE AREA.--282 mi².

PERIOD OF RECORD.--Discharge: May 1913 to current year.

Water-quality records: Water years 1957-59, 1964, 1971, and 1980.

Suspended sediment records: Water years 1980, 1994-96.

REVISED RECORDS.--WSP 415: 1913-14. WSP 781: 1928(M). WSP 1051: 1928, 1933. WSP 1301: 1914-15(M), 1917-27(M), 1929-31(M). WDR MA-RI-83-1: 1980(P), 1982(P). WDR MA-RI-84-1: Drainage Area.

GAGE.--Water-stage recorder. Datum of gage is 683.04 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1931, nonrecording gage at same site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Regulation at low flow by powerplants upstream. High flow slightly affected by retarding reservoir since 1973. Telephone and satellite gage-height telemeters at station.

AVERAGE DISCHARGE.--91 years (water years 1914-2004), 527 ft³/s, 25.37 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,200 ft³/s, Jan. 1, 1949, gage height, 12.08 ft, from rating curve extended above 6,400 ft³/s on basis of computations of flow over dams at gage heights 11.72 ft and 12.08 ft; minimum daily discharge, 1.0 ft³/s, Oct. 18, 1914.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,720 ft³/s, Dec. 26, gage height, 6.93 ft; minimum discharge, 100 ft³/s, July 13.

**DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES**

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|-------|-------|------|-------|-------|-------|-------|------|-------|-------|
| 1 | 1200 | 2140 | 1660 | 1010 | e234 | 241 | 1760 | 645 | 539 | 154 | 193 | 374 |
| 2 | 792 | 1480 | 1210 | 918 | e234 | 302 | 2580 | 574 | 689 | 162 | 445 | 325 |
| 3 | 652 | 1110 | 913 | 909 | e234 | 505 | 2940 | 560 | 905 | 208 | 438 | 264 |
| 4 | 600 | 946 | 786 | 1070 | e243 | 616 | 2330 | 694 | 840 | 173 | 313 | 215 |
| 5 | 658 | 873 | 752 | 1190 | e259 | 635 | 1670 | 727 | 680 | 160 | 386 | 193 |
| 6 | 625 | 969 | 748 | 1080 | e289 | 792 | 1280 | 677 | 563 | 320 | 348 | 171 |
| 7 | 557 | 914 | 703 | 886 | e337 | 1160 | 1060 | 608 | 471 | 438 | 251 | 166 |
| 8 | 463 | 751 | 719 | e606 | e385 | 988 | 914 | 534 | 449 | 335 | 206 | 160 |
| 9 | 420 | 652 | 752 | e509 | e375 | 745 | 749 | 490 | 391 | 221 | 181 | 601 |
| 10 | 393 | 597 | 631 | e472 | e325 | 659 | 652 | 517 | 441 | 180 | 152 | 1040 |
| 11 | 344 | 570 | 790 | e428 | e328 | 610 | 579 | 490 | 464 | 163 | 149 | 893 |
| 12 | 309 | 620 | 1490 | e393 | e301 | 599 | 542 | 467 | 389 | 145 | 159 | 594 |
| 13 | 304 | 637 | 1440 | e380 | e261 | 559 | 639 | 505 | 303 | 129 | 263 | 435 |
| 14 | 283 | 594 | 967 | e357 | e241 | 496 | 1210 | 430 | 275 | 133 | 399 | 346 |
| 15 | 422 | 520 | 788 | e352 | e240 | 505 | 1310 | 437 | 259 | 138 | 429 | 295 |
| 16 | 667 | 488 | 761 | e327 | e241 | 486 | 917 | 514 | 244 | 141 | 348 | 253 |
| 17 | 624 | 489 | 1090 | e327 | e244 | 449 | 738 | 471 | 228 | 140 | 440 | 233 |
| 18 | 531 | 458 | e1490 | e319 | e249 | 403 | e641 | 378 | 254 | 131 | 373 | 1500 |
| 19 | 516 | 447 | e1780 | e319 | 255 | 375 | e551 | 402 | 269 | 129 | 310 | 3260 |
| 20 | 506 | 1330 | 2030 | e312 | 248 | 352 | e540 | 361 | 205 | 130 | 236 | 3200 |
| 21 | 482 | 1890 | 1430 | e285 | 242 | 408 | 527 | 331 | 183 | 130 | 522 | 2000 |
| 22 | 437 | 1540 | 1130 | e276 | 246 | 440 | 499 | 302 | 161 | 119 | 1170 | 1070 |
| 23 | 421 | 1050 | 994 | e265 | 240 | 383 | 536 | 306 | 164 | 131 | 971 | 690 |
| 24 | 405 | 841 | e1370 | e257 | 234 | 371 | 668 | 336 | 163 | 227 | 618 | 579 |
| 25 | 407 | 774 | 3250 | e251 | 261 | 406 | 605 | 569 | 152 | 233 | 459 | 552 |
| 26 | 392 | 741 | 3540 | e244 | 281 | 501 | 691 | 668 | 163 | 187 | 359 | 472 |
| 27 | 613 | 668 | 2650 | e234 | 259 | 921 | 1350 | 879 | 195 | 172 | 323 | 378 |
| 28 | 1780 | 674 | 1850 | e234 | 256 | 1520 | 1300 | 1060 | 191 | 248 | 245 | 734 |
| 29 | 2530 | 1640 | 1440 | e234 | 231 | 1460 | 882 | 962 | 166 | 355 | 296 | 2110 |
| 30 | 3190 | 2030 | 1250 | e234 | --- | 1150 | 727 | 764 | 166 | 239 | 235 | 2110 |
| 31 | 3030 | --- | 1120 | e234 | --- | 1120 | --- | 542 | --- | 189 | 241 | --- |
| TOTAL | 24553 | 28433 | 41524 | 14912 | 7773 | 20157 | 31387 | 17200 | 10562 | 5960 | 11458 | 25213 |
| MEAN | 792 | 948 | 1339 | 481 | 268 | 650 | 1046 | 555 | 352 | 192 | 370 | 840 |
| MAX | 3190 | 2140 | 3540 | 1190 | 385 | 1520 | 2940 | 1060 | 905 | 438 | 1170 | 3260 |
| MIN | 283 | 447 | 631 | 234 | 231 | 241 | 499 | 302 | 152 | 119 | 149 | 160 |
| CFSM | 2.81 | 3.36 | 4.75 | 1.71 | 0.95 | 2.31 | 3.71 | 1.97 | 1.25 | 0.68 | 1.31 | 2.98 |
| IN. | 3.24 | 3.75 | 5.48 | 1.97 | 1.03 | 2.66 | 4.14 | 2.27 | 1.39 | 0.79 | 1.51 | 3.33 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1913 - 2004, BY WATER YEAR (WY)

| | 1913 | 1914 | 1915 | 1916 | 1917 | 1918 | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 | 1925 | 1926 | 1927 | 1928 | 1929 | 1930 | 1931 | 1932 | 1933 | 1934 | 1935 | 1936 | 1937 | 1938 | 1939 | 1940 | 1941 | 1942 | 1943 | 1944 | 1945 | 1946 | 1947 | 1948 | 1949 | 1950 | 1951 | 1952 | 1953 | 1954 | 1955 | 1956 | 1957 | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 | 1970 | 1971 | 1972 | 1973 | 1974 | 1975 | 1976 | 1977 | 1978 | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 312 | 468 | 531 | 509 | 489 | 901 | 1220 | 683 | 426 | 275 | 241 | 264 | 1978 | 1928 | 1974 | 1949 | 1984 | 1936 | 1920 | 1984 | 2000 | 1945 | 1928 | 1938 | 80.9 | 85.5 | 112 | 83.5 | 128 | 291 | 338 | 241 | 134 | 93.4 | 86.8 | 75.1 | 1915 | 1965 | 1915 | 1931 | 1931 | 1941 | 1985 | 1985 | 1921 | 1962 | 1913 | 1913 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

SUMMARY STATISTICS

| | FOR 2003 CALENDAR YEAR | | | | FOR 2004 WATER YEAR | | | | WATER YEARS 1913 - 2004 | | | |
|--------------------------|------------------------|--|--|--|---------------------|--|--|--|-------------------------|--|--|--|
| ANNUAL TOTAL | 248488 | | | | 239132 | | | | | | | |
| ANNUAL MEAN | 681 | | | | 653 | | | | 527 | | | |
| HIGHEST ANNUAL MEAN | | | | | | | | | 962 | | | |
| LOWEST ANNUAL MEAN | | | | | | | | | 211 | | | |
| HIGHEST DAILY MEAN | 3960 | | | | Mar 31 | | | | 3540 | | | |
| LOWEST DAILY MEAN | 102 | | | | Jul 31 | | | | 119 | | | |
| ANNUAL SEVEN-DAY MINIMUM | 124 | | | | Jul 26 | | | | 130 | | | |
| MAXIMUM PEAK FLOW | | | | | | | | | 3720 | | | |
| MAXIMUM PEAK STAGE | | | | | | | | | 6.93 | | | |
| INSTANTANEOUS LOW FLOW | | | | | | | | | 100 | | | |
| ANNUAL RUNOFF (CFSM) | 2.41 | | | | 2.32 | | | | 1.87 | | | |
| ANNUAL RUNOFF (INCHES) | 32.78 | | | | 31.55 | | | | 25.37 | | | |
| 10 PERCENT EXCEEDS | 1520 | | | | 1360 | | | | 1150 | | | |
| 50 PERCENT EXCEEDS | 455 | | | | 472 | | | | 337 | | | |
| 90 PERCENT EXCEEDS | 189 | | | | 190 | | | | 126 | | | |

e Estimated

HUDSON RIVER BASIN

01331500 HOOSIC RIVER AT ADAMS, MA

LOCATION.--Lat 42° 36'40", long 73° 07'28", Berkshire County, Hydrologic Unit 02020003, on left bank at Adams, 500 ft downstream from Dry Brook, and 0.4 mi upstream from Pecks Brook.

DRAINAGE AREA.--46.7 mi².

PERIOD OF RECORD.--Discharge: October 1931 to current year.

Water-quality records: Water years 1967-69.

REVISED RECORDS.--WDR MA-NH-RI-VT-73-1: 1971-72. WDR MA-RI-84-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 828.01 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1964, datum was 9.00 ft higher and Oct. 1, 1964, to May 29, 1974, 8.00 ft higher, at site 500 ft upstream.

REMARKS.--Records good except those for estimated daily discharge, which are poor. Diversion upstream for municipal supply of Adams. Some diurnal fluctuation by mill upstream prior to 1961. Flow regulated by Cheshire Reservoir 5.1 mi upstream.

AVERAGE DISCHARGE.--73 years (water years 1932-2004), 90.0 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,080 ft³/s, Sept. 21, 1938, gage height, 9.25 ft, site and datum then in use, from rating curve extended above 1,100 ft³/s on basis of computation of peak flow over dam; minimum daily discharge, 8.0 ft³/s, Aug. 31, Sept. 1, 1968.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 953 ft³/s, Apr. 1, gage height, 7.93 ft; minimum discharge, 24 ft³/s, Aug. 11-12.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004 DAILY MEAN VALUES

Table with 13 columns: DAY, OCT, NOV, DEC, JAN, FEB, MAR, APR, MAY, JUN, JUL, AUG, SEP. Rows show daily mean values from day 1 to 31, plus summary statistics for TOTAL, MEAN, MAX, and MIN.

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1932 - 2004, BY WATER YEAR (WY)

Table with 13 columns representing months and 13 rows representing statistics: MEAN, MAX, (WY), MIN, (WY) for each month across water years 1932 to 1980.

SUMMARY STATISTICS

Summary statistics table comparing 2003 calendar year, 2004 water year, and water years 1932-2004 for metrics like Annual Total, Annual Mean, Highest/Lowest Annual Mean, etc.

e Estimated

HUDSON RIVER BASIN

01332500 HOOSIC RIVER NEAR WILLIAMSTOWN, MA

LOCATION.--Lat 42° 42'01", long 73° 09'34", Berkshire County, Hydrologic Unit 02020003, on left bank 0.3 mi downstream from Sherman Brook and 2.7 mi east of junction of U.S. Highway 7 and State Highway 2 in Williamstown.

DRAINAGE AREA.--126 mi².

PERIOD OF RECORD.--Discharge: July 1940 to current year.

Water-quality records: Water years 1953-54, 1957-58, 1967-69.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 616.11 ft above National Geodetic Vertical Datum of 1929 (U.S. Army Corps of Engineers benchmark). Prior to June 6, 1979, at site 1.2 mi downstream at different datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Prior to 1966, slight diurnal fluctuation at low flow caused by mills upstream. Some regulation by Cheshire Reservoir 16 mi upstream. Satellite gage-height telemeter at station.

AVERAGE DISCHARGE.--64 years (water years 1941-2004), 274 ft³/s, 29.54 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,000 ft³/s, Dec. 31, 1948, gage height, 14.85 ft, former site and datum, from rating curve extended above 4,300 ft³/s on basis of contracted-opening measurement of peak flow; minimum discharge, 5.8 ft³/s, Aug. 30, 31, Oct. 26, 1940; minimum daily discharge, 24 ft³/s, Sept. 9, 1980.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,570 ft³/s, Mar. 29, gage height, 9.56 ft (from peak-stage indicator); minimum discharge, 89 ft³/s, Feb. 25.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|-------|------|------|-------|-------|-------|------|------|------|------|
| 1 | 389 | 536 | 542 | 393 | e135 | 148 | 2370 | 331 | 436 | 102 | 300 | 214 |
| 2 | 341 | 483 | 439 | 367 | e134 | 220 | 2650 | 309 | 491 | 145 | 253 | 177 |
| 3 | 301 | 480 | 364 | e350 | e127 | 360 | 1100 | 317 | 415 | 114 | 180 | 156 |
| 4 | 312 | 424 | 357 | e384 | e130 | 313 | 880 | 499 | 329 | 100 | 193 | 143 |
| 5 | 387 | 468 | 319 | e444 | e136 | 313 | 706 | 381 | 288 | 106 | 169 | 129 |
| 6 | 288 | 547 | 294 | e414 | e136 | 731 | 540 | 335 | 265 | 182 | 141 | 123 |
| 7 | 247 | 421 | 296 | e369 | e139 | 636 | 481 | 310 | 256 | 123 | 122 | 116 |
| 8 | 208 | 367 | 285 | e311 | e202 | 420 | 434 | 282 | 216 | 126 | 113 | 117 |
| 9 | 197 | 329 | 266 | e292 | e175 | 351 | 411 | 304 | 205 | 168 | 106 | 439 |
| 10 | 188 | 308 | 264 | e253 | 150 | 315 | 392 | 298 | 275 | 118 | 100 | 326 |
| 11 | 176 | 293 | 725 | e228 | 139 | 307 | 366 | 250 | 212 | 108 | 96 | 203 |
| 12 | 167 | 328 | 892 | e214 | 134 | 313 | 312 | 226 | 180 | 99 | 119 | 167 |
| 13 | 162 | 361 | 469 | e208 | 135 | 276 | 531 | 212 | 163 | 98 | 169 | 149 |
| 14 | 154 | 316 | 364 | e202 | 132 | 236 | 1010 | 199 | 154 | 100 | 206 | 135 |
| 15 | 462 | 282 | 389 | e194 | 126 | 254 | 591 | 250 | 148 | 143 | 141 | 127 |
| 16 | 384 | e263 | 367 | e189 | 132 | 240 | 459 | 351 | 137 | 203 | 205 | 122 |
| 17 | 286 | e253 | 1070 | e182 | e122 | 233 | 403 | 256 | 129 | 171 | 373 | 162 |
| 18 | 236 | e246 | 1520 | e170 | e122 | 224 | 356 | 208 | 157 | 121 | 208 | 2420 |
| 19 | 212 | 259 | 754 | e159 | 119 | 216 | 351 | 216 | 151 | 152 | 167 | 1210 |
| 20 | 207 | 1500 | 523 | e147 | 116 | 211 | 338 | 200 | 124 | 254 | 240 | 505 |
| 21 | 219 | 788 | 437 | e136 | 120 | 282 | 275 | 199 | 114 | 155 | 1120 | 396 |
| 22 | 211 | 487 | 404 | e134 | 119 | 238 | 250 | 166 | 113 | 122 | 724 | 307 |
| 23 | 213 | 408 | 393 | e129 | 119 | 210 | 325 | 206 | 124 | 193 | 344 | 263 |
| 24 | 187 | 384 | 1350 | e125 | 116 | 221 | 360 | 594 | 104 | 266 | 262 | 232 |
| 25 | 177 | 364 | 2020 | e129 | 115 | 274 | 302 | 962 | 97 | 160 | 212 | 212 |
| 26 | 197 | 326 | 917 | e124 | 115 | 421 | 942 | 677 | 167 | 128 | 188 | 202 |
| 27 | 1190 | 303 | 658 | e123 | 113 | 1750 | 870 | 889 | 132 | 254 | 168 | 162 |
| 28 | 1380 | 416 | 539 | e129 | 114 | 1230 | 502 | 654 | 110 | 834 | 160 | 283 |
| 29 | 2130 | 1740 | 478 | e135 | 124 | 887 | 406 | 490 | 143 | 318 | 154 | 467 |
| 30 | 1350 | 761 | e448 | e141 | --- | 705 | 363 | 367 | 116 | 214 | 203 | 279 |
| 31 | 739 | --- | e394 | e137 | --- | 1110 | --- | 306 | --- | 172 | 362 | --- |
| TOTAL | 13297 | 14441 | 18537 | 6912 | 3796 | 13645 | 19276 | 11244 | 5951 | 5549 | 7498 | 9943 |
| MEAN | 429 | 481 | 598 | 223 | 131 | 440 | 643 | 363 | 198 | 179 | 242 | 331 |
| MAX | 2130 | 1740 | 2020 | 444 | 202 | 1750 | 2650 | 962 | 491 | 834 | 1120 | 2420 |
| MIN | 154 | 246 | 264 | 123 | 113 | 148 | 250 | 166 | 97 | 98 | 96 | 116 |
| CFSM | 3.40 | 3.82 | 4.75 | 1.77 | 1.04 | 3.49 | 5.10 | 2.88 | 1.57 | 1.42 | 1.92 | 2.63 |
| IN. | 3.93 | 4.26 | 5.47 | 2.04 | 1.12 | 4.03 | 5.69 | 3.32 | 1.76 | 1.64 | 2.21 | 2.94 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2004, BY WATER YEAR (WY)

| | 1940 | 1941 | 1942 | 1943 | 1944 | 1945 | 1946 | 1947 | 1948 | 1949 | 1950 | 1951 | 1952 | 1953 | 1954 | 1955 | 1956 | 1957 | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 | 1970 | 1971 | 1972 | 1973 | 1974 | 1975 | 1976 | 1977 | 1978 | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 176 | 259 | 276 | 245 | 239 | 448 | 669 | 370 | 224 | 134 | 122 | 128 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MAX | 618 | 544 | 714 | 591 | 765 | 1038 | 1178 | 872 | 636 | 393 | 436 | 454 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| (WY) | 1978 | 1956 | 1974 | 1949 | 1981 | 1979 | 1969 | 1943 | 1972 | 1945 | 2000 | 1960 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MIN | 41.0 | 46.5 | 118 | 60.8 | 75.3 | 139 | 253 | 144 | 81.0 | 60.4 | 48.2 | 34.5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| (WY) | 1965 | 1965 | 1962 | 1981 | 1980 | 1965 | 1995 | 1987 | 1965 | 1962 | 1980 | 1980 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| SUMMARY STATISTICS | FOR 2003 CALENDAR YEAR | FOR 2004 WATER YEAR | FOR 2003 CALENDAR YEAR | FOR 2004 WATER YEAR | FOR 2003 CALENDAR YEAR | FOR 2004 WATER YEAR | FOR 2003 CALENDAR YEAR | FOR 2004 WATER YEAR |
|--------------------------|------------------------|---------------------|------------------------|---------------------|------------------------|---------------------|------------------------|---------------------|
| ANNUAL TOTAL | 133073 | 130089 | | | | | | |
| ANNUAL MEAN | 365 | 355 | | | | | | |
| HIGHEST ANNUAL MEAN | | | | | 274 | | | |
| LOWEST ANNUAL MEAN | | | | | 368 | | | 1975 |
| HIGHEST DAILY MEAN | 2440 | Mar 30 | 2650 | Apr 2 | 10400 | Dec 31 | 1948 | |
| LOWEST DAILY MEAN | 62 | Jul 31 | 96 | Aug 11 | 24 | Sep 9 | 1980 | |
| ANNUAL SEVEN-DAY MINIMUM | 72 | Jul 25 | 114 | Aug 6 | 25 | Sep 9 | 1980 | |
| MAXIMUM PEAK FLOW | | | 4570 | Apr 1 | 13000 | Dec 31 | 1948 | |
| MAXIMUM PEAK STAGE | | | b 9.56 | Apr 1 | | 14.85 | Dec 31 | 1948 |
| INSTANTANEOUS LOW FLOW | | | 89 | Feb 25 | | 5.8 | Aug 30 | 1940 |
| ANNUAL RUNOFF (CFSM) | 2.89 | | 2.82 | | | 2.17 | | |
| ANNUAL RUNOFF (INCHES) | 39.29 | | 38.41 | | | 29.54 | | |
| 10 PERCENT EXCEEDS | 772 | | 711 | | 580 | | | |
| 50 PERCENT EXCEEDS | 231 | | 253 | | 169 | | | |
| 90 PERCENT EXCEEDS | 117 | | 122 | | 67 | | | |

b From peak-stage indicator
c Estimated

HUDSON RIVER BASIN

01333000 GREEN RIVER AT WILLIAMSTOWN, MA

LOCATION.--Lat 42° 42'32", long 73° 11'50", Berkshire County, Hydrologic Unit 02020003, on left bank 0.1 mi upstream from bridge on State Highway 2 at Williamstown and 0.8 mi upstream from mouth.

DRAINAGE AREA.--42.6 mi².

PERIOD OF RECORD.--Discharge: September 1949 to current year.

Water-quality records: Water years 1967-69.

REVISED RECORDS.--WDR MA-RI-84-1: 1977-78(P), 1979, 1980-83(P).

GAGE.--Water-stage recorder. Elevation of gage is 615 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Slight diurnal fluctuation at times caused by mill upstream.

AVERAGE DISCHARGE.--55 years (water years 1950-2004), 83.5 ft³/s, 26.63 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,060 ft³/s, Dec. 21, 1973, gage height, 5.68 ft in gage well, from rating curve extended above 750 ft³/s on basis of slope-area measurement at gage height 4.94 ft; maximum gage height, 6.35 ft, Mar. 13, 1977, from floodmarks, gage height in well unknown; minimum discharge, 3.1 ft³/s, Sept. 20, 22, 24, 25, 1964.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Dec. 31, 1948, reached a stage of about 7.5 ft, from floodmarks.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,530 ft³/s, Sept. 18, gage height, 4.25 ft; minimum discharge, 19 ft³/s, July 12, 13.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | |
|---|------|------|------|-------|--------|------|------|-------|--------|------|------|------|-------------|
| 1 | 135 | 275 | 258 | 156 | e34 | 31 | 505 | 128 | 142 | 25 | e46 | 74 | |
| 2 | 119 | 222 | 209 | 139 | e33 | 97 | 566 | 115 | 138 | 29 | e41 | 60 | |
| 3 | 96 | 195 | 168 | 150 | e33 | 136 | 361 | 115 | 126 | 24 | e36 | 51 | |
| 4 | 107 | 158 | 149 | 165 | e36 | 116 | 299 | 163 | 102 | 23 | e38 | 43 | |
| 5 | 112 | 168 | 130 | 159 | e35 | 117 | 252 | 131 | 85 | 26 | e35 | 39 | |
| 6 | 89 | 161 | 124 | 137 | e37 | 286 | 204 | 120 | 78 | 29 | e29 | 35 | |
| 7 | 80 | 130 | 114 | 112 | e62 | 222 | 172 | 109 | 75 | 24 | e26 | 33 | |
| 8 | 71 | 117 | 111 | 103 | e50 | 162 | 148 | 92 | 67 | 23 | e23 | 33 | |
| 9 | 64 | 110 | 102 | 80 | e43 | 139 | 140 | 105 | 67 | 25 | e22 | 114 | |
| 10 | 59 | 103 | 100 | e74 | e41 | 128 | 126 | 92 | 89 | 22 | e21 | 84 | |
| 11 | 55 | 105 | 315 | e76 | e39 | 117 | 110 | 81 | 64 | 21 | 26 | 62 | |
| 12 | 51 | 107 | 296 | e84 | e37 | 109 | 99 | 76 | 54 | 20 | 30 | 52 | |
| 13 | 47 | 106 | 203 | e85 | e36 | 93 | 132 | 70 | 46 | 20 | 42 | 44 | |
| 14 | 44 | 91 | 163 | e70 | e35 | 87 | 189 | 64 | 44 | 20 | 39 | 39 | |
| 15 | 142 | 79 | 159 | e66 | e34 | 86 | 141 | 103 | 41 | 29 | 29 | 36 | |
| 16 | 93 | 74 | 134 | e64 | e31 | 79 | 129 | 118 | 36 | 26 | 71 | 34 | |
| 17 | 79 | 73 | 448 | e68 | e30 | 78 | 116 | 77 | 34 | 23 | 76 | 62 | |
| 18 | 71 | 69 | 547 | e65 | e30 | 74 | 108 | 71 | 52 | 21 | 44 | 971 | |
| 19 | 68 | 78 | 325 | e40 | e30 | 70 | 102 | 70 | 45 | 34 | 37 | 441 | |
| 20 | 64 | 493 | 258 | e36 | e29 | 70 | 93 | 61 | 34 | 44 | 77 | 261 | |
| 21 | 61 | 283 | 209 | e35 | e30 | 106 | 84 | 59 | 31 | 26 | 375 | 192 | |
| 22 | 61 | 213 | 179 | e34 | e30 | 79 | 79 | 53 | 30 | 24 | 228 | 146 | |
| 23 | 61 | 176 | 165 | e33 | e29 | 71 | 102 | 55 | 35 | 33 | 137 | 127 | |
| 24 | 56 | 150 | 520 | e34 | e29 | 81 | 90 | 139 | 28 | 35 | 104 | 99 | |
| 25 | 52 | 147 | 814 | e32 | e27 | 95 | 80 | 142 | 26 | 26 | 80 | 87 | |
| 26 | 54 | 122 | 477 | e32 | e27 | 129 | 247 | 142 | 51 | 23 | 69 | 78 | |
| 27 | 504 | 117 | 334 | e34 | e26 | 448 | 234 | 200 | 31 | 101 | 59 | 69 | |
| 28 | 507 | 157 | 266 | e36 | 30 | 338 | 176 | 180 | 27 | 224 | 53 | 120 | |
| 29 | 827 | 608 | 225 | e37 | 25 | 264 | 148 | 140 | 36 | 95 | 50 | 118 | |
| 30 | 510 | 319 | 215 | e36 | -- | 218 | 137 | 125 | 28 | e58 | 52 | 101 | |
| 31 | 358 | --- | 186 | e36 | --- | 288 | --- | 103 | --- | e43 | 137 | --- | |
| TOTAL | 4697 | 5206 | 7903 | 2308 | 988 | 4414 | 5369 | 3299 | 1742 | 1196 | 2132 | 3705 | |
| MEAN | 152 | 174 | 255 | 74.5 | 34.1 | 142 | 179 | 106 | 58.1 | 38.6 | 68.8 | 124 | |
| MAX | 827 | 608 | 814 | 165 | 62 | 448 | 566 | 200 | 142 | 224 | 375 | 971 | |
| MIN | 44 | 69 | 100 | 32 | 25 | 31 | 79 | 53 | 26 | 20 | 21 | 33 | |
| CFSM | 3.56 | 4.07 | 5.98 | 1.75 | 0.80 | 3.34 | 4.20 | 2.50 | 1.36 | 0.91 | 1.61 | 2.90 | |
| IN. | 4.10 | 4.55 | 6.90 | 2.02 | 0.86 | 3.85 | 4.69 | 2.88 | 1.52 | 1.04 | 1.86 | 3.24 | |
| STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1949 - 2004, BY WATER YEAR (WY) | | | | | | | | | | | | | |
| MEAN | 48.0 | 79.0 | 95.6 | 80.1 | 81.0 | 146 | 203 | 111 | 66.1 | 32.5 | 30.5 | 31.3 | |
| MAX | 222 | 174 | 259 | 219 | 239 | 376 | 390 | 251 | 256 | 124 | 174 | 158 | |
| (WY) | 1978 | 2004 | 1974 | 1979 | 1984 | 1979 | 1969 | 1984 | 1972 | 1996 | 2000 | 1960 | |
| MIN | 5.33 | 6.71 | 24.8 | 11.0 | 14.6 | 33.6 | 70.5 | 32.4 | 18.2 | 8.30 | 5.61 | 4.09 | |
| (WY) | 1965 | 1965 | 1965 | 1981 | 1980 | 1965 | 1995 | 1987 | 1965 | 1993 | 1964 | 1964 | |
| SUMMARY STATISTICS FOR 2003 CALENDAR YEAR FOR 2004 WATER YEAR WATER YEARS 1949 - 2004 | | | | | | | | | | | | | |
| ANNUAL TOTAL | | | | 45357 | | | | 42959 | | | | | |
| ANNUAL MEAN | | | | 124 | | | | 117 | 83.5 | | | | |
| HIGHEST ANNUAL MEAN | | | | | | | | | 126 | | | | |
| LOWEST ANNUAL MEAN | | | | | | | | | 31.7 | | | | |
| HIGHEST DAILY MEAN | | | | 827 | Oct 29 | | | 971 | Sep 18 | | | 2200 | Dec 21 1973 |
| LOWEST DAILY MEAN | | | | 15 | Jul 31 | | | 20 | Jul 12 | | | 3.2 | Sep 20 1964 |
| ANNUAL SEVEN-DAY MINIMUM | | | | 18 | Jul 25 | | | 22 | Jul 8 | | | 3.4 | Sep 19 1964 |
| MAXIMUM PEAK FLOW | | | | | | | | 1530 | Sep 18 | | | 4060 | Dec 21 1973 |
| MAXIMUM PEAK STAGE | | | | | | | | 4.25 | Sep 18 | | | 6.35 | Mar 13 1977 |
| INSTANTANEOUS LOW FLOW | | | | | | | | 19 | Jul 12 | | | 3.1 | Sep 20 1964 |
| ANNUAL RUNOFF (CFSM) | | | | 2.92 | | | | 2.76 | 1.96 | | | | |
| ANNUAL RUNOFF (INCHES) | | | | 39.61 | | | | 37.51 | 26.63 | | | | |
| 10 PERCENT EXCEEDS | | | | 292 | | | | 248 | 187 | | | | |
| 50 PERCENT EXCEEDS | | | | 71 | | | | 79 | 50 | | | | |
| 90 PERCENT EXCEEDS | | | | 27 | | | | 29 | 11 | | | | |

e Estimated

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

As the number of streams on which streamflow information is likely to be desired far exceeds the number of stream-gaging stations feasible to operate at one time, the Geological Survey collects limited streamflow data at sites other than stream-gaging stations. When limited streamflow data are collected on a systematic basis over a period of years for use in hydrologic analyses, the site at which the data are collected is called a partial-record station. Data collected at these partial-record stations are usable in low-flow or floodflow analyses, depending on the type of data collected. In addition, discharge measurements are made at other sites not included in the partial-record program. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Measurements at partial-record stations

No measurements were made at partial-record stations during the 2004 water year.

Discharge measurements made at miscellaneous sites September 2003 through October 2004

| Stream | Tributary to | Location | Drainage area (mi ²) | Measured previously (water years) | Measurements | |
|---|------------------|---|--|---|--------------|-----------------------------------|
| | | | | | Date | Discharge (ft ³ /s) |
| BACK RIVER BASIN | | | | | | |
| 414358070361701 Back River | Buzzards Bay | Lat 41°43'58", long 70°36'17", Barnstable County, at culvert on Old Dam Road, 0.9 mi southwest of Bourne, MA. | -- | -- | 8-10-04 | 0.46 |
| | | | | | 9-14-04 | 1.02 |
| 414347070360201 Back River | do. | Lat 41°43'47", long 70°36'02", Barnstable County, at culvert on County Road, 1.0 mi south of Bourne, MA. | -- | -- | 8-10-04 | .21 |
| | | | | | 9-13-04 | .32 |
| POCASSET RIVER BASIN | | | | | | |
| 414148070361801 Pocasset River | Buzzards Bay | Lat 41°41'48", long 70°36'18", Barnstable County, at culvert on County Road, 1.0 mi north of Pocasset, MA. | -- | -- | 8-10-04 | 0.52 |
| | | | | | 9-14-04 | .34 |
| RED BROOK BASIN | | | | | | |
| 414043070361701 Red Brook | Buzzards Bay | Lat 41°40'43", long 70°36'17", Barnstable County, at bog off County Road, 0.8 mi south of Pocasset, MA. | -- | -- | 8-10-04 | 0.66 |
| | | | | | 9-15-04 | .66 |
| 414040070364101 Red Brook | do. | Lat 41°40'40", long 70°36'41", Barnstable County, at fish ladder on Shore Road, 0.6 mi south of Pocasset, MA. | -- | -- | 8-10-04 | 1.29 |
| | | | | | 9-15-04 | 1.34 |
| SQUETEAGUE BROOK BASIN | | | | | | |
| 413952070363001 Squeteague Brook | Buzzards Bay | Lat 41°39'52", long 70°36'30", Barnstable County, at culvert on Scraggy Road, 0.3 mi east of Cataumet, MA. | -- | -- | 8-10-04 | 0.00 |
| | | | | | 9-14-04 | .00 |
| 413936070365501 Squeteague Brook | do. | Lat 41°39'36", long 70°36'55", Barnstable County, at culvert on Megansett Road, 1.1 mi north of North Falmouth, MA. | -- | -- | 8-10-04 | .28 |
| | | | | | 9-14-04 | .26 |
| OLD HARBOR CREEK BASIN | | | | | | |
| 414454070281801 Spring Hill Creek | Old Harbor Creek | Lat 41°44'54", long 70°28'18", Barnstable County, at culvert on Spring Hill Road 1.25 mi east of Sandwich, MA. | -- | -- | 8-09-04 | 0.62 |
| | | | | | 9-15-04 | .59 |
| SCORTON CREEK BASIN | | | | | | |
| 414445070272001 Scorton Creek Tributary | Scorton Creek | Lat 41°44'45", long 70°27'20", Barnstable County, at 2d culvert on Spring Hill Bog, 0.4 mi west of East Sandwich, MA. | -- | -- | 8-09-04 | 0.32 |
| | | | | | 9-15-04 | .28 |

See footnotes at end of table

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Discharge measurements made at miscellaneous sites October 2003 through September 2004--Continued

| Stream | Tributary to | Location | Drainage area (mi ²) | Measured previously (water years) | Measurements | |
|---|----------------------------|--|-------------------------------------|--|---|---|
| | | | | | Date | Discharge (ft ³ /s) |
| COONAMESSETT RIVER BASIN | | | | | | |
| 01105883759 Coonamessett River | Vineyard Sound | Lat 41°43'52", long 70°34'26", Barnstable County, at culvert on last set of bogs, 1,250 ft north of State Highway 28, 0.8 mi northwest of East Falmouth, MA. | 2.59 | 1978-79 1989, 1993 | 6-22-04 | 10.6 |
| WEST BRANCH WESTPORT RIVER BASIN | | | | | | |
| 01106000 Adamsville Brook | West Branch Westport River | Lat 41°33'30", long 71°07'47", Newport County, on right bank, 0.2 mi upstream from milldam at Adamsville, RI, and 0.7 mi upstream from mouth. | 8.01 | 1941-78 ^a , 1986-88 ^a , 1991-92, 2003 | 10-24-03 11-18-03 12-02-03 1-12-04 2-13-04 3-24-04 4-07-04 5-07-04 6-21-04 6-30-04 7-27-04 8-26-04 9-13-04 9-27-04 | 6.44 7.81 12.4 7.14 14.9 21.0 29.1 16.6 3.33 1.51 .48 3.79 1.09 1.54 |
| DUNDERY BROOK BASIN | | | | | | |
| 01106110 Dundery Brook | Briggs Marsh | Lat 41°30'26", long 71°10'48", Newport County, at twin culverts on Meetinghouse Lane, 0.50 mi southwest of Little Compton, RI. | -- | -- | 10-24-03 11-18-03 12-02-03 1-12-04 2-13-04 3-24-04 4-07-04 5-07-04 6-21-04 6-30-04 7-27-04 8-26-04 9-13-04 9-27-04 | 0.48 .95 1.65 .44 1.58 2.67 3.12 1.81 .58 .12 .00 .26 .08 .19 |
| LITTLE CREEK BASIN | | | | | | |
| 01106130 Little Creek | Sakonnet River | Lat 41°30'33", long 71°14'44", Newport County, at culvert on Green End Avenue, 1.75 mi east of Whitehall, RI. | -- | -- | 10-24-03 11-17-03 12-03-03 1-13-04 2-13-04 3-24-04 4-07-04 5-07-04 6-21-04 6-30-04 7-27-04 8-26-04 9-14-04 9-27-04 | 0.26 .63 .76 .83 .75 1.02 2.14 1.03 .20 .16 .06 .18 .14 .23 |

See footnotes at end of table

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Discharge measurements made at miscellaneous sites October 2003 through September 2004--Continued

| Stream | Tributary to | Location | Drainage area (mi ²) | Measured previously (water years) | Measurements | |
|-----------------------------------|-------------------------|---|--|---|--------------|-----------------------------------|
| | | | | | Date | Discharge (ft ³ /s) |
| BAILEY BROOK BASIN | | | | | | |
| 01106150 Bailey Brook | Green End Pond | Lat 41°31'47", long 71°17'30", Newport County, at culvert on Forest Avenue, 1.1 mi south of Middletown, RI. | 1.68 | -- | 10-24-03 | 0.44 |
| | | | | | 11-17-03 | .98 |
| | | | | | 12-03-03 | .76 |
| | | | | | 1-13-04 | .89 |
| | | | | | 2-13-04 | .77 |
| | | | | | 3-24-04 | 1.37 |
| | | | | | 4-07-04 | 3.17 |
| | | | | | 5-07-04 | 1.24 |
| | | | | | 6-21-04 | .23 |
| | | | | | 6-30-04 | .10 |
| | | | | | 7-27-04 | .01 |
| | | | | | 8-26-04 | .46 |
| | | | | | 9-14-04 | .08 |
| | 9-27-04 | .34 | | | | |
| SILVER CREEK BASIN | | | | | | |
| 01109160 Silver Creek | Bristol Harbor | Lat 41°40'38", long 71°16'44", Bristol County, at bridge on Hope Street, State Highway 114, 0.7 mi west of Bristol, RI. | 1.82 | -- | 10-24-03 | 5.53 |
| | | | | | 11-18-03 | .70 |
| | | | | | 12-02-03 | .77 |
| | | | | | 1-12-04 | 1.07 |
| | | | | | 2-13-04 | 1.29 |
| | | | | | 3-24-04 | 2.15 |
| | | | | | 4-07-04 | 13.5 |
| | | | | | 5-07-04 | 8.03 |
| | | | | | 6-21-04 | .19 |
| | | | | | 6-30-04 | 1.56 |
| | | | | | 7-27-04 | .19 |
| | | | | | 8-26-04 | .44 |
| | | | | | 9-13-04 | 1.29 |
| | 9-27-04 | 2.46 | | | | |
| ANNAWAMSCUTT BROOK BASIN | | | | | | |
| 01109290 Annawamscutt Brook | Providence River | Lat 41°45'34", long 71°20'37", Providence County, at bridge on State Highway 103, 0.3 mi west of Peck Corner, RI. | 1.10 | -- | 10-24-03 | 0.13 |
| | | | | | 11-18-03 | .32 |
| | | | | | 12-02-03 | .37 |
| | | | | | 1-12-04 | .40 |
| | | | | | 2-13-04 | .72 |
| | | | | | 3-24-04 | 1.07 |
| | | | | | 4-07-04 | 2.01 |
| | | | | | 5-07-04 | 1.31 |
| | | | | | 6-21-04 | .14 |
| | | | | | 6-30-04 | .09 |
| | | | | | 7-27-04 | .14 |
| | | | | | 8-26-04 | .13 |
| | | | | | 9-13-04 | .09 |
| | 9-27-04 | .25 | | | | |
| PAWTUXET RIVER BASIN | | | | | | |
| 01115110 Huntinghouse Brook | Regulating Reservoir | Lat 41°50'48", long 71°36'44", Providence County, at Elmdale Road, 1.6 mi northwest of North Scituate, RI. | 6.31 | 1993-2003 | 10-14-03 | 1.70 |
| | | | | | 4-15-04 | 83.4 |
| | | | | | 5-24-04 | 5.35 |
| | | | | | 6-24-04 | .46 |
| | | | | | 7-29-04 | .15 |
| | | | | | 9-21-04 | 2.74 |

See footnotes at end of table

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Discharge measurements made at miscellaneous sites October 2003 through September 2004--Continued

| Stream | Tributary to | Location | Drainage area (mi ²) | Measured previously (water years) | Measurements | |
|---------------------------------------|----------------------|---|-------------------------------------|--------------------------------------|--------------|-----------------------------------|
| | | | | | Date | Discharge (ft ³ /s) |
| PAWTUXET RIVER BASIN—Continued | | | | | | |
| 01115114 Rush Brook | Regulating Reservoir | Lat 41°50'15", long 71°36'45", Providence County, near Elmdale Road, 1.5 mi northwest of North Scituate, RI. | 6.31 | 1993–2003 | 10-14-03 | 0.62 |
| | | | | | 4-19-04 | 11.5 |
| | | | | | 5-24-04 | 2.31 |
| | | | | | 6-24-04 | .16 |
| | | | | | 7-29-04 | .14 |
| 9-21-04 | 3.94 | | | | | |
| 01115120 Unnamed Tributary | Scituate Reservoir | Lat 41°49'53", long 71°36'34", Providence County, at State Highway 6, 1.2 mi west of North Scituate, RI. | .42 | 1994–2003 | 10-16-03 | .09 |
| | | | | | 4-19-04 | 1.12 |
| | | | | | 5-24-04 | .14 |
| | | | | | 6-24-04 | 0 |
| | | | | | 7-29-04 | 0 |
| 9-21-04 | 0 | | | | | |
| 01115170 Moswansicut Stream | Regulating Reservoir | Lat 41°50'27", long 71°35'06", Providence County, at State Highway 116, 0.6 mi northeast of North Scituate, RI. | 3.20 | 1994–95, 2000–03 | 10-14-03 | .88 |
| | | | | | 4-15-04 | 35.3 |
| | | | | | 5-24-04 | 3.00 |
| | | | | | 6-24-04 | .89 |
| | | | | | 7-29-04 | .40 |
| 9-21-04 | 4.29 | | | | | |
| 01115180 Brandy Brook | Scituate Reservoir | Lat 41°49'10", long 71°35'11", Providence County, at State Highway 116, 0.9 mi south of North Scituate, RI. | 1.59 | 1993–2003 | 10-17-03 | 1.65 |
| | | | | | 4-19-04 | 6.10 |
| | | | | | 5-24-04 | 2.01 |
| | | | | | 6-25-04 | .79 |
| | | | | | 8-03-04 | .63 |
| 9-22-04 | 2.05 | | | | | |
| 01115183 Quonapaug Brook | do. | Lat 41°47'51", long 71°24'53", Providence County, at State Highway 116, 2.4 mi south of North Scituate, RI. | 1.96 | 1993–2003 | 10-17-03 | 2.66 |
| | | | | | 4-19-04 | 8.43 |
| | | | | | 5-24-04 | 2.45 |
| | | | | | 6-25-04 | .26 |
| | | | | | 8-03-04 | .43 |
| 9-21-04 | 2.64 | | | | | |
| 01115184 Spruce Brook | do. | Lat 41°47'19", long 71°37'14", Providence County, 0.2 mi south of State Highway 14, 3.5 mi southwest of North Scituate, RI. | .30 | 1994–2003 | 10-17-03 | 1.23 |
| | | | | | 4-14-04 | 22.3 |
| | | | | | 5-24-04 | 2.14 |
| | | | | | 6-25-04 | .54 |
| | | | | | 7-29-04 | .43 |
| 9-21-04 | 1.13 | | | | | |
| 01115185 Windsor Brook | Ponaganset River | Lat 41°50'10", long 71°43'23", Providence County, at Windsor Road, 1.3 mi northwest of South Foster, RI. | 4.22 | 1993–94, 1999–2003 | 10-14-03 | .90 |
| | | | | | 4-13-04 | 16.9 |
| | | | | | 5-25-04 | 2.88 |
| | | | | | 6-25-04 | .29 |
| | | | | | 8-03-04 | .49 |
| 9-22-04 | 2.26 | | | | | |
| 01115190 Dolly Cole Brook | Barden Reservoir | Lat 41°49'20", long 71°42'03", Providence County, at Old Danielson Pike at South Foster, RI. | 5.07 | 1993–2003 | 10-14-03 | 1.47 |
| | | | | | 4-13-04 | 11.9 |
| | | | | | 5-25-04 | 3.06 |
| | | | | | 6-25-04 | .87 |
| | | | | | 8-03-04 | .25 |
| 9-22-04 | 2.19 | | | | | |
| 01115265 Hemlock Brook | do. | Lat 41°47'26", long 71°41'57", Providence County, at King Road, 1.2 mi northeast of Foster Center, RI. | 10.62 | 1996–2003 | 10-14-03 | 2.55 |
| | | | | | 4-13-04 | 23.4 |
| | | | | | 5-25-04 | 5.99 |
| | | | | | 6-25-04 | 1.22 |
| | | | | | 8-03-04 | 0.43 |
| 9-22-04 | 5.21 | | | | | |

See footnotes at end of table

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Discharge measurements made at miscellaneous sites October 2003 through September 2004--Continued

| Stream | Tributary to | Location | Drainage area (mi ²) | Measured previously (water years) | Measurements | |
|---------------------------------------|-----------------------|---|-------------------------------------|--------------------------------------|--------------|-----------------------------------|
| | | | | | Date | Discharge (ft ³ /s) |
| PAWTUXET RIVER BASIN—Continued | | | | | | |
| 01115275 Bear Tree Brook | Westconnaug Stream | Lat 41°46'57", long 71°40'31", Providence County, at King Road, 1.2 mi northeast of Foster Center, RI. | 0.64 | 1994–95, 2000–03 | 10-16-03 | 1.18 |
| | | | | | 4-13-04 | 3.32 |
| | | | | | 5-25-04 | 1.38 |
| | | | | | 6-25-04 | .66 |
| | | | | | 7-29-04 | .73 |
| | | | | | 9-21-04 | .78 |
| 01115280 Cork Brook | Scituate Reservoir | Lat 41°48'14", long 71°39'01", Providence County, at Rockland Scituate Road, 0.8 mi northeast of Crazy Corners, RI. | 1.91 | 1993–2003 | 10-16-03 | 3.88 |
| | | | | | 4-14-04 | 53.2 |
| | | | | | 5-25-04 | 1.15 |
| | | | | | 6-25-04 | .23 |
| | | | | | 7-29-04 | .11 |
| | | | | | 9-21-04 | 1.38 |
| 01115297 Wilbur Hollow Brook | Barden Reservoir | Lat 41°45'53", long 71°38'10", Providence County, at Old Plainfield Pike, 2.2 mi southeast of Rockland, RI. | 4.45 | 1992–2003 | 10-17-03 | 6.01 |
| | | | | | 4-13-04 | 26.6 |
| | | | | | 5-25-04 | 6.66 |
| | | | | | 6-25-04 | 2.23 |
| | | | | | 7-29-04 | .60 |
| | | | | | 9-21-04 | 5.03 |
| 01116602 Pocasset River | Pawtuxet River | Lat 41°49'39", long 71°30'30", Providence County, at bridge on Memorial Avenue, 0.5 mi northwest of Johnston, RI. | 3.07 | -- | 10-24-03 | 1.47 |
| | | | | | 11-18-03 | 3.38 |
| | | | | | 12-02-03 | 3.48 |
| | | | | | 1-12-04 | 5.65 |
| | | | | | 2-13-04 | 6.78 |
| | | | | | 3-24-04 | 6.55 |
| | | | | | 4-07-04 | 15.5 |
| | | | | | 5-07-04 | 7.67 |
| | | | | | 6-21-04 | .62 |
| | | | | | 6-30-04 | .33 |
| | | | | | 7-27-04 | .21 |
| | | | | | 8-26-04 | 1.09 |
| | | | | | 9-13-04 | 1.08 |
| | | | | | 9-27-04 | 1.16 |
| 01116609 Pocasset River | do. | Lat 41°45'35", long 71°26'38", Providence County, at bridge on Pontiac Avenue, 0.5 mi southeast of Garden City, RI. | 19.9 | -- | 10-24-03 | 16.5 |
| | | | | | 11-18-03 | 24.3 |
| | | | | | 12-02-03 | 24.5 |
| | | | | | 1-12-04 | 30.8 |
| | | | | | 2-13-04 | 33.2 |
| | | | | | 3-24-04 | 36.6 |
| | | | | | 4-07-04 | 72.0 |
| | | | | | 5-07-04 | 49.5 |
| | | | | | 6-21-04 | 11.5 |
| | | | | | 6-30-04 | 8.88 |
| | | | | | 7-27-04 | 7.44 |
| | | | | | 8-26-04 | 16.2 |
| | | | | | 9-13-04 | 19.5 |
| | | | | | 9-27-04 | 17.1 |

See footnotes at end of table

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Discharge measurements made at miscellaneous sites October 2003 through September 2004--Continued

| Stream | Tributary to | Location | Drainage area (mi ²) | Measured previously (water years) | Measurements | |
|---|-------------------|--|--|---|--------------|-----------------------------------|
| | | | | | Date | Discharge (ft ³ /s) |
| SAUGATUCKET RIVER BASIN | | | | | | |
| 01117230 Saugatucket River | Point Judith Pond | Lat 41°27'53", long 71°29'29", Washington County, at twin culverts on Saugatucket Road, 1.0 mi north of Peacedale, RI. | 9.40 | -- | 10-24-03 | 7.54 |
| | | | | | 11-17-03 | 19.4 |
| | | | | | 12-03-03 | 8.61 |
| | | | | | 1-13-04 | 13.6 |
| | | | | | 2-13-04 | 19.8 |
| | | | | | 3-24-04 | 21.0 |
| | | | | | 4-07-04 | 39.0 |
| | | | | | 5-07-04 | 24.4 |
| | | | | | 6-21-04 | 7.25 |
| | | | | | 6-30-04 | 4.55 |
| | | | | | 7-23-04 | 3.31 |
| | | | | | 8-26-04 | 4.18 |
| | | | | | 9-14-04 | 3.40 |
| 01117237 Saugatucket River | do. | Lat 41°26'51", long 71°29'51", Washington County, at bridge on Church Street, 0.25 mi southwest of Peacedale, RI. | 15.2 | -- | 9-27-04 | 4.47 |
| | | | | | 10-24-03 | 12.3 |
| | | | | | 11-17-03 | 23.0 |
| | | | | | 12-03-03 | 14.8 |
| | | | | | 1-13-04 | 22.7 |
| | | | | | 2-13-04 | 29.8 |
| | | | | | 3-24-04 | 33.3 |
| | | | | | 4-07-04 | 55.5 |
| | | | | | 5-07-04 | 36.8 |
| | | | | | 6-21-04 | 10.7 |
| | | | | | 6-30-04 | 8.08 |
| | | | | | 7-23-04 | 5.18 |
| | | | | | 8-26-04 | 9.98 |
| 9-14-04 | 5.79 | | | | | |
| 9-27-04 | 8.95 | | | | | |
| UNNAMED TRIBUTARY TO CARD PONDS BASIN | | | | | | |
| 01117260 Unnamed Tributary to Card Ponds | Card Ponds | Lat 41°22'57", long 71°34'19", Washington County, at culvert on School House Road, 1.3 mi south of Perryville, RI. | 2.06 | -- | 10-24-03 | 2.27 |
| | | | | | 11-17-03 | 2.81 |
| | | | | | 12-03-03 | 2.11 |
| | | | | | 1-13-04 | 2.74 |
| | | | | | 2-13-04 | 3.27 |
| | | | | | 3-24-04 | 3.01 |
| | | | | | 4-07-04 | 4.62 |
| | | | | | 5-07-04 | 4.15 |
| | | | | | 6-21-04 | 2.97 |
| | | | | | 6-30-04 | 2.69 |
| | | | | | 7-23-04 | 2.28 |
| | | | | | 8-26-04 | 2.35 |
| | | | | | 9-14-04 | 2.19 |
| 9-27-04 | 2.16 | | | | | |

See footnotes at end of table

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Discharge measurements made at miscellaneous sites October 2003 through September 2004--Continued

| Stream | Tributary to | Location | Drainage area (mi ²) | Measured previously (water years) | Measurements | |
|----------------------------------|---------------------|---|----------------------------------|---|--------------|--------------------------------|
| | | | | | Date | Discharge (ft ³ /s) |
| KING TOM POND INLET BASIN | | | | | | |
| 01117285 | King Tom Pond | Lat 41°23'04", long 71°39'22", Washington County, at culvert on Old Post Road, State Route 2, 0.7 mi west of Charlestown, RI. | 2.49 | 1966 | 10-24-03 | 0.02 |
| King Tom Pond Inlet | | | | | 11-17-03 | .70 |
| | | | | | 12-03-03 | .38 |
| | | | | | 1-13-04 | .90 |
| | | | | | 2-13-04 | 1.80 |
| | | | | | 3-24-04 | 1.69 |
| | | | | | 4-07-04 | 3.55 |
| | | | | | 5-07-04 | 3.13 |
| | | | | | 6-21-04 | .96 |
| | | | | | 6-30-04 | .42 |
| | | | | | 7-23-04 | .17 |
| | | | | | 8-26-04 | 1.03 |
| | | | | | 9-14-04 | .13 |
| | | | | | 9-27-04 | .48 |
| PAWCATUCK RIVER BASIN | | | | | | |
| 01117336 | Worden Pond | Lat 41°31'03", long 71°31'33", Washington County, at culvert on Yawgoo Valley Road, 2.7 mi northeast of West Kingston, RI. | 6.34 | 1959–60, 1972, 2002–03 | 7-23-04 | 0.92 |
| Chipuxet River | | | | | 8-27-04 | 2.67 |
| | | | | | 9-15-04 | 1.44 |
| 01117354 | Usquepaug River | Lat 41°34'43", long 71°32'37", Washington County, at bridge on State Route 102, 0.3 mi west of Exeter, RI. | 2.80 | 1993, 2000–03 | 7-23-04 | .86 |
| 01117360 | Queen River | Lat 41°33'51", long 71°33'54", Washington County, at bridge on Liberty Church Road, 1.7 mi southwest of Exeter, RI. | 8.14 | 1959–60, 1988–93, 2000–03 | 7-23-04 | 2.72 |
| Fisherville Brook | | | | | | |
| 01117375 | do. | Lat 41°32'20", long 71°34'48", Washington County, at culvert on Mail Road, 0.3 mi west of Liberty, RI. | .82 | 1989–91, 1999–2003 | 7-23-04 | .01 |
| Unnamed Tributary | | | | | | |
| 01117380 | do. | Lat 41°32'14", long 71°35'17", Washington County, at bridge on Mail Road, 0.8 mi west of Liberty, RI. | 4.37 | 1959–60, 1989–91, 1993, 2000–03 | 7-23-04 | 1.90 |
| Locke Brook | | | | | | |
| 01117385 | Glen Rock Reservoir | Lat 41°31'08", long 71°35'58", Washington County, at culvert on Glen Rock Road, 1.2 mi northeast of Glen Rock, RI. | .25 | 1989–91, 1999–2003 | 7-23-04 | .00 |
| Rake Factory Brook | | | | | | |
| 01117390 | do. | Lat 41°30'59", long 71°36'23", Washington County, at culverts on Glen Rock Road, at Glen Rock, RI. | 2.83 | 1989–91, 1993, 2000–03 | 7-23-04 | .55 |
| Glen Rock Brook | | | | | | |
| 01117400 | Glen Rock Brook | Lat 41°31'04", long 71°36'18", Washington County, at culvert on Glen Rock Road, 0.1 mi north of Glen Rock, RI. | 1.04 | 1966–74 ^b , 1989–91, 1993, 2000–03 | 7-23-04 | .22 |
| Sherman Brook | | | | | | |
| 01117421 | Usquepaug River | Lat 41°29'54", long 71°33'55", Washington County, at bridge on State Highway 2, 1.2 mi northwest of West Kingston, RI. | 3.26 | 2002–03 | 7-23-04 | .84 |
| Chickasheen Brook | | | | | 8-27-04 | 1.13 |
| | | | | | 9-15-04 | .04 |
| 01117450 | Pawcatuck River | Lat 41°26'38", long 71°37'39", Washington County, at bridge on State Highway 2, 0.2 mi south of Kenyon, RI. | 6.32 | 1966–67, 1974, 1976, 2002–03 | 7-23-04 | 1.46 |
| Pasquiset Brook | | | | | 8-27-04 | 2.87 |
| 01117465 | do. | Lat 41°31'32", long 71°38'23", Washington County, at bridge on Hillsdale Road, 3.2 mi east of Wyoming, RI. | 5.53 | 1966–67, 1974, 1976, 1991, 2002–03 | 7-23-04 | 2.03 |
| Beaver River | | | | | 8-27-04 | 4.97 |
| | | | | | 9-15-04 | 2.03 |
| 01117480 | do. | Lat 41°27'38", long 71°38'54", Washington County, at culvert on Shannock Hill Road, 0.8 mi northeast of Carolina, RI. | 1.67 | 1966–67, 2002–03 | 7-23-04 | .52 |
| Taney Brook | | | | | 8-27-04 | 1.02 |
| | | | | | 9-15-04 | .40 |

See footnotes at end of table

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Discharge measurements made at miscellaneous sites October 2003 through September 2004--Continued

| Stream | Tributary to | Location | Drainage area (mi ²) | Measured previously (water years) | Measurements | |
|--|------------------|--|--|---|--------------|-----------------------------------|
| | | | | | Date | Discharge (ft ³ /s) |
| PAWCATUCK RIVER BASIN—Continued | | | | | | |
| 01117602 | Meadow Brook | Lat 41°26'45", long 71°41'26", Washington County, | -- | -- | 7-01-04 | 1.89 |
| Meadow Brook | Pond | 0.1 mi north of Meadow Brook Pond, 50 ft off dirt road, 0.5 mi northwest of State Highway 91, 0.6 mi north of Wood River Junction, RI. | | | 7-01-04 | 1.93 |
| 01117604 | Pawcatuck River | Lat 41°26'14", long 71°41'31", Washington County, | -- | -- | 7-01-04 | .28 |
| Meadow Brook | | at bridge on State Highway 91, 0.15 mi east of Wood River Junction, RI. | | | 7-01-04 | .24 |
| 01117700 | do. | Lat 41°25'37", long 71°41'44", Washington County, | 5.10 | 1966–67, | 7-23-04 | .86 |
| Cedar Swamp Brook | | at culvert on Kings Factory Road, 0.7 mi south of Wood River Junction, RI. | | 2002–03 | 8-27-04 | 3.15 |
| | | | | | 9-15-04 | .76 |
| 01117720 | do. | Lat 41°36'45", long 71°45'39", Washington County, | 11.4 | 1966–67, | 7-22-04 | 1.34 |
| Wood River | | at bridge on Stepstone Falls Road, 0.6 mi northeast of Escoheag, RI. | | 1991, | 8-30-04 | 1.32 |
| | | | | 2002–03 | 9-15-04 | 1.11 |
| 01117740 | Wood River | Lat 41°36'44", long 71°45'13", Washington County, | 4.20 | 1966–67, | 7-22-04 | 2.18 |
| Kelley Brook | | at bridge on Stepstone Falls Road, 0.8 mi northeast of Escoheag, RI. | | 1991, | 8-30-04 | 1.62 |
| | | | | 2002–03 | 9-15-04 | 1.48 |
| 01117750 | Eisenhower Lake | Lat 41°37'59", long 71°43'22", Kent County, at | 1.31 | 1966, | 7-22-04 | .34 |
| Acid Factory Brook | | culvert on Plain Meeting House Road, 4.1 mi south of Summit, RI. | | 2002–03 | 8-30-04 | .37 |
| | | | | | 9-15-04 | .37 |
| 01117760 | Wood River | Lat 41°35'44", long 71°43'14", Washington County, | 8.38 | 1979, 1982, | 7-22-04 | 5.43 |
| Flat River | | at bridge on Plain Road, 3.1 mi northwest of Arcadia, RI. | | 2002–03 | 8-30-04 | 2.85 |
| | | | | | 9-16-04 | 3.85 |
| 01117780 | Flat River | Lat 41°35'16", long 71°42'36", Washington County, | 6.68 | 1966–67, | 7-22-04 | 2.41 |
| Breakheart Brook | | at bridge on Frosty Hollow Road, 2.4 mi north of Arcadia, RI. | | 1979, 1982, | 8-30-04 | 3.39 |
| | | | | 1991–92, | | |
| | | | | 2002–03 | | |
| 01117840 | Wood River | Lat 41°33'54", long 71°43'35", Washington County, | 7.18 | 1966–67, | 7-22-04 | 1.09 |
| Parris Brook | | at bridge on White Pine Drive, 800 ft below Woody Hill Brook, and 1.7 mi northwest of Arcadia, RI. | | 1979, 1991, | 8-30-04 | 1.12 |
| | | | | 2002–03 | 9-16-04 | .92 |
| 01117860 | do. | Lat 41°33'30", long 71°41'08", Washington County, | 5.01 | 1966–67, | 7-22-04 | 2.47 |
| Roaring Brook | | at bridge on Old Nooseneck Road, 0.7 mi northeast of Arcadia, RI. | | 1991, | 8-30-04 | 2.68 |
| | | | | 2002–03 | 9-16-04 | 2.95 |
| 01117900 | Locustville Pond | Lat 41°31'43", long 71°44'13", Washington County, | 3.71 | 1966–67, | 7-22-04 | .57 |
| Brushy Brook | | at culvert on Saw Mill Road, 1.8 mi northwest of Hope Valley, RI. | | 1977, 1979, | 8-30-04 | .69 |
| | | | | 1991, | | |
| | | | | 2002–03 | | |
| 01117950 | Brushy Brook | Lat 41°31'38", long 71°44'12", Washington County, | 6.37 | 1966–67, | 7-22-04 | .87 |
| Moscow Brook | | at bridge on Saw Mill Road, 1.7 mi northwest of Hope Valley, RI. | | 1977, 1979, | 8-30-04 | .84 |
| | | | | 1991, | 9-16-04 | .43 |
| | | | | 2002–03 | | |
| 01118006 | Wood River | Lat 41°28'39", long 71°43'47", Washington County, | 5.89 | 1977, | 7-23-04 | 2.08 |
| Canonchet Brook | | at bridge on Rockville–Alton Road, 2.2 mi southwest of Hope Valley, RI. | | 1979–80, | 8-30-04 | 2.01 |
| | | | | 1991, | | |
| | | | | 2002–03 | | |
| 01118008 | do. | Lat 41°26'15", long 71°43'25", Washington County, | 2.05 | 1977, | 7-23-04 | .88 |
| Wood River Tributary | | at culvert on Rockville–Alton Road, 0.1 mi west of Alton, RI. | | 2002–03 | 8-30-04 | .75 |
| 01118009 | Pawcatuck River | Lat 41°26'10", long 71°43'17", Washington County, | 85.7 | 1977, | 7-23-04 | 40.7 |
| Wood River | | 0.1 mi south of State Route 91, 0.1 mi south of Alton, RI. | | 1979–81, | 8-30-04 | 46.4 |
| | | | | 1991, | | |
| | | | | 2002–03 | | |
| 01118022 | Watchaug Pond | Lat 41°22'28", long 71°42'59", Washington County, | 2.36 | 2002–03 | 7-23-04 | .56 |
| Perry Healy Brook | | at bridge on Klondike Road, 2.3 mi southeast of Bradford, RI. | | | 8-30-04 | .82 |

See footnotes at end of table

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Discharge measurements made at miscellaneous sites October 2003 through September 2004--Continued

| Stream | Tributary to | Location | Drainage area (mi ²) | Measured previously (water years) | Measurements | |
|--|------------------|---|-------------------------------------|--------------------------------------|-------------------------------|-----------------------------------|
| | | | | | Date | Discharge (ft ³ /s) |
| PAWCATUCK RIVER BASIN—Continued | | | | | | |
| 01118055 | Pawcatuck River | Lat 41°24'40", long 71°45'51", Washington County, at bridge on State Route 216, at intersection with Chase Hill Road, 0.8 mi northwest of Bradford, RI. | 6.67 | 1991, 2002–03 | 7-23-04 8-30-04 | 2.09 2.08 |
| 01118255 | Ashaway River | Lat 41°28'20", long 71°49'00", New London County, at bridge on Putker Road, 0.1 mi west of Laurel Glen, CT. | 7.42 | 1963–67, 2002–03 | 7-22-04 8-27-04 9-15-04 | .87 3.96 .50 |
| 01118340 | Green Fall River | Lat 41°27'17", long 71°49'36", New London County, at bridge on State Route 216, 0.5 mi west of Clarks Falls, CT. | 11.5 | 2002–03 | 7-22-04 8-27-04 9-15-04 | 4.28 3.06 1.60 |
| 01118352 | do. | Lat 41°28'05", long 71°48'31", New London County, at culvert on Pine Woods Road, 0.4 mi southeast of Laurel Glen, CT. | 1.92 | 1965–67, 2002–03 | 7-22-04 8-27-04 9-15-04 | .18 .33 .12 |
| 01118355 | Ashaway River | Lat 41°26'51", long 71°47'27", Washington County, at bridge at northeast end of State Route 184, 1.1 mi southwest of Hopkington, RI. | 2.54 | 1966–67, 2002–03 | 7-22-04 8-27-04 9-15-04 | .15 .31 .10 |
| 01118365 | Pawcatuck River | Lat 41°25'13", long 71°49'20", New London County, at bridge on Boom Bridge Road, 1.3 mi northwest of Potter Hill, RI. | 1.59 | 1966–67, 2002–03 | 7-22-04 8-27-04 9-15-04 | .97 .92 .66 |
| 01118373 | do. | Lat 41°26'27", long 71°52'58", New London County, at bridge on Main Street, 0.1 mi west of North Stonington, CT. | 7.79 | 1965, 2002–03 | 7-22-04 8-27-04 9-15-04 | 2.03 1.65 .70 |
| 01118375 | Shunock River | Lat 41°26'19", long 71°54'39", New London County, at bridge on Jeremy Hill Road, 1.5 mi west of North Stonington, CT. | 1.63 | 1963–65, 2002–03 | 7-22-04 8-27-04 9-15-04 | .02 .05 .01 |
| 01118380 | do. | Lat 41°26'19", long 71°53'05", New London County, at bridge on State Route 2, 0.2 mi southwest of North Stonington, CT. | 4.54 | 1963–65, 2002 | 7-22-04 8-27-04 9-15-05 | .34 .45 .14 |

^a Operated as a continuous-record gaging station.

^b Operated as a crest-stage partial-record station and published as "Glen Rock Brook tributary."

GROUND-WATER LEVELS IN MASSACHUSETTS

BARNSTABLE COUNTY

413956070164301. Barnstable well A1W 230.

LOCATION.--Lat 41° 39'56", long 70° 16'43", Barnstable County, Hydrologic Unit 01090002, 50 ft west of Mary Dunn Road at Hyannis Airport and 0.3 mi north of intersection of Willow Street and State Highway 28 in Barnstable.

Owner: U.S. Geological Survey.

AQUIFER.--Glacial sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Augered observation water-table well, diameter 1.25 in., depth 35.8 ft, screened 32.8 to 35.8 ft.

INSTRUMENTATION.--Monthly measurement with electric or chalked tape.

DATUM.--Elevation of land-surface datum is 42.53 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, at land-surface datum.

PERIOD OF RECORD.--January 1958 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 20.51 ft below land-surface datum, May 20, 1987; lowest measured, 26.59 ft below land-surface datum, Oct. 21, 1991.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|-----------------|-------------|---------|-------------|--------------|-------------|--------|-------------|--------------|-------------|--------|-------------|
| OCT 27 | 24.50 | DEC 24 | 22.66 | MAR 05 | 23.27 | APR 27 | 23.06 | JUN 24 | 23.38 | AUG 26 | 24.75 |
| NOV 24 | 24.58 | JAN 21 | 23.35 | 23 | 23.98 | MAY 24 | 23.17 | JUL 29 | 24.20 | | |
| WATER YEAR 2004 | | HIGHEST | 22.66 | DEC 24, 2003 | | LOWEST | 24.75 | AUG 26, 2004 | | | |

414154070165001. Barnstable well A1W 247.

LOCATION.--Lat 41° 41'54", long 70° 16'50", Barnstable County, Hydrologic Unit 01090002, 30 ft east of Mary Dunn Road and 0.2 mi south of State Highway 6A in Barnstable.

Owner: U.S. Geological Survey.

AQUIFER.--Glacial sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Augered observation water-table well, diameter 1.25 in., depth 52 ft, screened 49 to 52 ft.

INSTRUMENTATION.--Monthly measurement with electric or chalked tape.

DATUM.--Elevation of land-surface datum is 44.52 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.0 ft above land-surface datum.

PERIOD OF RECORD.--November 1962 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 20.52 ft below land-surface datum, Apr. 22, 1997; lowest measured, 28.64 ft below land-surface datum, Oct. 25, 1966.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|-----------------|-------------|---------|-------------|--------------|-------------|--------|-------------|--------------|-------------|--------|-------------|
| OCT 27 | 24.55 | DEC 24 | 24.32 | FEB 23 | 24.30 | APR 27 | 23.86 | JUN 24 | 23.94 | AUG 26 | 24.82 |
| NOV 24 | 24.84 | JAN 21 | 24.30 | MAR 23 | 24.43 | MAY 20 | 23.76 | JUL 29 | 24.45 | SEP 30 | 25.21 |
| WATER YEAR 2004 | | HIGHEST | 23.76 | MAY 20, 2004 | | LOWEST | 25.21 | SEP 30, 2004 | | | |

414129070361401. Bourne well BHW 198.

LOCATION.--Lat 41° 41'29", long 70° 36'14", Barnstable County, Hydrologic Unit 01090002, 50 ft west of County Road and 0.3 mi south of Pocasset Road in Bourne.

Owner: U.S. Geological Survey.

AQUIFER.--Glacial sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Augered observation water-table well, diameter 1.25 in., depth 50 ft, screened 47 to 50 ft; new well drilled at same location August 1990, diameter 2.0 in., depth 50 ft, screened 40–50 ft.

INSTRUMENTATION.--Monthly measurement with electric or chalked tape.

DATUM.--Elevation of land-surface datum is 55.56 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 1.65 ft above land-surface datum; prior to August 1990, 2.47 ft above land-surface datum.

PERIOD OF RECORD.--November 1962 to current year. Prior to October 1974, published in Massachusetts Hydrologic-Data Report No. 17.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 29.73 ft below land-surface datum, Mar. 24, 1998; lowest measured, 36.17 ft below land-surface datum, Oct. 25, 1966.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|-----------------|-------------|---------|-------------|--------------|-------------|--------|-------------|--------------|-------------|--------|-------------|
| OCT 24 | 34.41 | DEC 23 | 33.99 | FEB 26 | 33.46 | APR 22 | 33.38 | JUN 25 | 33.69 | AUG 26 | 34.53 |
| NOV 25 | 34.54 | JAN 21 | 33.43 | MAR 24 | 33.72 | MAY 21 | 33.31 | JUL 26 | 34.18 | SEP 27 | 34.79 |
| WATER YEAR 2004 | | HIGHEST | 33.31 | MAY 21, 2004 | | LOWEST | 34.79 | SEP 27, 2004 | | | |

GROUND-WATER LEVELS IN MASSACHUSETTS

BARNSTABLE COUNTY--Continued

414518070020301. Brewster well BMW 21.

LOCATION.--Lat 41°45'18", long 70°02'03", Barnstable County, Hydrologic Unit 01090002, about 50 ft north of Nook Road, 0.1 mi south of Cliff Pond, 0.3 mi east of Silas Road, and at Nickerson State Park in Brewster.

Owner: U.S. Geological Survey.

AQUIFER.--Glacial sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Augered observation water-table well, diameter 2.5 in., depth 24.8 ft, screened 21.8 to 24.8 ft.

INSTRUMENTATION.--Monthly measurement with electric or chalked tape.

DATUM.--Elevation of land-surface datum is 36.97 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.40 ft above land-surface datum.

PERIOD OF RECORD.--October 1957 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.90 ft below land-surface datum, Apr. 25, 1974; lowest measured, 13.57 ft below land-surface datum, Oct. 22, 2002.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|------------|-------------|---------|-------------|--------------|--------------|--------|-------------|--------------|-------------|--------|-------------|
| OCT 21 | 10.25 | DEC 23 | 10.21 | FEB 25 | 10.30 | APR 27 | 9.92 | JUN 25 | 9.98 | AUG 24 | 10.54 |
| NOV 19 | 10.48 | JAN 22 | 10.30 | MAR 24 | 10.35 | MAY 20 | 9.92 | JUL 27 | 10.04 | SEP 28 | 10.83 |
| WATER YEAR | 2004 | HIGHEST | 9.92 | APR 27, 2004 | MAY 20, 2004 | LOWEST | 10.83 | SEP 28, 2004 | | | |

414630070014901. Brewster well BMW 22.

LOCATION.--Lat 41°46'30", long 70°01'49", Barnstable County, Hydrologic Unit 01090002, 50 ft east of entrance to Nickerson State Park and 50 ft south of State Highway 6A in Brewster.

Owner: U.S. Geological Survey.

AQUIFER.--Glacial sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Augered observation water-table well, diameter 1.25 in., depth 52 ft, screened 49 to 52 ft.

INSTRUMENTATION.--Monthly measurement with electric or chalked tape, digital recorder (60-minute interval) with satellite telemeter since December 2001.

DATUM.--Elevation of land-surface datum is 50.45 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 3.06 ft above land-surface datum, prior to December 2001, at land-surface datum.

REMARKS.--Missing periods of more than one day are not estimated. Water levels affected by daily tidal fluctuations of about 0.03 ft.

PERIOD OF RECORD.--November 1962 to current year. Prior to October 1974, published in Massachusetts Hydrologic-Data Report No. 17.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 28.13 ft below land-surface datum, May 26, 1983; lowest, 33.84 ft below land-surface datum, Nov. 12, 13, 16, 2002.

EXTREMES FOR CURRENT YEAR.--Highest water level, 30.45 ft below land-surface datum, May 23--25; lowest, 31.77 ft below land-surface datum, Sept. 27, 28.

**DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES**

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 31.17 | 31.50 | 31.69 | 31.18 | 31.22 | 31.24 | 31.27 | 30.61 | 30.47 | 30.82 | 31.23 | 31.55 |
| 2 | 31.18 | 31.50 | 31.71 | 31.16 | 31.24 | 31.23 | 31.23 | 30.60 | 30.47 | 30.82 | 31.24 | 31.56 |
| 3 | 31.19 | 31.51 | 31.71 | 31.15 | 31.23 | 31.25 | 31.20 | 30.59 | 30.48 | 30.83 | 31.24 | 31.57 |
| 4 | 31.20 | 31.52 | 31.72 | 31.15 | 31.24 | 31.26 | 31.18 | 30.57 | 30.50 | 30.84 | 31.25 | 31.58 |
| 5 | 31.22 | 31.52 | 31.72 | 31.14 | 31.27 | 31.25 | 31.15 | 30.55 | 30.51 | 30.86 | 31.27 | 31.59 |
| 6 | 31.23 | 31.52 | 31.69 | 31.15 | 31.24 | 31.22 | 31.11 | 30.54 | 30.50 | 30.87 | 31.29 | 31.60 |
| 7 | 31.25 | 31.53 | 31.62 | 31.14 | 31.18 | 31.25 | 31.08 | 30.52 | 30.51 | 30.89 | 31.30 | 31.61 |
| 8 | 31.26 | 31.54 | 31.62 | 31.13 | 31.18 | 31.25 | 31.05 | 30.53 | 30.52 | 30.90 | 31.32 | 31.62 |
| 9 | 31.28 | 31.55 | 31.62 | 31.12 | 31.17 | 31.29 | 31.03 | 30.52 | 30.53 | 30.91 | 31.33 | 31.63 |
| 10 | 31.30 | 31.56 | 31.60 | 31.11 | 31.14 | 31.30 | 31.02 | 30.51 | 30.54 | 30.93 | 31.35 | 31.64 |
| 11 | 31.31 | 31.57 | 31.55 | 31.11 | 31.14 | 31.26 | 31.00 | 30.49 | 30.54 | 30.95 | 31.37 | 31.65 |
| 12 | 31.31 | 31.56 | 31.56 | 31.10 | 31.14 | 31.24 | 30.99 | 30.49 | 30.57 | 30.97 | 31.39 | 31.66 |
| 13 | 31.32 | 31.53 | 31.57 | 31.09 | 31.13 | 31.28 | 30.96 | 30.49 | 30.59 | 30.97 | 31.40 | 31.67 |
| 14 | 31.33 | 31.56 | 31.55 | 31.10 | 31.13 | 31.30 | 30.93 | 30.48 | 30.61 | 30.97 | 31.42 | 31.69 |
| 15 | 31.30 | 31.59 | 31.49 | 31.08 | 31.15 | 31.30 | 30.90 | 30.48 | 30.60 | 30.98 | 31.43 | 31.70 |
| 16 | 31.35 | 31.60 | 31.49 | 31.08 | 31.17 | 31.33 | 30.88 | 30.48 | 30.62 | 31.00 | 31.42 | 31.70 |
| 17 | 31.36 | 31.61 | 31.44 | 31.11 | 31.18 | 31.31 | 30.86 | 30.50 | 30.63 | 31.01 | 31.41 | 31.71 |
| 18 | 31.38 | 31.62 | 31.41 | 31.09 | 31.15 | 31.31 | 30.84 | 30.49 | 30.63 | 31.03 | 31.42 | 31.70 |
| 19 | 31.39 | 31.62 | 31.39 | 31.08 | 31.14 | 31.31 | 30.82 | 30.48 | 30.63 | 31.04 | 31.43 | 31.70 |
| 20 | 31.40 | 31.61 | 31.37 | 31.10 | 31.16 | 31.30 | 30.81 | 30.48 | 30.66 | 31.06 | 31.43 | 31.71 |
| 21 | 31.39 | 31.62 | 31.35 | 31.11 | 31.14 | 31.25 | 30.79 | 30.47 | 30.69 | 31.08 | 31.44 | 31.71 |
| 22 | 31.39 | 31.64 | 31.33 | 31.09 | 31.16 | 31.28 | 30.76 | 30.47 | 30.69 | 31.09 | 31.46 | 31.71 |
| 23 | 31.40 | 31.64 | 31.32 | 31.10 | 31.18 | 31.30 | 30.75 | 30.46 | 30.70 | 31.10 | 31.47 | 31.72 |
| 24 | 31.42 | 31.64 | 31.28 | 31.11 | 31.18 | 31.32 | 30.73 | 30.46 | 30.72 | 31.12 | 31.48 | 31.73 |
| 25 | 31.44 | 31.64 | 31.25 | 31.14 | 31.20 | 31.33 | 30.72 | 30.47 | 30.73 | 31.14 | 31.50 | 31.74 |
| 26 | 31.45 | 31.65 | 31.23 | 31.16 | 31.21 | 31.32 | 30.70 | 30.48 | 30.73 | 31.15 | 31.52 | 31.74 |
| 27 | 31.44 | 31.66 | 31.23 | 31.14 | 31.20 | 31.30 | 30.67 | 30.49 | 30.75 | 31.17 | 31.53 | 31.76 |
| 28 | 31.46 | 31.65 | 31.21 | 31.12 | 31.21 | 31.32 | 30.66 | 30.48 | 30.77 | 31.18 | 31.53 | 31.75 |
| 29 | 31.44 | 31.64 | 31.19 | 31.14 | 31.22 | 31.32 | 30.65 | 30.48 | 30.79 | 31.19 | 31.55 | 31.74 |
| 30 | 31.47 | 31.68 | 31.18 | 31.15 | -- | 31.32 | 30.63 | 30.48 | 30.80 | 31.20 | 31.57 | 31.71 |
| 31 | 31.49 | -- | 31.17 | 31.18 | -- | 31.30 | -- | 30.48 | -- | 31.21 | 31.56 | -- |
| MEAN | 31.34 | 31.59 | 31.46 | 31.12 | 31.18 | 31.29 | 30.91 | 30.50 | 30.62 | 31.01 | 31.40 | 31.67 |
| LOW | 31.49 | 31.68 | 31.72 | 31.18 | 31.27 | 31.33 | 31.27 | 30.61 | 30.80 | 31.21 | 31.57 | 31.76 |
| HIGH | 31.17 | 31.50 | 31.17 | 31.08 | 31.13 | 31.22 | 30.63 | 30.46 | 30.47 | 30.82 | 31.23 | 31.55 |

GROUND-WATER LEVELS IN MASSACHUSETTS

BARNSTABLE COUNTY--Continued

414100070011101. Chatham well CGW 138.

LOCATION.--Lat 41° 41' 00", long 70° 01' 11", Barnstable County, Hydrologic Unit 01090002, 50 ft east of State Highway 137 and 300 ft north of State Highway 28 in Chatham.

Owner: U.S. Geological Survey.

AQUIFER.--Glacial sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Augered observation water-table well, diameter 1.25 in., depth 44 ft, screened 41 to 44 ft.

INSTRUMENTATION.--Monthly measurement with electric or chalked tape.

DATUM.--Elevation of land-surface datum is 35.28 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 4.77 ft above land-surface datum; prior to June 1980, 3.80 ft above land-surface datum.

PERIOD OF RECORD.--November 1962 to current year. Prior to October 1974, published in Massachusetts Hydrologic-Data Report No. 17.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 20.94 ft below land-surface datum, Apr. 25, 1983; lowest measured, 26.38 ft below land-surface datum, Sept. 25, 1980.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|------------|-------------|---------|-------------|--------------|-------------|--------|-------------|--------------|-------------|--------|-------------|
| OCT 21 | 23.59 | DEC 23 | 23.15 | FEB 25 | 23.12 | APR 27 | 22.55 | JUN 24 | 22.88 | SEP 28 | 24.08 |
| NOV 19 | 23.68 | JAN 22 | 23.06 | MAR 24 | 23.25 | MAY 20 | 22.51 | AUG 26 | 23.93 | | |
| WATER YEAR | 2004 | HIGHEST | 22.51 | MAY 20, 2004 | | LOWEST | 24.08 | SEP 28, 2004 | | | |

413525070291904. Mashpee well MIW 29.

LOCATION.--Lat 41° 35' 25", long 70° 29' 19", Barnstable County, Hydrologic Unit 01090002, 20 ft west of dirt road, 0.8 mi north of intersection of Great Hay Road and dirt road which is 0.12 mi northeast of intersection of Red Brook Road and Great Hay Road in Mashpee.

Owner: Town of Mashpee.

AQUIFER.--Glacial sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Hydraulic-rotary drilled observation water-table well, diameter 2.0 in., depth 40.0 ft, screened 37.0 to 40.0 ft.

INSTRUMENTATION.--Monthly measurement with electric or chalked tape.

DATUM.--Elevation of land-surface datum is 15.78 above National Geodetic Vertical Datum of 1929. Measuring point: Top of steel coupling, 1.36 ft above land-surface datum.

PERIOD OF RECORD.--February 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.62 ft below land-surface datum, Apr. 22 1987; lowest measured, 10.03 ft below land-surface datum, Oct. 24, 1980.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|------------|-------------|---------|-------------|--------------|-------------|--------|-------------|--------------|-------------|--------|-------------|
| OCT 24 | 8.99 | DEC 23 | 7.82 | FEB 26 | 8.31 | APR 22 | 7.84 | JUN 25 | 8.31 | AUG 26 | 9.19 |
| NOV 25 | 9.11 | JAN 26 | 8.07 | MAR 24 | 8.35 | MAY 21 | 7.98 | JUL 26 | 8.83 | SEP 27 | 9.40 |
| WATER YEAR | 2004 | HIGHEST | 7.82 | DEC 23, 2003 | | LOWEST | 9.40 | SEP 27, 2004 | | | |

414418070241601. Sandwich well SDW 252.

LOCATION.--Lat 41° 44' 18", long 70° 24' 16", Barnstable County, Hydrologic Unit 01090002, 0.5 mi north of State Highway 6A and 15 ft east of Private Road in Sandwich.

Owner: U.S. Geological Survey.

AQUIFER.--Glacial sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Augered observation water-table well, diameter 1.25 in., depth 57 ft, screened 55 to 57 ft.

INSTRUMENTATION.--Monthly measurement with electric or chalked tape.

DATUM.--Elevation of land-surface datum is 53.47 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 1.0 ft above land-surface datum.

PERIOD OF RECORD.--November 1962 to current year. Prior to October 1974, published in Massachusetts Hydrologic-Data Report No. 17.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 45.88 ft below land-surface datum, Apr. 25, 1983; lowest measured, 48.23 ft below land-surface datum, Oct. 25, 1966.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|------------|-------------|---------|-------------|--------------|-------------|--------------|-------------|--------|-------------|--------------|-------------|
| OCT 24 | 47.47 | DEC 23 | 47.15 | FEB 26 | 47.23 | APR 22 | 47.15 | JUN 25 | 47.25 | AUG 26 | 47.68 |
| NOV 25 | 47.42 | JAN 21 | 47.25 | MAR 24 | 47.24 | MAY 21 | 47.23 | JUL 26 | 47.50 | SEP 28 | 47.64 |
| WATER YEAR | 2004 | HIGHEST | 47.15 | DEC 23, 2003 | | APR 22, 2004 | | LOWEST | 47.68 | AUG 26, 2004 | |

GROUND-WATER LEVELS IN MASSACHUSETTS

BARNSTABLE COUNTY--Continued

414124070265901. Sandwich well SDW 253.

LOCATION.--Lat 41° 41' 24", long 70° 26' 59", Barnstable County, Hydrologic Unit 01090002, 800 ft west of Stowe Road and 50 ft south of Farmersville Road in Sandwich.

Owner: U.S. Geological Survey.

AQUIFER.--Glacial sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Augered observation water-table well, diameter 1.25 in., depth 70 ft, screened 67 to 70 ft.

INSTRUMENTATION.--Monthly measurement with electric or chalked tape.

DATUM.--Elevation of land-surface datum is 111.20 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 3.0 ft above land-surface datum.

PERIOD OF RECORD.--November 1962 to current year. Prior to October 1974, published in Massachusetts Hydrologic-Data Report No. 17.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 45.78 ft below land-surface datum, July 30, 1973; lowest measured, 55.05 ft below land-surface datum, Feb. 28, 1967.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|-----------------|-------------|---------|-------------|--------------|-------------|--------|-------------|--------------|-------------|--------|-------------|
| OCT 24 | 51.07 | DEC 23 | 50.54 | FEB 26 | 50.51 | APR 22 | 50.23 | JUN 25 | 50.59 | AUG 26 | 51.24 |
| NOV 25 | 51.17 | JAN 21 | 50.56 | MAR 24 | 50.59 | MAY 21 | 50.35 | JUL 26 | 51.01 | SEP 29 | 51.49 |
| WATER YEAR 2004 | | HIGHEST | 50.23 | APR 22, 2004 | | LOWEST | 51.49 | SEP 29, 2004 | | | |

420239070062001. Truro well TSW 1.

LOCATION.--Lat 42° 02' 39", long 70° 06' 20", Barnstable County, Hydrologic Unit 01090002, near old pumping station about 200 ft north of State Highway 6A and 1.2 mi northwest of North Truro.

Owner: Town of Provincetown.

AQUIFER.--Glacial sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Driven observation water-table well, diameter 1.25 in., depth 68 ft, cased to 68 ft, open end.

INSTRUMENTATION.--Monthly measurement with electric or chalked tape.

DATUM.--Elevation of land-surface datum is 16.80 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 3.50 ft above land-surface datum.

REMARKS.--Water levels affected by pumping, barometric pressure, and tide.

PERIOD OF RECORD.--August 1950 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 9.28 ft below land-surface datum, Mar. 23, 1983; lowest measured, 12.10 ft below land-surface datum, Sept. 11, 1954.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|-----------------|-------------|---------|-------------|--------------|-------------|--------|-------------|--------------|-------------|--------|-------------|
| OCT 21 | 10.78 | DEC 23 | 10.21 | FEB 25 | 10.52 | APR 28 | 10.64 | JUN 21 | 10.58 | AUG 24 | 10.75 |
| NOV 19 | 10.79 | JAN 22 | 10.52 | MAR 24 | 10.56 | MAY 20 | 10.70 | JUL 27 | 10.82 | SEP 30 | 10.63 |
| WATER YEAR 2004 | | HIGHEST | 10.21 | DEC 23, 2003 | | LOWEST | 10.82 | JUL 27, 2004 | | | |

420206070045901. Truro well TSW 89.

LOCATION.--Lat 42° 02' 06", long 70° 04' 59", Barnstable County, Hydrologic Unit 01090002, 300 ft west of U.S. Highway 6 and 50 ft north of Highland Road in Truro.

Owner: U.S. Geological Survey.

AQUIFER.--Glacial sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Augered observation water-table well, diameter 2.0 in., depth 21.7 ft, screened 16.7 to 21.7 ft; prior to November 1989, diameter 1.25 in., depth 27.7 ft, screened 24.7 to 27.7 ft at same location.

INSTRUMENTATION.--Monthly measurement with electric or chalked tape.

DATUM.--Elevation of land-surface datum is 16.60 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, at land-surface datum; prior to November 1989, 0.22 ft above land-surface datum.

PERIOD OF RECORD.--September 1962 to current year. Prior to October 1974, published in Massachusetts Hydrologic-Data Report No. 17.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 10.20 ft below land-surface datum, Apr. 25, 1983; lowest measured, 12.96 ft below land-surface datum, Sept. 28, 1965.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|-----------------|-------------|---------|-------------|--------------|-------------|--------------|-------------|--------|-------------|--------------|-------------|
| OCT 21 | 12.31 | DEC 23 | 11.85 | MAR 24 | 12.15 | MAY 20 | 12.05 | JUL 27 | 12.37 | SEP 30 | 12.54 |
| NOV 19 | 12.37 | FEB 25 | 12.19 | APR 28 | 11.85 | JUN 21 | 12.14 | AUG 24 | 12.49 | | |
| WATER YEAR 2004 | | HIGHEST | 11.85 | DEC 23, 2003 | | APR 28, 2004 | | LOWEST | 12.54 | SEP 30, 2004 | |

GROUND-WATER LEVELS IN MASSACHUSETTS

BARNSTABLE COUNTY--Continued

415353069585401. Wellfleet well WNW 17.

LOCATION.--Lat 41° 53'53", long 69° 58'54", Barnstable County, Hydrologic Unit 01090002, about 150 ft east of old pumping station and 45 ft west of road to the public beach at Cape Cod National Seashore in Wellfleet.

Owner: Cape Cod National Seashore.

AQUIFER.--Glacial sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Driven observation water-table well, diameter 2.5 in., depth 42 ft, screen information not available.

INSTRUMENTATION.--Monthly measurement with electric or chalked tape.

DATUM.--Elevation of land-surface datum is 19.10 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 1.24 ft above land-surface datum, 1.13 ft prior to June 1992.

PERIOD OF RECORD.--November 1962 to current year. Prior to October 1974, published in Massachusetts Hydrologic-Data Report No. 17.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 7.27 ft below land-surface datum, June 27, 1967; lowest measured, 12.75 ft below land-surface datum, Jan. 31, 1967.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|------------|-------------|---------|-------------|--------------|-------------|--------|-------------|--------------|-------------|--------|-------------|
| OCT 21 | 10.71 | DEC 23 | 10.99 | FEB 27 | 11.67 | APR 28 | 10.66 | JUN 21 | 10.77 | AUG 24 | 11.50 |
| NOV 19 | 11.08 | JAN 22 | 11.18 | MAR 24 | 11.47 | MAY 20 | 10.52 | JUL 27 | 11.19 | SEP 30 | 11.73 |
| WATER YEAR | 2004 | HIGHEST | 10.52 | MAY 20, 2004 | | LOWEST | 11.73 | SEP 30, 2004 | | | |

BERKSHIRE COUNTY

421550073025101. Becket well A3W 12.

LOCATION.--Lat 42° 15'50", long 73° 02'51", Berkshire County, Hydrologic Unit 01080206, at edge of Bonny Rigg Restaurant parking lot, 30 ft north of Route 20 and 0.2 mi east of Route 8.

Owner: Private owner.

AQUIFER.--Glacial sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Augered observation water-table well, diameter 2.0 in., depth 35 ft, screened 25 to 35 ft.

INSTRUMENTATION.--Monthly measurement with electric or chalked tape.

DATUM.--Elevation of land-surface datum is 1285 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 3.00 ft above land-surface datum.

PERIOD OF RECORD.--October 1986 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.31 ft below land-surface datum, Oct. 29, 2003; lowest measured, 4.62 ft below land-surface datum, Aug. 23, 1988, July 24, 1991.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|------------|-------------|---------|-------------|--------------|-------------|--------|-------------|--------------|-------------|--------|-------------|
| OCT 29 | 2.31 | DEC 17 | 3.05 | FEB 18 | 3.53 | APR 20 | 3.02 | JUN 25 | 3.54 | AUG 31 | 3.30 |
| NOV 19 | 3.16 | JAN 27 | 3.53 | MAR 24 | 3.25 | MAY 27 | 3.04 | JUL 27 | 3.64 | SEP 21 | 2.59 |
| WATER YEAR | 2004 | HIGHEST | 2.31 | OCT 29, 2003 | | LOWEST | 3.64 | JUL 27, 2004 | | | |

423503073075401. Cheshire well CJW 2.

LOCATION.--Lat 42° 35'03", long 73° 07'54", Berkshire County, Hydrologic Unit 02020003, at intersection of Wells and Jenks Roads 2.3 mi northeast of Cheshire.

Owner: Private owner.

AQUIFER.--Glacial till of Pleistocene age.

WELL CHARACTERISTICS.--Dug observation water-table well, diameter 30 in., depth 22 ft, cased with stone to 22 ft, open end.

INSTRUMENTATION.--Monthly measurement with electric or chalked tape.

DATUM.--Elevation of land-surface datum is 1,210 ft, above National Geodetic Vertical Datum of 1929. Measuring point: Inside rim of concrete well top, 1.0 ft above land-surface datum.

REMARKS.--Water level may be affected by nearby pumping during summer period.

PERIOD OF RECORD.--October 1951 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.09 ft below land-surface datum, Jan. 19, 1952; lowest measured, 19.83 ft below land-surface datum, Aug. 24, 1995.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|------------|-------------|---------|-------------|--------------|-------------|--------|-------------|--------------|-------------|--------|-------------|
| OCT 28 | 0.99 | DEC 16 | 2.50 | FEB 17 | 8.19 | APR 22 | 2.66 | JUN 30 | 5.48 | AUG 19 | 5.99 |
| NOV 18 | 3.34 | JAN 26 | 5.19 | MAR 24 | 3.69 | MAY 19 | 3.83 | JUL 27 | 6.19 | SEP 21 | 2.68 |
| WATER YEAR | 2004 | HIGHEST | 0.99 | OCT 28, 2003 | | LOWEST | 8.19 | FEB 17, 2004 | | | |

GROUND-WATER LEVELS IN MASSACHUSETTS

BERKSHIRE COUNTY--Continued

421316073212801. Great Barrington well GMW 2.

LOCATION.--Lat 42° 13'16", long 73° 21'28", Berkshire County, Hydrologic Unit 01100005, 30 ft west of State Highway 41 and 1.5 mi north of intersection of State Highway 41 and U.S. Highway 7 in Great Barrington.

Owner: Private owner.

AQUIFER.--Glacial outwash of Pleistocene age.

WELL CHARACTERISTICS.--Dug observation water-table well, diameter 36 in., depth 16 ft, cased with stone to 16 ft, open end.

INSTRUMENTATION.--Monthly measurement with electric or chalked tape.

DATUM.--Elevation of land-surface datum is 732 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of stone curbing, east side of well, 1.12 ft above land-surface datum. Prior to July 25, 1978, measured at land-surface datum.

REMARKS.--Water level affected by stream.

PERIOD OF RECORD.--June 1951 to current year. Continuous graphic recorder January 1968 to August 1982.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.99 ft below land-surface datum, Apr. 21, 1983; lowest measured, 14.97 ft below land-surface datum, Nov. 20, 1964.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|-----------------|-------------|--------|--------------|--------|-------------|--------------|-------------|--------|-------------|--------|-------------|
| OCT 28 | 9.26 | DEC 16 | 8.58 | FEB 18 | 10.63 | APR 20 | 7.52 | JUN 24 | 10.95 | AUG 30 | 10.69 |
| NOV 18 | 6.16 | JAN 26 | 10.35 | MAR 23 | 8.80 | MAY 26 | 8.88 | JUL 27 | 7.43 | SEP 21 | 8.81 |
| WATER YEAR 2004 | HIGHEST | 6.16 | NOV 18, 2003 | LOWEST | 10.95 | JUN 24, 2004 | | | | | |

420912073043001. Otis well OTW 7.

LOCATION.--Lat 42° 09'12", long 73° 04'30", Berkshire County, Hydrologic Unit 01080207, about 400 ft south of Hawley Road and 15 ft west of State Highway 8 in Otis.

Owner: U.S. Geological Survey.

AQUIFER.--Glacial sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Augered observation water-table well, diameter 2.0 in., depth 17.5 ft, screened 15.5 to 17.5 ft.

INSTRUMENTATION.--Monthly measurement with electric or chalked tape.

DATUM.--Elevation of land-surface datum is 1,145 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 4.12 ft above land-surface datum.

REMARKS.--Water levels affected by Minor Brook and Farmington River.

PERIOD OF RECORD.--January 1965 to current year. Prior to October 1974, published in Massachusetts Hydrologic-Data Report No. 17.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.55 ft below land-surface datum, Apr. 21, 1983; lowest measured, 10.16 ft below land-surface datum, Sept. 21, 1983.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|-----------------|-------------|--------|--------------|--------|-------------|--------------|-------------|--------|-------------|--------|-------------|
| OCT 22 | 12.04 | DEC 17 | 7.46 | FEB 18 | 8.86 | APR 20 | 7.28 | JUN 25 | 8.98 | AUG 31 | 8.24 |
| NOV 19 | 8.02 | JAN 27 | 8.15 | MAR 23 | 7.90 | MAY 27 | 8.35 | JUL 27 | 9.58 | SEP 21 | 6.73 |
| WATER YEAR 2004 | HIGHEST | 6.73 | SEP 21, 2004 | LOWEST | 12.04 | OCT 22, 2003 | | | | | |

GROUND-WATER LEVELS IN MASSACHUSETTS

BERKSHIRE COUNTY--Continued

422745073112001. Pittsfield well PTW 51.

LOCATION.--Lat 42° 27'45", long 73° 11'20", Berkshire County, Hydrologic Unit 01100005, 30 ft east of Hubbard Ave. and about 100 ft north of Barton Brook in Pittsfield.

Owner: U.S. Geological Survey.

AQUIFER.--Glacial sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Augered observation water-table well, diameter 2.0 in., depth 31.5 ft, screened 26.5 to 31.5 ft. Prior to July 1986, augered observation water-table well, diameter 1.25 in., depth 31.5 ft, screened 29.5 to 31.5 ft.

INSTRUMENTATION.--Monthly measurement with groundwater electric tape by USGS personnel. Digital recorder (60-min punch) July 1986 to current year, satellite telemeter since July 2001.

DATUM.--Elevation of land-surface datum is 1,050 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing in base of aluminum shelter, 1.83 ft above land-surface datum; prior to July 1986, top of casing, 2.50 ft above land-surface datum.

REMARKS.--Missing periods of more than one day are not estimated.

PERIOD OF RECORD.--August 1963 to current year. Prior to October 1974, published in Massachusetts Hydrologic-Data Report No. 17.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 12.30 ft below land-surface datum, Apr. 25, 1969; lowest, 27.57 ft below land-surface datum, Dec. 11, 1964.

EXTREMES FOR CURRENT YEAR.--Highest water level, 13.83 ft below land-surface datum, Dec. 26; lowest, 18.67 ft below land-surface datum, Aug. 20.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 15.48 | 14.66 | 14.51 | 13.99 | 15.10 | 15.99 | 14.71 | 14.46 | 15.03 | 16.15 | 18.15 | 18.00 |
| 2 | 15.41 | 14.66 | 14.54 | 14.00 | 15.14 | 15.80 | 14.54 | 14.47 | 14.97 | 16.18 | 18.12 | 18.03 |
| 3 | 15.39 | 14.65 | 14.57 | 13.99 | 15.14 | 15.58 | 14.46 | 14.49 | 14.92 | 16.23 | 18.10 | 18.11 |
| 4 | 15.35 | 14.67 | 14.54 | 13.98 | 15.19 | 15.39 | 14.45 | 14.46 | 14.94 | 16.31 | 18.16 | 18.20 |
| 5 | 15.32 | 14.65 | 14.53 | 13.97 | 15.25 | 15.28 | 14.47 | 14.48 | 14.96 | 16.37 | 18.18 | 18.30 |
| 6 | 15.32 | 14.63 | 14.54 | 14.01 | 15.29 | 15.18 | 14.49 | 14.52 | 14.99 | 16.29 | 18.18 | 18.39 |
| 7 | 15.32 | 14.63 | 14.57 | 14.04 | 15.27 | 15.13 | 14.50 | 14.55 | 15.03 | 16.28 | 18.23 | 18.48 |
| 8 | 15.32 | 14.67 | 14.62 | 14.06 | 15.25 | 15.10 | 14.53 | 14.60 | 15.07 | 16.29 | 18.29 | 18.58 |
| 9 | 15.34 | 14.70 | 14.63 | 14.06 | 15.20 | 15.11 | 14.55 | 14.61 | 15.09 | 16.35 | 18.34 | 18.54 |
| 10 | 15.36 | 14.70 | 14.63 | 14.08 | 15.19 | 15.11 | 14.59 | 14.63 | 15.07 | 16.40 | 18.40 | 18.42 |
| 11 | 15.36 | 14.70 | 14.54 | 14.09 | 15.24 | 15.07 | 14.62 | 14.67 | 15.10 | 16.47 | 18.47 | 18.34 |
| 12 | 15.34 | 14.69 | 14.47 | 14.10 | 15.29 | 15.05 | 14.65 | 14.70 | 15.15 | 16.54 | 18.54 | 18.25 |
| 13 | 15.37 | 14.67 | 14.49 | 14.12 | 15.33 | 15.11 | 14.59 | 14.74 | 15.19 | 16.62 | 18.58 | 18.17 |
| 14 | 15.37 | 14.75 | 14.45 | 14.19 | 15.37 | 15.10 | 14.48 | 14.77 | 15.21 | 16.69 | 18.59 | 18.17 |
| 15 | 15.27 | 14.81 | 14.41 | 14.21 | 15.44 | 15.09 | 14.51 | 14.79 | 15.25 | 16.79 | 18.61 | 18.23 |
| 16 | 15.24 | 14.86 | 14.43 | 14.26 | 15.48 | 15.09 | 14.53 | 14.78 | 15.29 | 16.90 | 18.64 | 18.27 |
| 17 | 15.24 | 14.89 | 14.31 | 14.32 | 15.53 | 15.09 | 14.53 | 14.82 | 15.32 | 17.01 | 18.58 | 18.33 |
| 18 | 15.22 | 14.91 | 14.10 | 14.30 | 15.55 | 15.13 | 14.56 | 14.83 | 15.35 | 17.12 | 18.55 | 18.12 |
| 19 | 15.23 | 14.86 | 14.09 | 14.35 | 15.59 | 15.16 | 14.53 | 14.87 | 15.37 | 17.22 | 18.60 | 17.53 |
| 20 | 15.25 | 14.69 | 14.13 | 14.39 | 15.64 | 15.14 | 14.58 | 14.91 | 15.41 | 17.33 | 18.65 | 17.21 |
| 21 | 15.22 | 14.60 | 14.15 | 14.42 | 15.68 | 15.10 | 14.59 | 14.95 | 15.47 | 17.44 | 18.58 | 17.00 |
| 22 | 15.26 | 14.62 | 14.16 | 14.43 | 15.75 | 15.15 | 14.60 | 14.99 | 15.54 | 17.55 | 18.41 | 16.85 |
| 23 | 15.28 | 14.63 | 14.20 | 14.46 | 15.81 | 15.17 | 14.60 | 15.02 | 15.61 | 17.65 | 18.28 | 16.73 |
| 24 | 15.36 | 14.62 | 14.12 | 14.48 | 15.83 | 15.20 | 14.59 | 15.04 | 15.68 | 17.73 | 18.19 | 16.64 |
| 25 | 15.41 | 14.66 | 13.90 | 14.58 | 15.88 | 15.19 | 14.61 | 15.01 | 15.76 | 17.82 | 18.11 | 16.55 |
| 26 | 15.38 | 14.69 | 13.85 | 14.68 | 15.93 | 15.11 | 14.52 | 14.99 | 15.81 | 17.91 | 18.03 | 16.49 |
| 27 | 15.26 | 14.72 | 13.88 | 14.76 | 15.97 | 14.97 | 14.40 | 14.92 | 15.87 | 17.99 | 18.00 | 16.43 |
| 28 | 15.04 | 14.66 | 13.89 | 14.85 | 16.00 | 14.89 | 14.43 | 14.90 | 15.95 | 17.97 | 18.03 | 16.34 |
| 29 | 14.87 | 14.53 | 13.88 | 14.93 | 16.01 | 14.86 | 14.45 | 14.96 | 16.00 | 17.95 | 18.02 | 16.12 |
| 30 | 14.72 | 14.51 | 13.90 | 14.97 | --- | 14.85 | 14.46 | 14.99 | 16.07 | 18.02 | 18.05 | 16.01 |
| 31 | 14.68 | --- | 13.95 | 15.03 | --- | 14.82 | --- | 15.03 | --- | 18.09 | 18.03 | --- |
| MEAN | 15.26 | 14.69 | 14.29 | 14.33 | 15.49 | 15.16 | 14.54 | 14.77 | 15.35 | 17.02 | 18.31 | 17.63 |
| LOW | 15.48 | 14.91 | 14.63 | 15.03 | 16.01 | 15.99 | 14.71 | 15.04 | 16.07 | 18.09 | 18.65 | 18.58 |
| HIGH | 14.68 | 14.51 | 13.85 | 13.97 | 15.10 | 14.82 | 14.40 | 14.46 | 14.92 | 16.15 | 18.00 | 16.01 |

GROUND-WATER LEVELS IN MASSACHUSETTS

BERKSHIRE COUNTY--Continued

420351073193602. Sheffield well SJW 58.

LOCATION.--Lat 42° 03' 51", long 73° 19' 36", Berkshire County, Hydrologic Unit 01100005, about 100 ft east of U.S. Highway 7 and 30 ft north of Hewins Road in Sheffield.

Owner: U.S. Geological Survey.

AQUIFER.--Glacial sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Augered observation water-table well with sand point, diameter 2.0 in., depth 32 ft, screened 27 to 32 ft.

INSTRUMENTATION.--Monthly measurement with electric or chalked tape.

DATUM.--Elevation of land-surface datum is 680 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 1.6 ft above land-surface datum.

PERIOD OF RECORD.--October 1987 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 11.02 ft below land-surface datum, June 23, 1990; lowest measured, 17.16 ft below land-surface datum, Oct. 24, 2002.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|-----------------|---------------|--------------|--------------|--------------|-------------|--------|-------------|--------|-------------|--------|-------------|
| OCT 28 | 13.10 | DEC 16 | 12.35 | FEB 18 | 12.15 | APR 20 | 12.01 | JUN 24 | 12.45 | AUG 30 | 13.17 |
| NOV 18 | 11.52 | JAN 27 | 11.76 | MAR 23 | 12.50 | MAY 26 | 12.22 | JUL 27 | 13.02 | SEP 21 | 12.97 |
| WATER YEAR 2004 | HIGHEST 11.52 | NOV 18, 2003 | LOWEST 13.17 | AUG 30, 2004 | | | | | | | |

BRISTOL COUNTY

415447071155301. Attleboro well ATW 83.

LOCATION.--Lat 41° 54' 47", long 71° 15' 53", Bristol County, Hydrologic Unit 01090004, about 150 ft north of parking lot and 200 ft west of dirt road at Bristol County Nursing Home in Attleboro.

Owner: U.S. Geological Survey.

AQUIFER.--Glacial sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Augered observation water-table well, diameter 2.0 in., depth 20.6 ft, screened 18.6 to 20.6 ft.

INSTRUMENTATION.--Monthly measurement with electric or chalked tape.

DATUM.--Elevation of land-surface datum is 145 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.5 ft above land-surface datum.

PERIOD OF RECORD.--June 1964 to current year. Prior to October 1974, published in Massachusetts Hydrologic-Data Report No. 17.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.98 ft below land-surface datum, Jan. 27, 1978; lowest measured, 5.34 ft below land-surface datum, Aug. 30, 1999.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|-----------------|--------------|--------------|-------------|--------------|-------------|--------|-------------|--------|-------------|--------|-------------|
| OCT 23 | 4.13 | DEC 23 | 3.01 | FEB 26 | 3.99 | APR 29 | 3.23 | JUN 24 | 4.34 | AUG 26 | 4.23 |
| NOV 20 | 3.83 | JAN 22 | 3.80 | MAR 29 | 3.81 | MAY 27 | 3.85 | JUL 22 | 4.58 | SEP 30 | 3.86 |
| WATER YEAR 2004 | HIGHEST 3.01 | DEC 23, 2003 | LOWEST 4.58 | JUL 22, 2004 | | | | | | | |

414705071045301. Freetown well F3W 23.

LOCATION.--Lat 41° 47' 05", long 71° 04' 53", Bristol County, Hydrologic Unit 01090004, about 300 ft west of State Highway 24 and 200 ft north of State Highway 79 in Freetown.

Owner: U.S. Geological Survey.

AQUIFER.--Glacial sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Augered observation water-table well, diameter 2.0 in., depth 42 ft, screened 40 to 42 ft.

INSTRUMENTATION.--Monthly measurement with electric or chalked tape.

DATUM.--Elevation of land-surface datum is 38 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.0 ft above land-surface datum.

REMARKS.--Water level affected by tide.

PERIOD OF RECORD.--June 1964 to current year. Prior to October 1974, published in Massachusetts Hydrologic-Data Report No. 17.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.72 ft below land-surface datum, Apr. 22, 1983; lowest measured, 15.70 ft below land-surface datum, Jan. 29, 1966.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|-----------------|---------------|--------------|--------------|--------------|-------------|--------|-------------|--------|-------------|--------|-------------|
| OCT 22 | 13.65 | DEC 23 | 12.78 | FEB 26 | 13.55 | APR 28 | 12.80 | JUN 23 | 13.51 | AUG 26 | 14.11 |
| NOV 20 | 13.67 | JAN 23 | 13.13 | MAR 29 | 13.81 | MAY 27 | 13.14 | JUL 22 | 13.99 | SEP 30 | 14.10 |
| WATER YEAR 2004 | HIGHEST 12.78 | DEC 23, 2003 | LOWEST 14.11 | AUG 26, 2004 | | | | | | | |

GROUND-WATER LEVELS IN MASSACHUSETTS

BRISTOL COUNTY--Continued

414025070572801. New Bedford well NGW 116.

LOCATION.--Lat 41° 40'25", long 70° 57'28", Bristol County, Hydrologic Unit 01090002, New Bedford Municipal Airport, 30 ft east of control tower building in New Bedford.

Owner: U.S. Geological Survey.

AQUIFER.--Glacial sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Augered observation water-table well, diameter 2 in., depth 27.3 ft, screened 25.3 to 27.3 ft.

INSTRUMENTATION.--Monthly measurement with electric or chalked tape.

DATUM.--Elevation of land-surface datum is 65 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 1.0 ft above land-surface datum.

PERIOD OF RECORD.--June 1964 to current year. Prior to October 1974, published in Massachusetts Hydrologic-Data Report No. 17.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.31 ft below land-surface datum, Mar. 26, 1969; lowest measured, 5.20 ft below land-surface datum, July 24, 1964.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|-----------------|--------------|--------------|-------------|--------------|-------------|--------|-------------|--------|-------------|--------|-------------|
| OCT 23 | 4.08 | DEC 23 | 3.86 | FEB 25 | 4.23 | APR 29 | 3.96 | JUN 24 | 4.50 | AUG 26 | 4.18 |
| NOV 20 | 4.16 | JAN 22 | 4.51 | MAR 29 | 4.05 | MAY 27 | 4.43 | JUL 22 | 4.71 | SEP 30 | 3.55 |
| WATER YEAR 2004 | HIGHEST 3.55 | SEP 30, 2004 | LOWEST 4.71 | JUL 22, 2004 | | | | | | | |

415812071111101. Norton well N4W 37.

LOCATION.--Lat 41° 58'12", long 71° 11'11", Bristol County, Hydrologic Unit 01090004, at Wheaton College, 250 ft northeast of observatory in Norton.

Owner: U.S. Geological Survey.

AQUIFER.--Glacial sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Augered observation water-table well, diameter 2.0 in., depth 19.5 ft, screened 17.5 to 19.5 ft.

INSTRUMENTATION.--Monthly measurement with electric or chalked tape.

DATUM.--Elevation of land-surface datum is 105 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 3.0 ft above land-surface datum.

PERIOD OF RECORD.--June 1964 to current year. Prior to October 1974, published in Massachusetts Hydrologic-Data Report No. 17.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.35 ft below land-surface datum, Dec. 29, 1969; lowest measured, 11.39 ft below land-surface datum, Sept. 24, 1993.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|-----------------|--------------|--------------|-------------|--------------|-------------|--------|-------------|--------|-------------|--------|-------------|
| OCT 23 | 7.49 | DEC 23 | 4.28 | FEB 26 | 7.91 | APR 29 | 5.11 | JUN 24 | 8.23 | AUG 27 | 7.41 |
| NOV 20 | 6.84 | JAN 20 | 6.55 | MAR 26 | 6.86 | MAY 27 | 7.23 | JUL 19 | 8.88 | SEP 20 | 6.85 |
| WATER YEAR 2004 | HIGHEST 4.28 | DEC 23, 2003 | LOWEST 8.88 | JUL 19, 2004 | | | | | | | |

414714071175901. Seekonk well SHW 275.

LOCATION.--Lat 41° 47'14", long 71° 17'59", Bristol County, Hydrologic Unit 01090004, middle of median strip of Interstate Highway 195 and 1.1 mi west of Palmer River in Seekonk.

Owner: U.S. Geological Survey.

AQUIFER.--Glacial sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Augered observation water-table well, diameter 2.0 in., depth 14.4 ft, screened 12.4 to 14.4 ft.

INSTRUMENTATION.--Monthly measurement with electric or chalked tape.

DATUM.--Elevation of land-surface datum is 21 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 3.0 ft above land-surface datum.

PERIOD OF RECORD.--June 1964 to current year. Prior to October 1974, published in Massachusetts Hydrologic-Data Report No. 17.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.02 ft below land-surface datum, Dec. 20, 1986; lowest measured, 8.02 ft below land-surface datum, Sept. 26, 1980.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|-----------------|--------------|--------------|-------------|--------------|-------------|--------|-------------|--------|-------------|--------|-------------|
| OCT 23 | 5.79 | DEC 23 | 5.37 | FEB 26 | 5.69 | APR 29 | 5.20 | JUN 24 | 6.23 | AUG 26 | 5.96 |
| NOV 20 | 5.63 | JAN 22 | 5.82 | MAR 29 | 5.51 | MAY 27 | 5.74 | JUL 22 | 6.50 | SEP 30 | 5.11 |
| WATER YEAR 2004 | HIGHEST 5.11 | SEP 30, 2004 | LOWEST 6.50 | JUL 22, 2004 | | | | | | | |

GROUND-WATER LEVELS IN MASSACHUSETTS

BRISTOL COUNTY--Continued

415457071060101. Taunton well TAW 337.

LOCATION.--Lat 41° 54'57", long 71° 06'01", Bristol County, Hydrologic Unit 01090004, Taunton State Hospital, about 200 ft west of Mill River and about 300 ft east of Danforth Street in Taunton.

Owner: U.S. Geological Survey.

AQUIFER.--Glacial sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Augered observation water-table well, diameter 2.0 in., depth 20 ft, screened 18 to 20 ft.

INSTRUMENTATION.--Monthly measurement with electric or chalked tape.

DATUM.--Elevation of land-surface datum is 50 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.5 ft above land-surface datum.

REMARKS.--Water levels affected by Mill River.

PERIOD OF RECORD.--June 1964 to current year. Prior to October 1974, published in Massachusetts Hydrologic-Data Report No. 17.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.96 ft below land-surface datum, Dec. 29, 1969; lowest measured, 12.43 ft below land-surface datum, Oct. 22, 1988.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|-----------------|-------------|--------|--------------|--------|-------------|--------------|-------------|--------|-------------|--------|-------------|
| OCT 23 | 9.60 | DEC 23 | 7.27 | FEB 26 | 8.82 | APR 29 | 7.41 | JUN 24 | 9.16 | AUG 27 | 9.76 |
| NOV 20 | 9.05 | JAN 20 | 8.40 | MAR 26 | 8.75 | MAY 27 | 8.40 | JUL 19 | 9.60 | SEP 23 | 9.86 |
| WATER YEAR 2004 | HIGHEST | 7.27 | DEC 23, 2003 | LOWEST | 9.86 | SEP 23, 2004 | | | | | |

DUKES COUNTY

412346070353403. Edgartown well ENW 52.

LOCATION.--Lat 41° 23'46", long 70° 35'34", Dukes County, Hydrologic Unit 01090002, 0.5 mi west of Airport Road and 0.6 mi north of West Tisbury Road in Edgartown.

Owner: Martha's Vineyard State Forest.

AQUIFER.--Glacial sand, gravel and cobbles of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 2 in., depth 64 ft, screened 61 to 64 ft.

INSTRUMENTATION.--Monthly measurement with electric or chalked tape.

DATUM.--Elevation of land-surface datum is 34 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 0.02 ft below land-surface datum.

PERIOD OF RECORD.--December 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 12.93 ft below land-surface datum, May 24 and June 27, 1987; lowest measured, 20.95 ft below land-surface datum, Mar. 28, 2002.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|-----------------|-------------|--------|--------------|--------|-------------|--------------|-------------|--------|-------------|--------|-------------|
| NOV 26 | 17.90 | JAN 26 | 17.73 | MAR 26 | 17.75 | MAY 26 | 16.90 | JUL 28 | 17.37 | SEP 27 | 18.43 |
| DEC 28 | 18.07 | FEB 26 | 17.74 | APR 27 | 17.34 | JUN 28 | 16.99 | AUG 27 | 17.87 | | |
| WATER YEAR 2004 | HIGHEST | 16.90 | MAY 26, 2004 | LOWEST | 18.43 | SEP 27, 2004 | | | | | |

GROUND-WATER LEVELS IN MASSACHUSETTS

ESSEX COUNTY

423641071102501. Andover well AJW 462.

LOCATION.--Lat 42° 36' 41", long 71° 10' 25", Essex County, Hydrologic Unit 01070002, about 1,200 ft south of Shawsheen River, and 30 ft west of Interstate Highway 93 in Andover.

Owner: U.S. Geological Survey.

AQUIFER.--Glacial sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Augered observation water-table well, diameter 1.25 in., depth 32.5 ft, screened 30.5 to 32.5 ft.

INSTRUMENTATION.--Monthly measurement with electric or chalked tape.

DATUM.--Elevation of land-surface datum is 110 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.0 ft above land-surface datum.

REMARKS.--Water level affected by nearby construction starting about January 1993 to about January 1995.

PERIOD OF RECORD.--November 1968 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 11.72 ft below land-surface datum, June 20, 1984; lowest measured, 22.56 ft below land-surface datum, July 28, 1994.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|------------|-------------|---------|-------------|--------------|-------------|--------|--------------|--------|-------------|--------|-------------|
| OCT 30 | 15.30 | DEC 22 | 14.87 | FEB 25 | 15.45 | APR 29 | 14.09 | JUN 30 | 14.77 | AUG 23 | 14.49 |
| NOV 24 | 15.36 | JAN 20 | 15.02 | MAR 30 | 15.37 | MAY 27 | 14.22 | JUL 29 | 14.89 | SEP 24 | 14.49 |
| WATER YEAR | 2004 | HIGHEST | 14.09 | APR 29, 2004 | LOWEST | 15.45 | FEB 25, 2004 | | | | |

424322070592401. Georgetown well GCW 168.

LOCATION.--Lat 42° 43' 22", long 70° 59' 24", Essex County, Hydrologic Unit 01090001, 18 ft south of State Highway 133 and 25 ft east of Winter Street at Murca Park in Georgetown.

Owner: U.S. Geological Survey.

AQUIFER.--Glacial outwash of Pleistocene age.

WELL CHARACTERISTICS.--Augered observation water-table well, diameter 2.0 in., depth 21 ft, screened 19 to 21 ft.

INSTRUMENTATION.--Monthly measurement with electric or chalked tape.

DATUM.--Elevation of land-surface datum is 80 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.0 ft above land-surface datum.

PERIOD OF RECORD.--January 1965 to current year. Prior to October 1974, published in Massachusetts Hydrologic-Data Report No. 17.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.27 ft below land-surface datum, Mar. 27, 2001; lowest measured, 6.65 ft below land-surface datum, Sept. 22, 1965.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|------------|-------------|---------|-------------|--------------|-------------|--------|--------------|--------|-------------|--------|-------------|
| OCT 30 | 4.25 | DEC 22 | 3.63 | FEB 25 | 4.77 | APR 29 | 3.45 | JUN 30 | 4.82 | AUG 23 | 3.84 |
| NOV 24 | 4.65 | JAN 20 | 4.54 | MAR 30 | 4.23 | MAY 27 | 3.33 | JUL 29 | 4.70 | SEP 24 | 4.12 |
| WATER YEAR | 2004 | HIGHEST | 3.33 | MAY 27, 2004 | LOWEST | 4.82 | JUN 30, 2004 | | | | |

GROUND-WATER LEVELS IN MASSACHUSETTS

ESSEX COUNTY--Continued

424841071004101. Haverhill well HLW 23.

LOCATION.--Lat 42°48'41", long 71°00'41", Essex County, Hydrologic Unit 01070002, about 50 ft north of Amesbury Line Road and 0.9 mi south of State Highway 110 in Haverhill.

Owner: Private owner.

AQUIFER.--Glacial sand of Pleistocene age.

WELL CHARACTERISTICS.--Dug observation water-table well, diameter 12 in., depth 15.1 ft, cased with tile to 15.1 ft, open end.

INSTRUMENTATION.--Monthly measurement with electric tape by observer. Continuous graphic recorder October 1960 to September 1982, digital recorder (60-minute punch) October 1984 to current year.

DATUM.--Elevation of land-surface datum is 105 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top edge of hole in base of steel recorder shelter, 1.71 ft above land-surface datum, 1.65 ft prior to June 8, 1995.

REMARKS.--Missing periods of more than one day are not estimated.

PERIOD OF RECORD.--October 1960 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 4.96 ft below land-surface datum, Apr. 7, 8, 1987; lowest, 15.02 ft below land-surface datum, Feb. 2, 1966.

EXTREMES FOR CURRENT YEAR.--Highest water level, 8.39 ft below land-surface datum, Apr. 19; lowest, 13.54 ft below land-surface datum, Oct. 12-14.

**DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES**

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|-------|-------|-------|-------|-------|-------|-------|------|-------|-------|-------|-------|
| 1 | 13.43 | 13.05 | 13.17 | 11.93 | 12.25 | 12.76 | 12.81 | 8.52 | 9.70 | 11.18 | 12.52 | 12.81 |
| 2 | 13.45 | 13.01 | 13.19 | 11.92 | 12.28 | 12.77 | 11.30 | 8.56 | 9.73 | 11.23 | 12.55 | 12.85 |
| 3 | 13.47 | 13.05 | 13.20 | 11.90 | 12.30 | 12.79 | 10.07 | 8.60 | 9.77 | 11.28 | 12.59 | 12.87 |
| 4 | --- | --- | 13.20 | 11.87 | 12.30 | 12.81 | 9.63 | 8.63 | 9.82 | 11.33 | 12.63 | 12.90 |
| 5 | 13.49 | --- | 13.22 | 11.86 | 12.28 | 12.82 | 9.38 | 8.67 | 9.87 | 11.38 | 12.68 | 12.94 |
| 6 | --- | --- | 13.22 | 11.86 | 12.29 | 12.83 | 9.21 | 8.71 | 9.91 | 11.43 | 12.71 | 12.97 |
| 7 | --- | --- | 13.23 | 11.86 | 12.29 | 12.85 | 9.08 | 8.76 | 9.95 | 11.49 | 12.75 | 12.99 |
| 8 | --- | --- | 13.24 | 11.86 | 12.30 | 12.87 | 8.99 | 8.83 | 10.00 | 11.53 | 12.79 | 13.03 |
| 9 | 13.49 | --- | 13.24 | 11.86 | 12.31 | 12.89 | 8.93 | 8.86 | 10.05 | 11.55 | 12.82 | 13.05 |
| 10 | 13.51 | --- | 13.25 | 11.86 | 12.33 | 12.90 | 8.91 | 8.91 | 10.08 | 11.59 | 12.87 | 13.02 |
| 11 | 13.52 | 13.14 | 13.24 | 11.86 | 12.35 | 12.91 | 8.91 | 8.95 | 10.12 | 11.64 | 12.89 | 13.03 |
| 12 | 13.54 | 13.14 | 13.13 | 11.85 | 12.37 | 12.93 | 8.92 | 9.01 | 10.18 | 11.69 | 12.93 | 13.04 |
| 13 | 13.54 | --- | 12.99 | 11.85 | 12.38 | 12.95 | 8.90 | 9.07 | 10.24 | 11.73 | 12.89 | 13.06 |
| 14 | --- | 13.14 | 12.88 | 11.87 | 12.40 | 12.97 | 8.79 | 9.12 | 10.28 | 11.77 | 12.86 | 13.08 |
| 15 | --- | 13.14 | 12.81 | 11.87 | 12.43 | 12.98 | 8.68 | 9.17 | 10.34 | 11.80 | 12.89 | 13.10 |
| 16 | --- | 13.15 | 12.74 | 11.88 | 12.47 | 12.99 | 8.56 | 9.23 | 10.40 | 11.85 | 12.90 | 13.13 |
| 17 | --- | --- | 12.69 | 11.90 | 12.50 | 13.01 | 8.47 | 9.28 | 10.46 | 11.89 | 12.92 | 13.15 |
| 18 | --- | 13.14 | 12.59 | 11.91 | 12.52 | 13.02 | 8.45 | 9.32 | 10.49 | 11.93 | 12.94 | 13.12 |
| 19 | --- | 13.14 | 12.45 | 11.92 | 12.54 | 13.04 | 8.41 | 9.35 | 10.51 | 11.97 | 12.97 | 12.97 |
| 20 | --- | 13.14 | 12.33 | 11.95 | 12.55 | 13.05 | 8.46 | 9.40 | 10.56 | 12.02 | 13.00 | 12.88 |
| 21 | --- | 13.15 | 12.26 | 11.98 | 12.57 | 13.06 | 8.51 | 9.45 | 10.61 | 12.06 | 12.98 | 12.84 |
| 22 | --- | 13.15 | 12.22 | 11.99 | 12.60 | 13.07 | 8.53 | 9.50 | 10.66 | 12.11 | 12.77 | 12.82 |
| 23 | --- | --- | 12.19 | 12.02 | 12.62 | 13.07 | 8.56 | 9.54 | 10.72 | 12.15 | 12.66 | 12.81 |
| 24 | --- | 13.14 | 12.17 | 12.04 | 12.63 | 13.07 | 8.55 | 9.57 | 10.78 | 12.20 | 12.63 | 12.81 |
| 25 | --- | 13.14 | 12.15 | 12.08 | 12.66 | 13.06 | 8.62 | 9.58 | 10.84 | 12.23 | 12.61 | 12.82 |
| 26 | --- | 13.16 | 12.11 | 12.10 | 12.68 | 13.05 | 8.60 | 9.59 | 10.89 | 12.27 | 12.62 | 12.85 |
| 27 | 13.48 | 13.16 | 12.07 | 12.11 | 12.70 | 13.03 | 8.54 | 9.60 | 10.94 | 12.32 | 12.63 | 12.87 |
| 28 | --- | 13.17 | 12.04 | 12.13 | 12.72 | 13.01 | 8.55 | 9.61 | 11.00 | 12.36 | 12.67 | 12.90 |
| 29 | 13.46 | 13.17 | 12.00 | 12.16 | 12.73 | 12.98 | 8.54 | 9.64 | 11.06 | 12.40 | 12.70 | 12.90 |
| 30 | --- | 13.17 | 11.97 | 12.19 | --- | 12.94 | 8.51 | 9.66 | 11.12 | 12.44 | 12.74 | 12.90 |
| 31 | --- | --- | 11.95 | 12.22 | --- | 12.90 | --- | 9.67 | --- | 12.48 | 12.77 | --- |
| MEAN | --- | --- | 12.68 | 11.96 | 12.46 | 12.95 | 9.01 | 9.17 | 10.37 | 11.85 | 12.77 | 12.95 |
| LOW | --- | --- | 13.25 | 12.22 | 12.73 | 13.07 | 12.81 | 9.67 | 11.12 | 12.48 | 13.00 | 13.15 |
| HIGH | --- | --- | 11.95 | 11.85 | 12.25 | 12.76 | 8.41 | 8.52 | 9.70 | 11.18 | 12.52 | 12.81 |

GROUND-WATER LEVELS IN MASSACHUSETTS

ESSEX COUNTY--Continued

424520070562401. Newbury well NIW 27.

LOCATION.--Lat 42° 45' 20", long 70° 56' 24", Essex County, Hydrologic Unit 01090001, about 300 ft east of Interstate Highway 95 and 100 ft north of Central Street in Newbury.

Owner: Private owner.

AQUIFER.--Glacial sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Dug observation water-table well, diameter 31 in., depth 19.8 ft, cased with tile to 19.8 ft, open end.

INSTRUMENTATION.--Monthly measurement with electric tape by observer. Continuous graphic recorder January 1967 to September 1982, digital recorder (60-minute interval) October 1984 to current year.

DATUM.--Elevation of land-surface datum is 55 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top edge of hole in base of steel recorder shelter, 2.15 ft above land-surface datum. Prior to October 1978, 2.0 ft above land-surface datum; October 1978 to Sept. 18, 1990, 1.95 ft above land-surface datum.

REMARKS.--Missing periods of more than one day are not estimated.

PERIOD OF RECORD.--February 1965 to current year. Prior to October 1974, published in Massachusetts Hydrologic-Data Report No. 17.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.94 ft below land-surface datum, Oct. 21, 1996; lowest, 12.68 ft below land-surface datum, Nov. 24, 1965.

EXTREMES FOR CURRENT YEAR.--Highest water level, 1.57 ft below land-surface datum, Apr. 5; lowest, 9.85 ft below land-surface datum, Oct. 12.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1 | 9.63 | 8.14 | 7.91 | 4.34 | 6.45 | 7.69 | 5.51 | 3.45 | 4.31 | 6.62 | 7.97 | 7.34 |
| 2 | 9.64 | 8.05 | 7.89 | 4.41 | 6.57 | 7.70 | 1.95 | 3.51 | 4.35 | 6.69 | 8.02 | 7.41 |
| 3 | 9.65 | 8.02 | 7.90 | 4.44 | 6.66 | 7.69 | 1.66 | 3.54 | 4.42 | 6.76 | 8.07 | 7.47 |
| 4 | 9.65 | 8.01 | 7.91 | 4.45 | 6.68 | 7.68 | 1.65 | 3.45 | 4.50 | 6.86 | 8.12 | 7.52 |
| 5 | 9.66 | 8.01 | 7.91 | 4.48 | 6.71 | 7.66 | 1.62 | 3.54 | 4.57 | 6.95 | 8.16 | 7.60 |
| 6 | 9.69 | 7.98 | 7.91 | 4.46 | 6.75 | 7.60 | 1.70 | 3.59 | 4.64 | 7.02 | 8.20 | 7.67 |
| 7 | 9.72 | 7.95 | 7.89 | 4.50 | 6.74 | 7.58 | 1.75 | 3.64 | 4.68 | 7.11 | 8.25 | 7.72 |
| 8 | 9.75 | 7.94 | 7.94 | 4.57 | 6.75 | 7.57 | 1.81 | 3.73 | 4.72 | 7.20 | 8.31 | 7.77 |
| 9 | 9.77 | 7.95 | 7.98 | 4.64 | 6.79 | 7.57 | 1.89 | 3.75 | 4.75 | 7.20 | 8.36 | 7.73 |
| 10 | 9.80 | 7.95 | 7.97 | 4.67 | 6.81 | 7.59 | 2.11 | 3.81 | 4.78 | 7.20 | 8.42 | 7.56 |
| 11 | 9.83 | 7.94 | 7.82 | 4.74 | 6.82 | 7.57 | 2.32 | 3.85 | 4.86 | 7.27 | 8.47 | 7.50 |
| 12 | 9.84 | 7.92 | 7.04 | 4.83 | 6.88 | 7.53 | 2.35 | 3.92 | 4.97 | 7.34 | 8.52 | 7.46 |
| 13 | 9.81 | 7.87 | 6.28 | 4.89 | 6.91 | 7.55 | 2.09 | 4.01 | 5.07 | 7.39 | 8.45 | 7.44 |
| 14 | 9.81 | 7.86 | 5.98 | 4.94 | 6.95 | 7.60 | 1.65 | 4.07 | 5.15 | 7.39 | 8.32 | 7.47 |
| 15 | 9.71 | 7.90 | 5.74 | 4.98 | 7.02 | 7.60 | 1.79 | 4.13 | 5.23 | 7.34 | 8.32 | 7.50 |
| 16 | 9.49 | 7.94 | 5.42 | 5.01 | 7.11 | 7.62 | 2.11 | 4.19 | 5.34 | 7.35 | 8.27 | 7.51 |
| 17 | 9.32 | 7.97 | 5.23 | 5.12 | 7.19 | 7.62 | 2.07 | 4.26 | 5.43 | 7.40 | 8.21 | 7.53 |
| 18 | 9.20 | 8.00 | 4.54 | 5.24 | 7.22 | 7.62 | 2.10 | 4.31 | 5.48 | 7.47 | 8.16 | 7.38 |
| 19 | 9.12 | 7.99 | 4.26 | 5.29 | 7.23 | 7.62 | 2.15 | 4.34 | 5.53 | 7.52 | 8.13 | 6.53 |
| 20 | 9.10 | 7.95 | 4.26 | 5.40 | 7.30 | 7.62 | 2.27 | 4.43 | 5.62 | 7.56 | 8.12 | 5.89 |
| 21 | 9.08 | 7.97 | 4.32 | 5.50 | 7.34 | 7.48 | 2.40 | 4.48 | 5.72 | 7.61 | 8.09 | 5.71 |
| 22 | 9.07 | 7.99 | 4.39 | 5.56 | 7.40 | 7.28 | 2.45 | 4.54 | 5.82 | 7.67 | 7.58 | 5.71 |
| 23 | 9.08 | 8.01 | 4.46 | 5.56 | 7.46 | 7.13 | 2.27 | 4.57 | 5.92 | 7.73 | 7.02 | 5.78 |
| 24 | 9.10 | 8.01 | 4.49 | 5.58 | 7.50 | 7.02 | 2.45 | 4.64 | 6.03 | 7.76 | 6.87 | 5.86 |
| 25 | 9.14 | 8.00 | 4.27 | 5.69 | 7.53 | 6.95 | 3.00 | 4.48 | 6.12 | 7.74 | 6.88 | 5.93 |
| 26 | 9.16 | 8.00 | 4.13 | 5.83 | 7.58 | 6.86 | 3.12 | 4.35 | 6.20 | 7.75 | 6.94 | 6.00 |
| 27 | 9.14 | 8.00 | 4.14 | 5.94 | 7.61 | 6.71 | 3.03 | 4.31 | 6.24 | 7.78 | 7.00 | 6.10 |
| 28 | 9.10 | 8.00 | 4.19 | 6.01 | 7.64 | 6.52 | 3.18 | 4.26 | 6.34 | 7.81 | 7.06 | 6.17 |
| 29 | 8.97 | 7.93 | 4.20 | 6.10 | 7.67 | 6.38 | 3.31 | 4.22 | 6.43 | 7.84 | 7.15 | 6.17 |
| 30 | 8.64 | 7.92 | 4.22 | 6.20 | --- | 6.29 | 3.38 | 4.24 | 6.52 | 7.88 | 7.23 | 6.11 |
| 31 | 8.34 | --- | 4.28 | 6.31 | --- | 6.24 | --- | 4.29 | --- | 7.92 | 7.29 | --- |
| MEAN | 9.39 | 7.97 | 5.90 | 5.15 | 7.08 | 7.33 | 2.37 | 4.06 | 5.32 | 7.39 | 7.87 | 6.92 |
| LOW | 9.84 | 8.14 | 7.98 | 6.31 | 7.67 | 7.70 | 5.51 | 4.64 | 6.52 | 7.92 | 8.52 | 7.77 |
| HIGH | 8.34 | 7.86 | 4.13 | 4.34 | 6.45 | 6.24 | 1.62 | 3.45 | 4.31 | 6.62 | 6.87 | 5.71 |

GROUND-WATER LEVELS IN MASSACHUSETTS

ESSEX COUNTY--Continued

423845070542501. Topsfield well TQW 1.

LOCATION.--Lat 42° 38'45", long 70° 54'25", Essex County, Hydrologic Unit 01090001, 0.7 mi south of Ipswich Road and 120 ft west of Hamilton Road in Topsfield.

Owner: Private owner.

AQUIFER.--Glacial till of Pleistocene age.

WELL CHARACTERISTICS.--Dug observation water-table well, diameter 30 in., depth 22.5 ft, cased with stone to 22.5 ft, open end.

INSTRUMENTATION.--Monthly measurement with electric or chalked tape.

DATUM.--Elevation of land-surface datum is 130 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top edge of steel rim in concrete cover, 0.6 ft above land-surface datum.

PERIOD OF RECORD.--February 1936 to October 1947, April 1957 to current year. Prior to October 1974, published in Massachusetts Hydrologic-Data Report No. 17.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.22 ft below land-surface datum, Mar. 23, 1983; lowest measured, 17.52 ft below land-surface datum, Jan. 27, 1966.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|-----------------|-------------|--------|--------------|--------|-------------|--------------|-------------|--------|-------------|--------|-------------|
| OCT 30 | 14.39 | DEC 22 | 8.00 | FEB 25 | 12.25 | APR 29 | 7.98 | JUN 30 | 12.45 | AUG 23 | 13.75 |
| NOV 24 | 14.09 | JAN 20 | 10.40 | MAR 30 | 11.17 | MAY 27 | 11.01 | JUL 29 | 13.27 | SEP 24 | 13.51 |
| WATER YEAR 2004 | HIGHEST | 7.98 | APR 29, 2004 | LOWEST | 14.39 | OCT 30, 2003 | | | | | |

423505070491702. Wenham well WPW 76.

LOCATION.--Lat 42° 35'05", long 70° 49'17", Essex County, Hydrologic Unit 01090001, 45 ft west of State Highway 128 and 120 ft of Grapevine Road in Wenham.

Owner: U.S. Geological Survey.

AQUIFER.--Glacial sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Augered observation water-table well, diameter 2.0 in., depth 22.0 ft, screened 20.0 to 22.0 ft.

INSTRUMENTATION.--Monthly measurement with electric or chalked tape.

DATUM.--Elevation of land-surface datum is 60 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 3.0 ft above land-surface datum.

PERIOD OF RECORD.--January 1965 to current year. Prior to October 1974, published in Massachusetts Hydrologic-Data Report No. 17.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.39 ft below land-surface datum, Jan. 26, 1978; lowest measured, 4.65 ft below land-surface datum, Aug. 30, 1995.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|-----------------|-------------|--------|--------------|--------|-------------|--------------|-------------|--------|-------------|--------|-------------|
| OCT 30 | 2.21 | DEC 22 | 1.53 | FEB 25 | 2.73 | APR 29 | 1.67 | JUN 30 | 2.83 | AUG 23 | 2.29 |
| NOV 24 | 2.77 | JAN 20 | 2.40 | MAR 30 | 2.55 | MAY 27 | 1.93 | JUL 29 | 2.36 | SEP 24 | 2.35 |
| WATER YEAR 2004 | HIGHEST | 1.53 | DEC 22, 2003 | LOWEST | 2.83 | JUN 30, 2004 | | | | | |

GROUND-WATER LEVELS IN MASSACHUSETTS

FRANKLIN COUNTY

423809072435601. Colrain well CSW 8.

LOCATION.--Lat 42° 38'09", long 72° 43'56", Franklin County, Hydrologic Unit 01080203, 15 ft east of State Highway 112 and 100 ft north of North River Bridge in Colrain.

Owner: U.S. Geological Survey.

AQUIFER.--Glacial sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Augered observation water-table well, diameter 1.25 in., depth 32.3 ft, screened 30.3 to 32.3 ft.

INSTRUMENTATION.--Monthly measurement with electric or chalked tape.

DATUM.--Elevation of land-surface datum is 460 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 1.97 ft above land-surface datum, 1.66 ft prior to October 1995.

REMARKS.--Water levels affected by North River.

PERIOD OF RECORD.--December 1964 to current year. Prior to October 1974, published in Massachusetts Hydrologic-Data Report No. 17.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 14.68 ft below land-surface datum, Apr. 21, 1983; lowest measured, 23.48 ft below land-surface datum, Jan. 31, 1965.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|-----------------|-------------|---------|-------------|--------------|-------------|--------|-------------|--------------|-------------|--------|-------------|
| OCT 21 | 19.28 | DEC 16 | 16.80 | FEB 18 | 18.36 | APR 27 | 16.47 | JUN 29 | 18.77 | AUG 18 | 20.33 |
| NOV 18 | 17.54 | JAN 26 | 17.32 | MAR 23 | 18.95 | MAY 19 | 17.35 | JUL 27 | 19.95 | SEP 21 | 19.89 |
| WATER YEAR 2004 | | HIGHEST | 16.47 | APR 27, 2004 | | LOWEST | 20.33 | AUG 18, 2004 | | | |

423310072355801. Deerfield well DFW 44.

LOCATION.--Lat 42° 33'10", long 72° 35'58", Franklin County, Hydrologic Unit 01080203, 1.2 mi south of Deerfield River Bridge and 15 ft east of U.S. Highway 5 in Deerfield.

Owner: U.S. Geological Survey.

AQUIFER.--Glacial sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Augered observation water-table well, diameter 2.0 in., depth 27.6 ft, screened 25.6 to 27.6 ft.

INSTRUMENTATION.--Monthly measurement with electric or chalked tape.

DATUM.--Elevation of land-surface datum is 140 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 3.0 ft above land-surface datum.

PERIOD OF RECORD.--December 1964 to current year. Prior to October 1974, published in Massachusetts Hydrologic-Data Report No. 17.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.42 ft below land-surface datum, May 29, 1979; lowest measured, 6.16 ft below land-surface datum, Sept. 25, 1980.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|-----------------|-------------|---------|-------------|--------------|-------------|--------|-------------|--------------|-------------|--------|-------------|
| OCT 21 | 2.60 | DEC 16 | 2.43 | FEB 17 | 2.50 | APR 29 | 1.93 | JUN 28 | 3.01 | AUG 18 | 2.99 |
| NOV 18 | 2.55 | JAN 26 | 3.50 | MAR 24 | 2.38 | MAY 20 | 2.88 | JUL 27 | 3.42 | SEP 21 | 2.38 |
| WATER YEAR 2004 | | HIGHEST | 1.93 | APR 29, 2004 | | LOWEST | 3.50 | JAN 26, 2004 | | | |

423339072524101. Hawley well HMW 8.

LOCATION.--Lat 42° 33'39", long 72° 52'41", Franklin County, Hydrologic Unit 01080206, in state forest parking area on west side of Plainfield Road opposite East Cemetery.

Owner: State Forest.

AQUIFER.--Glacial till and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Augered observation water-table well, diameter 2.0 in., depth 17 ft, screened 7 to 17 ft.

INSTRUMENTATION.--Monthly measurement with electric or chalked tape.

DATUM.--Elevation of land-surface datum is 1700 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 4.18 ft above land-surface datum.

PERIOD OF RECORD.--October 1986 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.37 ft below land-surface datum, Mar. 24, 2003; lowest measured, 6.92 ft below land-surface datum, Sept. 27, 1995.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|-----------------|-------------|---------|-------------|--------------|-------------|--------|-------------|--------------|-------------|--------|-------------|
| OCT 28 | 3.12 | DEC 16 | 2.79 | FEB 18 | 3.50 | APR 27 | 2.49 | JUN 30 | 3.92 | AUG 19 | 4.11 |
| NOV 18 | 3.14 | JAN 26 | 3.44 | MAR 24 | 3.26 | MAY 19 | 3.12 | JUL 27 | 4.69 | SEP 21 | 3.27 |
| WATER YEAR 2004 | | HIGHEST | 2.49 | APR 27, 2004 | | LOWEST | 4.69 | JUL 27, 2004 | | | |

GROUND-WATER LEVELS IN MASSACHUSETTS

FRANKLIN COUNTY--Continued

423441072170701. Orange well ORW 63.

LOCATION.--Lat 42° 34'41", long 72° 17'07", Franklin County, Hydrologic Unit 01080202, at Orange Airport, 100 ft along and 50 ft northwest of main entrance road to airport, off East River Street in Orange.

Owner: U.S. Geological Survey.

AQUIFER.--Glacial sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Augered observation water-table well, diameter 2.0 in., depth 20.6 ft, screened 18.6 to 20.6 ft.

INSTRUMENTATION.--Monthly measurement with electric or chalked tape.

DATUM.--Elevation of land-surface datum is 530 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 3.75 ft above land-surface datum, 3.45 ft prior to May 1992.

PERIOD OF RECORD.--January 1985 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.81 ft below land-surface datum, Apr. 25, 1996; lowest measured, 8.74 ft below land-surface datum, Nov. 27, 2001.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|------------|-------------|---------|-------------|--------------|-------------|--------|--------------|--------|-------------|--------|-------------|
| OCT 21 | 7.42 | DEC 16 | 6.84 | FEB 17 | 7.40 | APR 26 | 5.98 | JUL 01 | 7.04 | AUG 17 | 7.89 |
| NOV 18 | 6.85 | JAN 26 | 6.86 | MAR 24 | 7.50 | MAY 20 | 6.24 | 26 | 7.42 | SEP 22 | 7.08 |
| WATER YEAR | 2004 | HIGHEST | 5.98 | APR 26, 2004 | LOWEST | 7.89 | AUG 17, 2004 | | | | |

422607072324401. Sunderland well S6W 7.

LOCATION.--Lat 42° 26'07", long 72° 32'44", Franklin County, Hydrologic Unit 01080201, about 100 ft east of State Highway 116 and 30 ft north of Russellville Brook in Sunderland.

Owner: Sunderland Water Department.

AQUIFER.--Glacial outwash of Pleistocene age.

WELL CHARACTERISTICS.--Driven observation water-table well, diameter 2.5 in., depth 54 ft, cased to 54 ft, open end.

INSTRUMENTATION.--Monthly measurement with electric or chalked tape.

DATUM.--Elevation of land-surface datum is 210 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, at land-surface datum.

REMARKS.--Water level affected by pumping and nearby Russellville Brook.

PERIOD OF RECORD.--November 1957 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.25 ft below land-surface datum, Apr. 24, 1984; lowest measured, 23.27 ft below land-surface datum, Apr. 25, 2002.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|------------|-------------|---------|-------------|--------------|-------------|--------|--------------|--------|-------------|--------|-------------|
| OCT 28 | 14.68 | DEC 16 | 11.45 | FEB 18 | 12.14 | MAY 20 | 11.54 | AUG 18 | 16.60 | SEP 21 | 16.49 |
| NOV 18 | 12.08 | JAN 26 | 11.27 | APR 23 | 10.09 | JUL 27 | 14.29 | | | | |
| WATER YEAR | 2004 | HIGHEST | 10.09 | APR 23, 2004 | LOWEST | 16.60 | AUG 18, 2004 | | | | |

422559072332402. Sunderland well S6W 68.

LOCATION.--Lat 42° 25'59", long 72° 33'24", Franklin County, Hydrologic Unit 01080201, about 175 ft east of North Plain Road and 500 ft north of Plum Tree Road in Sunderland.

Owner: Private owner.

AQUIFER.--Glacial lacustrine deposits of late Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 1.25 in., depth 28 ft, screened 25 to 28 ft.

INSTRUMENTATION.--Monthly measurement with electric or chalked tape.

DATUM.--Elevation of land-surface datum is 160 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.0 ft above land-surface datum.

PERIOD OF RECORD.--October 1983 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.09 ft below land-surface datum, Oct. 22, 1989, May 21, 1990; lowest measured, 5.41 ft below land-surface datum, Sept. 23, 2002.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|------------|-------------|---------|-------------|--------------|-------------|--------|--------------|--------|-------------|--------|-------------|
| OCT 28 | 2.36 | DEC 16 | 1.97 | FEB 18 | 3.08 | MAY 20 | 2.40 | JUL 27 | 3.62 | SEP 21 | 3.09 |
| NOV 18 | 2.37 | JAN 26 | 2.86 | APR 23 | 1.61 | JUN 28 | 3.24 | AUG 18 | 4.02 | | |
| WATER YEAR | 2004 | HIGHEST | 1.61 | APR 23, 2004 | LOWEST | 4.02 | AUG 18, 2004 | | | | |

GROUND-WATER LEVELS IN MASSACHUSETTS

HAMPDEN COUNTY

421228072585301. Blandford well BEW 9.

LOCATION.--Lat 42° 12'28", long 72° 58'53", Hampden County, Hydrologic Unit 01080206, 10 ft west of Blair Road and 0.25 mi south of intersection with North Blandford Road.

Owner: Springfield Water Department.

AQUIFER.--Glacial sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Augered observation water-table well, diameter 2.0 in., depth 15 ft, screened 5 to 15 ft.

INSTRUMENTATION.--Monthly measurement with electric or chalked tape.

DATUM.--Elevation of land-surface datum is 1140 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 3.0 ft above land-surface datum.

PERIOD OF RECORD.--October 1986 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.39 ft below land-surface datum, June 27, 2002; lowest measured, 4.60 ft below land-surface datum, Aug. 24, 1995.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|-----------------|--------------|--------------|-------------|--------------|-------------|--------|-------------|--------|-------------|--------|-------------|
| OCT 29 | 0.91 | DEC 17 | 1.63 | FEB 19 | 2.37 | APR 20 | 1.82 | JUN 25 | 2.21 | AUG 31 | 2.20 |
| NOV 19 | 1.68 | JAN 27 | 2.23 | MAR 24 | 2.09 | MAY 27 | 1.99 | JUL 27 | 2.31 | SEP 21 | 1.70 |
| WATER YEAR 2004 | HIGHEST 0.91 | OCT 29, 2003 | LOWEST 2.37 | FEB 19, 2004 | | | | | | | |

421012072324501. Chicopee well CMW 95.

LOCATION.--Lat 42° 10'12", long 72° 32'45", Hampden County, Hydrologic Unit 01080204, in Chicopee Memorial State Park, 100 ft east of check-in house on north side of road in Chicopee.

Owner: Commonwealth of Massachusetts.

AQUIFER.--Glacial sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Augered observation water-table well, diameter 2.0-in. PVC, depth 34.0 ft, screened 30.0 to 34.0 ft.

INSTRUMENTATION.--Monthly measurement with electric or chalked tape.

DATUM.--Elevation of land-surface datum is 200 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 3.48 ft above land-surface datum, 3.0 ft prior to October 1995.

PERIOD OF RECORD.--August 1984 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 19.40 ft below land-surface datum, Aug. 21, 1984; lowest measured, 24.40 ft below land-surface datum, Nov. 25, 2002.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|-----------------|---------------|--------------|--------------|--------------|-------------|--------|-------------|--------|-------------|--------|-------------|
| OCT 28 | 22.19 | JAN 26 | 20.96 | MAR 23 | 21.76 | MAY 26 | 20.29 | JUL 27 | 21.71 | SEP 22 | 23.03 |
| NOV 18 | 21.71 | FEB 18 | 21.32 | APR 19 | 21.23 | JUN 24 | 21.20 | AUG 30 | 22.12 | | |
| WATER YEAR 2004 | HIGHEST 20.29 | MAY 26, 2004 | LOWEST 23.03 | SEP 22, 2004 | | | | | | | |

420357072511601. Granville well GLW 5.

LOCATION.--Lat 42° 03'57", long 72° 51'16", Hampden County, Hydrologic Unit 01080206, near Granville Public School, 275 ft south of State Highway 57 and 0.2 mi west of Sodom Street in Granville.

Owner: U.S. Geological Survey.

AQUIFER.--Glacial sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Augered observation water-table well, diameter 2.0 in., depth 67.7 ft, screened 65.7 to 67.7 ft.

INSTRUMENTATION.--Monthly measurement with electric or chalked tape.

DATUM.--Elevation of land-surface datum is 675 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.0 ft above land-surface datum.

PERIOD OF RECORD.--January 1965 to current year. Prior to October 1974, published in Massachusetts Hydrologic-Data Report No. 17.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 28.06 ft below land-surface datum, June 21, 1983; lowest, 37.20 ft below land-surface datum, Jan. 24, 1966.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|-----------------|---------------|--------------|--------------|--------------|-------------|--------|-------------|--------|-------------|--------|-------------|
| OCT 29 | 31.46 | DEC 17 | 30.85 | FEB 18 | 31.00 | APR 19 | 31.76 | JUN 25 | 32.06 | AUG 31 | 33.33 |
| NOV 19 | 31.08 | JAN 27 | 30.47 | MAR 23 | 31.73 | MAY 27 | 31.61 | JUL 27 | 32.73 | SEP 21 | 33.59 |
| WATER YEAR 2004 | HIGHEST 30.47 | JAN 27, 2004 | LOWEST 33.59 | SEP 21, 2004 | | | | | | | |

GROUND-WATER LEVELS IN MASSACHUSETTS

HAMPDEN COUNTY--Continued

420259072581701. Granville well GLW 6.

LOCATION.--Lat 42° 02' 59", long 72° 58' 17", Hampden County, Hydrologic Unit 01080207, at Granville State Forest, 20 ft west of West Hartland Road and 0.9 mi north of state boundary in Granville.

Owner: U.S. Geological Survey.

AQUIFER.--Glacial sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Augered observation water-table well, diameter 2.0 in., depth 20.8 ft, screened 18.8 to 20.8 ft.

INSTRUMENTATION.--Monthly measurement with electric or chalked tape.

DATUM.--Elevation of land-surface datum is 1,160 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.78 ft above land-surface datum, 2.5 ft prior to October 1995.

REMARKS.--Water levels affected by Halfway Brook.

PERIOD OF RECORD.--January 1965 to current year. Prior to October 1974, published in Massachusetts Hydrologic-Data Report No. 17.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.49 ft below land-surface datum, Apr. 26, 1972; lowest measured, 8.50 ft below land-surface datum, Aug. 23, 1993.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|------------|-------------|---------|-------------|--------------|-------------|--------|-------------|--------------|-------------|--------|-------------|
| OCT 29 | 2.82 | DEC 17 | 3.30 | FEB 18 | 6.00 | APR 20 | 3.00 | JUN 25 | 6.30 | AUG 31 | 6.11 |
| NOV 19 | 4.19 | JAN 27 | 5.66 | MAR 23 | 5.00 | MAY 27 | 4.24 | JUL 27 | 6.81 | SEP 21 | 3.54 |
| WATER YEAR | 2004 | HIGHEST | 2.82 | OCT 29, 2003 | | LOWEST | 6.81 | JUL 27, 2004 | | | |

421240072490201. Montgomery well M7W 19.

LOCATION.--Lat 42° 12' 40", long 72° 49' 02", Hampden County, Hydrologic Unit 01080206, at corner of Russell Road and road to cemetery, about 500 ft south of intersection of Main Road and Russell Road.

Owner: Westfield Water Department.

AQUIFER.--Glacial sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Augered observation water-table well, diameter 2.0 in., depth 18 ft, screened 8 to 18 ft.

INSTRUMENTATION.--Monthly measurement with electric or chalked tape.

DATUM.--Elevation of land-surface datum is 1060 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 1.0 ft above land-surface datum.

PERIOD OF RECORD.--October 1986 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, +0.33 ft above land-surface datum, Feb. 25, 1998; lowest measured, 4.31 ft below land-surface datum, Sept. 21, 1993

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|------------|-------------|---------|-------------|--------------|-------------|--------|-------------|--------------|-------------|--------|-------------|
| OCT 29 | 0.31 | DEC 17 | 0.51 | FEB 19 | 1.46 | APR 20 | 0.38 | JUN 25 | 1.74 | AUG 31 | 2.16 |
| NOV 19 | .87 | JAN 27 | 1.11 | MAR 24 | 1.47 | MAY 27 | 1.05 | JUL 27 | 2.31 | SEP 21 | 1.25 |
| WATER YEAR | 2004 | HIGHEST | 0.31 | OCT 29, 2003 | | LOWEST | 2.31 | JUL 27, 2004 | | | |

420430072491201. Southwick well SVW 95.

LOCATION.--Lat 42° 04' 30", long 72° 49' 12", Hampden County, Hydrologic Unit 01080206, in garden 100 ft north of Route 57 and about 600 ft west of intersection with Loomis Street.

Owner: Private owner.

AQUIFER.--Glacial sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Augered observation water-table well, diameter 2.0 in., depth 37 ft, screened 27 to 37 ft.

INSTRUMENTATION.--Monthly measurement with electric or chalked tape.

DATUM.--Elevation of land-surface datum is 270 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.5 ft above land-surface datum, 3.0 ft prior to October 1995.

PERIOD OF RECORD.--October 1986 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.66 ft below land-surface datum, July 24, 1989; lowest measured, 6.52 ft below land-surface datum, Sept. 24, 2002.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|------------|-------------|---------|-------------|--------------|-------------|--------|-------------|--------------|-------------|--------|-------------|
| OCT 29 | 2.18 | DEC 17 | 2.17 | FEB 18 | 2.86 | APR 19 | 2.33 | JUN 25 | 3.77 | AUG 31 | 4.77 |
| NOV 18 | 2.58 | JAN 27 | 2.73 | MAR 23 | 3.08 | MAY 27 | 2.89 | JUL 27 | 4.61 | SEP 21 | 4.03 |
| WATER YEAR | 2004 | HIGHEST | 2.17 | DEC 17, 2003 | | LOWEST | 4.77 | AUG 31, 2004 | | | |

GROUND-WATER LEVELS IN MASSACHUSETTS

HAMPDEN COUNTY--Continued

420646072420101. Westfield well WVW 62.

LOCATION.--Lat 42° 06' 46", long 72° 42' 01", Hampden County, Hydrologic Unit 01080206, at Western Massachusetts Hospital about 200 ft east of East Mountain Road and 0.4 mi north of U.S. Highway 20 in Westfield.

Owner: Commonwealth of Massachusetts.

AQUIFER.--Glacial outwash of Pleistocene age.

WELL CHARACTERISTICS.--Driven observation water-table well, diameter 2.5 in., depth 22 ft, casing information not available.

INSTRUMENTATION.--Monthly measurement with electric or chalked tape.

DATUM.--Elevation of land-surface datum is 210 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 3.5 ft above land-surface datum.

REMARKS.--Water level affected by pumping.

PERIOD OF RECORD.--August 1957 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.70 ft below land-surface datum, Oct. 29, 1975; lowest measured, well dry, Sept. 22, 1983, Nov. 21, 1983.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|-----------------|-------------|---------|-------------|--------------|-------------|--------|-------------|--------------|-------------|--------|-------------|
| OCT 29 | 5.58 | DEC 17 | 6.25 | FEB 18 | 7.29 | APR 19 | 5.53 | JUN 25 | 7.43 | AUG 31 | 8.74 |
| NOV 19 | 6.47 | JAN 27 | 6.55 | MAR 25 | 7.72 | MAY 27 | 6.37 | JUL 27 | 8.49 | SEP 21 | 7.85 |
| WATER YEAR 2004 | | HIGHEST | 5.53 | APR 19, 2004 | | LOWEST | 8.74 | AUG 31, 2004 | | | |

420924072422602. Westfield well WVW 152.

LOCATION.--Lat 42° 09' 24", long 72° 42' 26", Hampden County, Hydrologic Unit 01080206, about 100 ft south of Owen District Road, 0.4 mi west of intersection of Owen District Road and Mountain Road at East Mountain Country Club, 0.4 mi east of Barnes Municipal Airport.

Owner: City of Westfield.

AQUIFER.--Glacial sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Driven observation water-table well, diameter 2.0 in., depth 16 ft, screened 6 to 16 ft.

INSTRUMENTATION.--Monthly measurement with electric or chalked tape.

DATUM.--Elevation of land-surface datum is 215.69 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.0 ft above land-surface datum.

PERIOD OF RECORD.--October 1986 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.43 ft below land-surface datum, Feb. 20, 1997; lowest measured, 4.72 ft below land-surface datum, Dec. 21, 1986, Jan. 24, 1987.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|-----------------|-------------|---------|-------------|--------------|-------------|--------|-------------|--------------|-------------|--------|-------------|
| OCT 29 | 1.99 | DEC 17 | 2.38 | FEB 18 | 2.65 | APR 19 | 2.24 | JUN 25 | 3.11 | AUG 31 | 3.19 |
| NOV 19 | 2.59 | JAN 27 | 2.61 | MAR 25 | 2.86 | MAY 27 | 2.34 | JUL 27 | 3.21 | SEP 21 | 2.53 |
| WATER YEAR 2004 | | HIGHEST | 1.99 | OCT 29, 2003 | | LOWEST | 3.21 | JUL 27, 2004 | | | |

420905072254001. Wilbraham well XJW 55.

LOCATION.--Lat 42° 09' 05", long 72° 25' 40", Hampden County, Hydrologic Unit 01080204, 45 ft south of U.S. Highway 20 and 0.1 mi west of North Main Street in Wilbraham.

Owner: U.S. Geological Survey.

AQUIFER.--Glacial sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Augered observation water-table well, diameter 2.0 in., depth 62.5 ft, screened 60.5 to 62.5 ft.

INSTRUMENTATION.--Monthly measurement with electric or chalked tape.

DATUM.--Elevation of land-surface datum is 255 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 1.07 ft above land-surface datum.

PERIOD OF RECORD.--January 1965 to current year. Prior to October 1974, published in Massachusetts Hydrologic-Data Report No. 17.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 30.15 ft below land-surface datum, Jan. 2, 1997; lowest measured, 45.44 ft below land-surface datum, Jan. 24, 1966.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|-----------------|-------------|---------|-------------|--------------|-------------|--------|-------------|--------------|-------------|--------|-------------|
| OCT 28 | 41.26 | FEB 18 | 39.19 | APR 19 | 37.57 | JUN 24 | 37.62 | AUG 30 | 41.64 | SEP 22 | 38.59 |
| NOV 18 | 40.29 | MAR 23 | 40.80 | MAY 26 | 36.10 | JUL 27 | 40.01 | | | | |
| WATER YEAR 2004 | | HIGHEST | 36.10 | MAY 26, 2004 | | LOWEST | 41.64 | AUG 30, 2004 | | | |

GROUND-WATER LEVELS IN MASSACHUSETTS

HAMPSHIRE COUNTY

422733072532601. Cummington well CYW 13.

LOCATION.--Lat 42° 27'33", long 72° 53'26", Hampshire County, Hydrologic Unit 01080206, at end of dirt road between lumber yard and elementary school in Cummington center.

Owner: Town of Cummington.

AQUIFER.--Glacial sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Augered observation water-table well, diameter 2.0 in., depth 39 ft, screened 29 to 39 ft.

INSTRUMENTATION.--Monthly measurement with electric or chalked tape.

DATUM.--Elevation of land-surface datum is 988 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 3.59 ft above land-surface datum, 3.0 ft prior to October 1995.

PERIOD OF RECORD.--October 1986 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.10 ft below land-surface datum, Apr. 21, 1993; lowest measured, 6.52 ft below land-surface datum, Sept. 23, 1993.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|-----------------|-------------|--------|--------------|--------|-------------|--------------|-------------|--------|-------------|--------|-------------|
| OCT 28 | 4.01 | DEC 16 | 3.71 | FEB 18 | 5.25 | APR 23 | 3.81 | JUN 30 | 5.63 | AUG 19 | 5.31 |
| NOV 18 | 4.37 | JAN 26 | 4.72 | MAR 24 | 4.89 | MAY 19 | 4.72 | JUL 27 | 5.87 | SEP 21 | 4.22 |
| WATER YEAR 2004 | HIGHEST | 3.71 | DEC 16, 2003 | LOWEST | 5.87 | JUL 27, 2004 | | | | | |

421355072322001. Granby well GKW 68.

LOCATION.--Lat 42° 13'55", long 72° 32'20", Hampshire County, Hydrologic Unit 01080201, about 15 ft east of Morgan Street, 0.3 mi south of East Street, and 2.0 mi southwest of Granby.

Owner: Holyoke Water Power Co.

AQUIFER.--Glacial outwash of Pleistocene age.

WELL CHARACTERISTICS.--Driven observation water-table well, diameter 1.25 in., depth 18 ft, screened 16 to 18 ft.

INSTRUMENTATION.--Monthly measurement with electric or chalked tape.

DATUM.--Elevation of land-surface datum is 239.17 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, at land-surface datum.

PERIOD OF RECORD.--April 1954 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.25 ft below land-surface datum, Apr. 21, 1983; lowest measured, 11.17 ft below land-surface datum, Nov. 25, 1964.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|-----------------|-------------|--------|--------------|--------|-------------|--------------|-------------|--------|-------------|--------|-------------|
| OCT 28 | 6.77 | DEC 16 | 6.43 | FEB 18 | 7.29 | APR 19 | 6.00 | JUN 24 | 7.49 | AUG 30 | 9.54 |
| NOV 18 | 6.29 | JAN 26 | 6.48 | MAR 25 | 7.27 | MAY 26 | 6.03 | JUL 27 | 8.75 | SEP 22 | 8.78 |
| WATER YEAR 2004 | HIGHEST | 6.00 | APR 19, 2004 | LOWEST | 9.54 | AUG 30, 2004 | | | | | |

GROUND-WATER LEVELS IN MASSACHUSETTS

HAMPSHIRE COUNTY--Continued

422103072241102. Pelham well PDW 23.

LOCATION.--Lat 42° 21' 03", long 72° 24' 11", Hampshire County, Hydrologic Unit 01080204, at Knight's Corner, 50 ft east of U.S. Highway 202 and 75 ft south of small pond in Pelham.

Owner: Massachusetts Department of Public Works.

AQUIFER.--Bedrock.

WELL CHARACTERISTICS.--Air-percussion observation water-table well, diameter 6.0 in., depth 740 ft, cased to 740 ft, open end.

INSTRUMENTATION.--Monthly measurement with electric tape by USGS personnel. Continuous graphic recorder October 1981 to December 1983, April 1986 to October 1991; digital recorder (60-minute punch) October 1991 to current year, satellite telemeter since September 2001.

DATUM.--Elevation of land-surface datum is 939 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of hole in base of aluminum recorder shelter, 1.53 ft above land-surface datum, 1.60 ft prior to November 1995.

REMARKS.--Water levels may be affected by unknown pumping, regulation, or construction; missing periods of more than one day are not estimated.

PERIOD OF RECORD.--October 1981 to October 1991; digital recorder (60-minute interval) October 1991 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 9.44 ft below land-surface datum, Apr. 7, 1982; lowest, 24.04 ft below land-surface datum, May 5, 1998.

EXTREMES FOR CURRENT YEAR.--Highest water level, 13.99 ft below land-surface datum, Apr. 14, 15; lowest, 18.13 ft below land-surface datum, Sept. 3.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 15.62 | 14.63 | 14.16 | 14.13 | 14.80 | 15.21 | 14.48 | 14.86 | 15.23 | 16.39 | 17.22 | 18.07 |
| 2 | 15.58 | 14.58 | 14.17 | 14.13 | 14.85 | 15.20 | 14.42 | 14.84 | 15.24 | 16.39 | 17.25 | 18.11 |
| 3 | 15.52 | 14.51 | 14.24 | 14.08 | 14.93 | 15.17 | 14.44 | 14.81 | 15.34 | 16.40 | 17.29 | 18.12 |
| 4 | 15.43 | 14.47 | 14.29 | 14.05 | 14.92 | 15.16 | 14.40 | 14.77 | 15.42 | 16.42 | 17.38 | 18.11 |
| 5 | 15.33 | 14.43 | 14.33 | 14.02 | 14.96 | 15.13 | 14.34 | 14.84 | 15.45 | 16.43 | 17.42 | 18.10 |
| 6 | 15.30 | 14.37 | 14.29 | 14.02 | 14.97 | 15.03 | 14.27 | 14.90 | 15.45 | 16.45 | 17.45 | 18.07 |
| 7 | 15.32 | 14.34 | 14.20 | 14.09 | 14.84 | 14.96 | 14.29 | 14.92 | 15.57 | 16.48 | 17.44 | 18.05 |
| 8 | 15.33 | 14.33 | 14.21 | 14.16 | 14.83 | 14.96 | 14.28 | 14.94 | 15.62 | 16.52 | 17.43 | 18.02 |
| 9 | 15.33 | 14.34 | 14.28 | 14.20 | 14.94 | 14.97 | 14.24 | 14.93 | 15.65 | 16.60 | 17.43 | 17.93 |
| 10 | 15.35 | 14.33 | 14.32 | 14.21 | 14.95 | 14.98 | 14.20 | 14.92 | 15.63 | 16.66 | 17.42 | 17.84 |
| 11 | 15.34 | 14.31 | 14.29 | 14.20 | 14.96 | 14.95 | 14.17 | 14.92 | 15.63 | 16.68 | 17.41 | 17.83 |
| 12 | 15.30 | 14.28 | 14.27 | 14.17 | 15.02 | 14.87 | 14.16 | 14.94 | 15.67 | 16.70 | 17.41 | 17.78 |
| 13 | 15.25 | 14.25 | 14.34 | 14.16 | 15.02 | 14.84 | 14.10 | 15.04 | 15.86 | 16.70 | 17.41 | 17.76 |
| 14 | 15.24 | 14.26 | 14.35 | 14.23 | 15.02 | 14.83 | 14.00 | 15.11 | 15.93 | 16.69 | 17.44 | 17.76 |
| 15 | 15.13 | 14.30 | 14.20 | 14.26 | 15.05 | 14.84 | 14.01 | 15.13 | 15.93 | 16.67 | 17.56 | 17.80 |
| 16 | 15.12 | 14.34 | 14.20 | 14.26 | 15.17 | 14.84 | 14.04 | 15.13 | 15.95 | 16.71 | 17.65 | 17.78 |
| 17 | 15.16 | 14.35 | 14.18 | 14.31 | 15.26 | 14.76 | 14.04 | 15.16 | 15.97 | 16.76 | 17.70 | 17.72 |
| 18 | 15.16 | 14.45 | 14.11 | 14.30 | 15.22 | 14.74 | 14.05 | 15.22 | 15.97 | 16.87 | 17.74 | 17.61 |
| 19 | 15.12 | 14.48 | 14.13 | 14.27 | 15.13 | 14.73 | 14.05 | 15.24 | 15.97 | 16.90 | 17.77 | 17.56 |
| 20 | 15.10 | 14.46 | 14.16 | 14.31 | 15.09 | 14.71 | 14.13 | 15.29 | 15.98 | 16.90 | 17.80 | 17.56 |
| 21 | 15.05 | 14.48 | 14.22 | 14.42 | 15.02 | 14.61 | 14.21 | 15.33 | 16.02 | 16.93 | 17.79 | 17.49 |
| 22 | 15.00 | 14.48 | 14.24 | 14.49 | 15.00 | 14.66 | 14.25 | 15.36 | 16.08 | 16.95 | 17.77 | 17.36 |
| 23 | 14.95 | 14.47 | 14.25 | 14.53 | 15.13 | 14.71 | 14.28 | 15.44 | 16.12 | 16.97 | 17.77 | 17.29 |
| 24 | 14.97 | 14.42 | 14.24 | 14.54 | 15.18 | 14.73 | 14.34 | 15.46 | 16.17 | 17.00 | 17.79 | 17.24 |
| 25 | 15.02 | 14.38 | 14.19 | 14.60 | 15.18 | 14.75 | 14.59 | 15.44 | 16.22 | 17.04 | 17.90 | 17.18 |
| 26 | 14.99 | 14.37 | 14.15 | 14.82 | 15.21 | 14.74 | 14.69 | 15.42 | 16.24 | 17.07 | 17.99 | 17.09 |
| 27 | 14.91 | 14.37 | 14.14 | 14.87 | 15.22 | 14.69 | 14.68 | 15.36 | 16.27 | 17.07 | 18.07 | 17.00 |
| 28 | 14.82 | 14.31 | 14.14 | 14.79 | 15.20 | 14.68 | 14.71 | 15.31 | 16.32 | 17.12 | 18.07 | 16.87 |
| 29 | 14.73 | 14.18 | 14.10 | 14.77 | 15.16 | 14.70 | 14.81 | 15.28 | 16.34 | 17.17 | 18.04 | 16.70 |
| 30 | 14.70 | 14.17 | 14.09 | 14.75 | --- | 14.66 | 14.86 | 15.27 | 16.36 | 17.20 | 18.06 | 16.61 |
| 31 | 14.68 | --- | 14.13 | 14.75 | --- | 14.57 | --- | 15.25 | --- | 17.22 | 18.07 | --- |
| MEAN | 15.16 | 14.38 | 14.21 | 14.35 | 15.04 | 14.85 | 14.32 | 15.12 | 15.85 | 16.78 | 17.64 | 17.61 |
| LOW | 15.62 | 14.63 | 14.35 | 14.87 | 15.26 | 15.21 | 14.86 | 15.46 | 16.36 | 17.22 | 18.07 | 18.12 |
| HIGH | 14.68 | 14.17 | 14.09 | 14.02 | 14.80 | 14.57 | 14.00 | 14.77 | 15.23 | 16.39 | 17.22 | 16.61 |

GROUND-WATER LEVELS IN MASSACHUSETTS

HAMPSHIRE COUNTY--Continued

422103072241103. Pelham well PDW 24.

LOCATION.--Lat 42° 21' 03", long 72° 24' 11", Hampshire County, Hydrologic Unit 01080204, at Knight's Corner, 50 ft east of U.S. Highway 202 and 75 ft south of small pond in Pelham.

Owner: Massachusetts Department of Public Works.

AQUIFER.--Glacial sand and till of the Pleistocene age.

WELL CHARACTERISTICS.--Augered observation water-table well, diameter 2.0 in., PVC, depth 25.0 ft, screened 21.0 to 25.0 ft.

INSTRUMENTATION.--Monthly measurement with electric or chalked tape.

DATUM.--Elevation of land-surface datum is 940 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 3.86 ft above land-surface datum, 3.0 ft prior to October 1995.

PERIOD OF RECORD.--August 1984 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.80 ft below land-surface datum, Mar. 29, 1994; lowest water level measured, 8.35 ft below land-surface datum, Sept. 25, 2002.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|-----------------|--------------|--------------|-------------|--------------|-------------|--------|-------------|--------|-------------|--------|-------------|
| OCT 24 | 4.44 | DEC 19 | 2.47 | FEB 18 | 4.42 | APR 29 | 2.81 | JUN 28 | 5.13 | AUG 18 | 6.26 |
| NOV 20 | 3.20 | JAN 21 | 4.07 | MAR 30 | 3.32 | MAY 20 | 3.72 | JUL 26 | 5.78 | SEP 22 | 4.77 |
| WATER YEAR 2004 | HIGHEST 2.47 | DEC 19, 2003 | LOWEST 6.26 | AUG 18, 2004 | | | | | | | |

421627072201701. Ware well WEW 43.

LOCATION.--Lat 42° 16' 27", long 72° 20' 17", Hampshire County, Hydrologic Unit 01080204, 30 ft north of State Highway 9 and 200 ft east of Swift River in Ware.

Owner: U.S. Geological Survey.

AQUIFER.--Glacial sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Augered observation water-table well, diameter 2.0 in., depth 27.2 ft, screened 25.2 to 27.2 ft.

INSTRUMENTATION.--Monthly measurement with electric or chalked tape.

DATUM.--Elevation of land-surface datum is 380 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 3.0 ft above land-surface datum.

REMARKS.--Water levels affected by Swift River.

PERIOD OF RECORD.--January 1965 to current year. Prior to October 1975, published in Massachusetts Hydrologic-Data Report No. 17.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.08 ft below land-surface datum, Apr. 28, 1997; lowest measured, 11.51 ft below land-surface datum, Jan. 20, 1999.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|-----------------|--------------|--------------|-------------|--------------|-------------|--------|-------------|--------|-------------|--------|-------------|
| OCT 24 | 8.86 | DEC 19 | 8.10 | FEB 18 | 8.72 | MAY 26 | 7.70 | JUL 26 | 8.90 | SEP 22 | 9.82 |
| NOV 20 | 8.51 | JAN 21 | 8.40 | APR 19 | 7.88 | JUN 24 | 8.47 | AUG 30 | 8.94 | | |
| WATER YEAR 2004 | HIGHEST 7.70 | MAY 26, 2004 | LOWEST 9.82 | SEP 22, 2004 | | | | | | | |

421923072451001. Westhampton well WXW 20.

LOCATION.--Lat 42° 20' 28", long 72° 48' 24", Hampshire County, Hydrologic Unit 01080206, 20 ft north of Northwest Road and 0.75 mi west of intersection of Kings Road and Northwest Road, 4 mi northwest of Westhampton.

Owner: Private owner.

AQUIFER.--Glacial sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Augered observation water-table well, diameter 2.0 in., depth 42 ft, screened 32 to 42 ft.

INSTRUMENTATION.--Monthly measurement with electric or chalked tape.

DATUM.--Elevation of land-surface datum is 1175 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 3.0 ft above land-surface datum.

PERIOD OF RECORD.--July 1987 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.17 ft below land-surface datum, May 29, 1996; lowest measured, 18.60 ft below land-surface datum, Feb. 26, 2002.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|-----------------|--------------|--------------|--------------|--------------|-------------|--------|-------------|--------|-------------|--------|-------------|
| OCT 29 | 11.67 | DEC 17 | 7.83 | FEB 19 | 10.52 | APR 20 | 9.42 | JUL 27 | 12.64 | SEP 21 | 14.77 |
| NOV 19 | 9.06 | JAN 27 | 7.93 | MAR 24 | 12.57 | JUN 25 | 10.16 | AUG 31 | 14.40 | | |
| WATER YEAR 2004 | HIGHEST 7.83 | DEC 17, 2003 | LOWEST 14.77 | SEP 21, 2004 | | | | | | | |

GROUND-WATER LEVELS IN MASSACHUSETTS

MIDDLESEX COUNTY

422812071244401. Acton well ACW 158.

LOCATION.--Lat 42° 28' 12", long 71° 24' 44", Middlesex County, Hydrologic Unit 01070005, 30 ft north of State Highway 2 and 150 ft east of Wetherbee Street in Acton.

Owner: U.S. Geological Survey.

AQUIFER.--Glacial sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Augered observation water-table well, diameter 2.0 in., depth 33.8 ft, screened 31.8 to 33.8 ft.

INSTRUMENTATION.--Monthly measurement with electric or chalked tape; digital recorder (60-minute interval) with satellite telemeter, since July 2001.

DATUM.--Elevation of land-surface datum is 153 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of shelf in base of steel shelter, 3.68 ft above land-surface datum. Prior to July 2001, top of casing, 3.60 ft above land-surface datum.

REMARKS.--Missing periods of more than one day are not estimated.

PERIOD OF RECORD.--January 1965 to current year. Prior to October 1974, published in Massachusetts Hydrologic-Data Report No. 17.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 14.98 ft below land-surface datum, Apr. 23, 1987; lowest, 21.86 ft below land-surface datum, Jan. 26, 1966.

EXTREMES FOR CURRENT YEAR.--Highest water level, 16.28 ft below land-surface datum, May 7; lowest, 19.29 ft below land-surface datum, Sept. 18.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 18.36 | 18.67 | 18.41 | 17.56 | 17.98 | 18.58 | 18.70 | 16.32 | 16.89 | 17.86 | 18.67 | 19.09 |
| 2 | 18.38 | 18.63 | 18.43 | 17.54 | 18.02 | 18.60 | 18.64 | 16.32 | 16.91 | 17.89 | 18.69 | 19.10 |
| 3 | 18.39 | 18.60 | 18.45 | 17.51 | 18.04 | 18.62 | 18.52 | 16.31 | 16.94 | 17.92 | 18.71 | 19.11 |
| 4 | 18.40 | 18.58 | 18.45 | 17.50 | 18.07 | 18.63 | 18.35 | 16.31 | 16.97 | 17.96 | 18.72 | 19.12 |
| 5 | 18.42 | 18.55 | 18.46 | 17.48 | 18.10 | 18.64 | 18.17 | 16.30 | 17.00 | 17.98 | 18.74 | 19.14 |
| 6 | 18.44 | 18.52 | 18.45 | 17.47 | 18.11 | 18.65 | 17.98 | 16.30 | 17.02 | 18.02 | 18.76 | 19.15 |
| 7 | 18.46 | 18.50 | 18.45 | 17.46 | 18.13 | 18.67 | 17.80 | 16.30 | 17.05 | 18.06 | 18.78 | 19.16 |
| 8 | 18.48 | 18.49 | 18.49 | 17.45 | 18.17 | 18.67 | 17.65 | 16.34 | 17.08 | 18.09 | 18.80 | 19.17 |
| 9 | 18.49 | 18.47 | 18.51 | 17.45 | 18.18 | 18.69 | 17.53 | 16.34 | 17.10 | 18.12 | 18.82 | 19.18 |
| 10 | 18.52 | 18.45 | 18.52 | 17.45 | 18.20 | 18.70 | 17.43 | 16.36 | 17.14 | 18.15 | 18.84 | 19.19 |
| 11 | 18.53 | 18.43 | 18.49 | 17.45 | 18.23 | 18.70 | 17.36 | 16.38 | 17.17 | 18.18 | 18.86 | 19.21 |
| 12 | 18.54 | 18.41 | 18.51 | 17.46 | 18.24 | 18.70 | 17.30 | 16.41 | 17.21 | 18.21 | 18.88 | 19.21 |
| 13 | 18.56 | 18.40 | 18.50 | 17.47 | 18.26 | 18.72 | 17.23 | 16.44 | 17.25 | 18.24 | 18.89 | 19.23 |
| 14 | 18.58 | 18.39 | 18.45 | 17.50 | 18.28 | 18.73 | 17.17 | 16.46 | 17.27 | 18.26 | 18.91 | 19.24 |
| 15 | 18.58 | 18.39 | 18.39 | 17.50 | 18.31 | 18.74 | 17.12 | 16.48 | 17.31 | 18.29 | 18.93 | 19.25 |
| 16 | 18.61 | 18.39 | 18.38 | 17.53 | 18.33 | 18.74 | 17.05 | 16.51 | 17.35 | 18.32 | 18.95 | 19.26 |
| 17 | 18.63 | 18.39 | 18.33 | 17.57 | 18.35 | 18.75 | 16.97 | 16.55 | 17.38 | 18.35 | 18.96 | 19.27 |
| 18 | 18.64 | 18.40 | 18.28 | 17.58 | 18.36 | 18.76 | 16.90 | 16.56 | 17.41 | 18.37 | 18.97 | 19.28 |
| 19 | 18.64 | 18.38 | 18.22 | 17.61 | 18.38 | 18.78 | 16.81 | 16.59 | 17.44 | 18.40 | 18.98 | 19.27 |
| 20 | 18.66 | 18.38 | 18.15 | 17.64 | 18.40 | 18.77 | 16.75 | 16.62 | 17.49 | 18.43 | 18.99 | 19.25 |
| 21 | 18.65 | 18.39 | 18.07 | 17.67 | 18.41 | 18.77 | 16.69 | 16.64 | 17.52 | 18.46 | 19.00 | 19.23 |
| 22 | 18.67 | 18.41 | 18.00 | 17.68 | 18.44 | 18.79 | 16.62 | 16.67 | 17.55 | 18.49 | 19.02 | 19.21 |
| 23 | 18.69 | 18.42 | 17.94 | 17.71 | 18.46 | 18.80 | 16.58 | 16.69 | 17.59 | 18.51 | 19.02 | 19.20 |
| 24 | 18.71 | 18.40 | 17.88 | 17.74 | 18.47 | 18.80 | 16.53 | 16.72 | 17.63 | 18.54 | 19.03 | 19.19 |
| 25 | 18.72 | 18.40 | 17.82 | 17.78 | 18.49 | 18.80 | 16.50 | 16.75 | 17.66 | 18.56 | 19.03 | 19.18 |
| 26 | 18.73 | 18.41 | 17.77 | 17.81 | 18.51 | 18.80 | 16.45 | 16.77 | 17.69 | 18.58 | 19.04 | 19.17 |
| 27 | 18.74 | 18.42 | 17.73 | 17.83 | 18.53 | 18.77 | 16.41 | 16.79 | 17.73 | 18.59 | 19.05 | 19.17 |
| 28 | 18.76 | 18.40 | 17.69 | 17.84 | 18.55 | 18.78 | 16.39 | 16.81 | 17.76 | 18.61 | 19.05 | 19.17 |
| 29 | 18.75 | 18.39 | 17.64 | 17.88 | 18.57 | 18.76 | 16.37 | 16.84 | 17.79 | 18.62 | 19.06 | 19.16 |
| 30 | 18.76 | 18.42 | 17.60 | 17.90 | --- | 18.74 | 16.34 | 16.85 | 17.83 | 18.64 | 19.07 | 19.15 |
| 31 | 18.71 | --- | 17.58 | 17.94 | --- | 18.73 | --- | 16.87 | --- | 18.66 | 19.08 | --- |
| MEAN | 18.59 | 18.45 | 18.19 | 17.61 | 18.30 | 18.72 | 17.21 | 16.54 | 17.34 | 18.30 | 18.91 | 19.19 |
| LOW | 18.76 | 18.67 | 18.52 | 17.94 | 18.57 | 18.80 | 18.70 | 16.87 | 17.83 | 18.66 | 19.08 | 19.28 |
| HIGH | 18.36 | 18.38 | 17.58 | 17.45 | 17.98 | 18.58 | 16.34 | 16.30 | 16.89 | 17.86 | 18.67 | 19.09 |

423349071134101. Billerica well BCW 363.

LOCATION.--Lat 42° 33' 49", long 71° 13' 41", Middlesex County, Hydrologic Unit 01070002, 20 ft south of Baldwin Road and 50 ft west of Westminster Road in Billerica.

Owner: Private owner.

AQUIFER.--Glacial sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Dug observation water-table well, diameter 30 in., depth 15.5 ft, cased with stone to 15.5 ft, open end.

INSTRUMENTATION.--Monthly measurement with electric or chalked tape.

DATUM.--Elevation of land-surface datum is 166 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of pipe on wooden cover, 2.50 ft above land-surface datum.

PERIOD OF RECORD.--June 1962 to current year. Prior to October 1974, published in Massachusetts Hydrologic-Data Report No. 17.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.73 ft below land-surface datum, Apr. 1, 1993; lowest measured, dry Aug. 24, Sept. 22, Oct. 25, 1983.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|-----------------|-------------|--------|--------------|--------|-------------|--------------|-------------|--------|-------------|--------|-------------|
| OCT 30 | 11.05 | DEC 22 | 8.32 | FEB 24 | 9.83 | APR 28 | 7.23 | JUN 29 | 9.94 | AUG 25 | 10.76 |
| NOV 24 | 10.06 | JAN 20 | 9.02 | MAR 30 | 8.97 | MAY 27 | 8.71 | JUL 27 | 10.81 | SEP 26 | 10.46 |
| WATER YEAR 2004 | HIGHEST | 7.23 | APR 28, 2004 | LOWEST | 11.05 | OCT 30, 2003 | | | | | |

GROUND-WATER LEVELS IN MASSACHUSETTS

MIDDLESEX COUNTY--Continued

422637071202701. Concord well CTW 165.

LOCATION.--Lat 42° 26'37", long 71° 20'27", Middlesex County, Hydrologic Unit 01070005, 30 ft south of State Highway 2 and 0.1 mi west of State Highway 126 in Concord.

Owner: U.S. Geological Survey.

AQUIFER.--Glacial sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Augered observation water-table well, diameter 2.0 in., depth 66.7 ft, screened 64.7 to 66.7 ft.

INSTRUMENTATION.--Monthly measurement with electric or chalked tape.

DATUM.--Elevation of land-surface datum is 199.26 ft (revised) above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 0.5 ft above land-surface datum, 2.0 ft prior to October 1991.

PERIOD OF RECORD.--February 1965 to current year. Prior to October 1974, published in Massachusetts Hydrologic-Data Report No. 17.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 35.50 ft below land-surface datum, July 20, 1984; lowest measured, 47.10 ft below land-surface datum, Feb. 28, 1967.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|-----------------|-------------|---------|-------------|--------------|-------------|--------|-------------|--------------|-------------|--------|-------------|
| OCT 27 | 43.00 | DEC 22 | 43.08 | FEB 24 | 43.31 | APR 28 | 42.53 | JUN 29 | 41.62 | AUG 25 | 41.89 |
| NOV 24 | 42.86 | JAN 20 | 43.12 | MAR 29 | 43.53 | MAY 27 | 41.76 | JUL 27 | 41.77 | SEP 23 | 42.11 |
| WATER YEAR 2004 | | HIGHEST | 41.62 | JUN 29, 2004 | | LOWEST | 43.53 | MAR 29, 2004 | | | |

422650071214402. Concord well CTW 167.

LOCATION.--Lat 42° 26'50", long 71° 21'44", Middlesex County, Hydrologic Unit 01070005, 10 ft south of State Highway 2 and 10 ft west of Sudbury Road in Concord.

Owner: U.S. Geological Survey.

AQUIFER.--Glacial sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Augered observation water-table well, diameter 2.0 in., depth 24.8 ft, screened 21.8 to 24.8 ft.

INSTRUMENTATION.--Monthly measurement with electric or chalked tape.

DATUM.--Elevation of land-surface datum is 135 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 3.3 ft above land-surface datum.

PERIOD OF RECORD.--January 1965 to current year. Prior to October 1974, published in Massachusetts Hydrologic-Data Report No. 17.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.47 ft below land-surface datum, Apr. 21, 1984; lowest measured, 11.46 ft below land-surface datum, Sept. 26, 2002.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|-----------------|-------------|---------|-------------|--------------|-------------|--------|-------------|--------------|-------------|--------|-------------|
| OCT 27 | 9.30 | DEC 22 | 6.69 | FEB 24 | 8.50 | APR 28 | 5.81 | JUN 29 | 8.27 | AUG 25 | 8.00 |
| NOV 24 | 7.77 | JAN 20 | 7.61 | MAR 29 | 7.91 | MAY 27 | 7.16 | JUL 27 | 8.65 | SEP 23 | 7.93 |
| WATER YEAR 2004 | | HIGHEST | 5.81 | APR 28, 2004 | | LOWEST | 9.30 | OCT 27, 2003 | | | |

422627071154002. Lexington well LTW 104.

LOCATION.--Lat 42° 26'27", long 71° 15'40", Middlesex County, Hydrologic Unit 01090001, at The Commonwealth of Massachusetts Department of Public Works maintenance depot, 0.2 mi west of State Highway 128 and 500 ft south of State Highway 2A in Lexington.

Owner: U.S. Geological Survey.

AQUIFER.--Glacial sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Augered observation water-table well, diameter 2.0 in., depth 20.7 ft, screened 18.7 to 20.7 ft.

INSTRUMENTATION.--Monthly measurement with electric or chalked tape.

DATUM.--Elevation of land-surface datum is 180 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 4.5 ft above land-surface datum.

PERIOD OF RECORD.--January 1965 to current year. Prior to October 1974, published in Massachusetts Hydrologic-Data Report No. 17.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.72 ft below land-surface datum, Apr. 1, 1993; lowest measured, 4.35 ft below land-surface datum, Aug. 26, 1975.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|-----------------|-------------|---------|-------------|--------------|-------------|--------|-------------|--------------|-------------|--------|-------------|
| OCT 27 | 2.33 | DEC 22 | 1.65 | FEB 24 | 2.43 | APR 28 | 1.17 | JUN 29 | 2.87 | AUG 25 | 1.75 |
| NOV 24 | 1.86 | JAN 20 | 2.64 | MAR 29 | 1.72 | MAY 27 | 1.80 | JUL 27 | 1.88 | SEP 23 | 1.91 |
| WATER YEAR 2004 | | HIGHEST | 1.17 | APR 28, 2004 | | LOWEST | 2.87 | JUN 29, 2004 | | | |

GROUND-WATER LEVELS IN MASSACHUSETTS

MIDDLESEX COUNTY--Continued

424055071435301. Townsend well TRW 13.

LOCATION.--Lat 42° 40'55", long 71° 43'43", Middlesex County, Hydrologic Unit 01070004, 15 ft south of Dudley Road and 15 ft north of Turnpike Road in Townsend.

Owner: U.S. Geological Survey.

AQUIFER.--Glacial sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Augered observation water-table well, diameter 2.0 in., depth 32.9 ft, screened 30.9 to 32.9 ft.

INSTRUMENTATION.--Monthly measurement with electric or chalked tape.

DATUM.--Elevation of land-surface datum is 313 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 3.0 ft above land-surface datum.

PERIOD OF RECORD.--January 1965 to current year. Prior to October 1974, published in Massachusetts Hydrologic-Data Report No. 17.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 9.55 ft below land-surface datum, Apr. 24, 1987; lowest measured, 17.41 ft below land-surface datum, Jan. 26, 1966.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|-----------------|-------------|--------|--------------|--------|-------------|--------------|-------------|--------|-------------|--------|-------------|
| OCT 23 | 13.14 | DEC 18 | 12.82 | FEB 23 | 13.08 | APR 19 | 11.02 | JUN 23 | 11.72 | AUG 20 | 13.25 |
| NOV 19 | 12.81 | JAN 20 | 12.49 | MAR 30 | 12.96 | MAY 20 | 11.01 | JUL 20 | 12.44 | SEP 23 | 14.65 |
| WATER YEAR 2004 | HIGHEST | 11.01 | MAY 20, 2004 | LOWEST | 14.65 | SEP 23, 2004 | | | | | |

423115071032001. Wakefield well WAW 38.

LOCATION.--Lat 42° 31'15", long 71° 03'20", Middlesex County, Hydrologic Unit 01090001, 75 ft north of State Highway 128 and 0.4 mi southeast of Saugus River in Wakefield.

Owner: U.S. Geological Survey.

AQUIFER.--Glacial sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Augered observation water-table well, diameter 2.0 in., depth 25.5 ft, screened 23.5 to 25.5 ft.

INSTRUMENTATION.--Monthly measurement with electric tape; digital recorder (60-minute interval) with satellite telemeter since July 2001.

DATUM.--Elevation of land-surface datum is 80 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of plywood floor in base of steel shelter, 3.54 ft above land-surface datum; prior to July 2001, top of casing, 3.45 ft above land-surface datum.

REMARKS.--Missing periods of more than one day are not estimated.

PERIOD OF RECORD.--January 1965 to current year. Prior to October 1974, published in Massachusetts Hydrologic-Data Report No. 17.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 2.92 ft below land-surface datum, Oct. 29, 1996; lowest, 9.99 ft below land-surface datum, Sept. 22, 1965.

EXTREMES FOR CURRENT YEAR.--Highest water level, 3.80 ft below land-surface datum, Apr. 2; lowest, 7.65 ft below land-surface datum, Oct. 11, 12.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1 | 7.36 | 6.22 | 6.73 | 5.85 | 7.02 | 7.09 | 4.99 | 5.63 | 6.22 | 6.84 | 6.54 | 6.46 |
| 2 | 7.39 | 6.29 | 6.78 | 5.90 | 7.05 | 7.06 | 4.14 | 5.70 | 6.25 | 6.80 | 6.59 | 6.52 |
| 3 | 7.43 | 6.34 | 6.83 | 5.91 | 7.06 | 7.05 | 4.52 | 5.70 | 6.26 | 6.84 | 6.63 | 6.57 |
| 4 | 7.45 | 6.41 | 6.86 | 5.93 | 6.85 | 7.04 | 4.71 | 5.42 | 6.31 | 6.88 | 6.68 | 6.62 |
| 5 | 7.46 | 6.40 | 6.89 | 5.91 | 6.84 | 7.02 | 4.80 | 5.53 | 6.36 | 6.91 | 6.69 | 6.68 |
| 6 | 7.49 | 6.27 | 6.89 | 5.85 | 6.84 | 6.97 | 4.92 | 5.65 | 6.39 | 6.93 | 6.72 | 6.72 |
| 7 | 7.53 | 6.30 | 6.90 | 5.92 | 6.68 | 6.96 | 5.05 | 5.74 | 6.40 | 6.97 | 6.77 | 6.75 |
| 8 | 7.56 | 6.39 | 6.94 | 6.00 | 6.58 | 6.95 | 5.15 | 5.84 | 6.44 | 7.00 | 6.82 | 6.75 |
| 9 | 7.59 | 6.45 | 6.95 | 6.07 | 6.62 | 6.97 | 5.24 | 5.88 | 6.47 | 6.84 | 6.87 | 6.32 |
| 10 | 7.62 | 6.48 | 6.95 | 6.14 | 6.63 | 6.97 | 5.33 | 5.93 | 6.42 | 6.88 | 6.92 | 6.27 |
| 11 | 7.64 | 6.51 | 6.37 | 6.20 | 6.64 | 6.94 | 5.40 | 5.99 | 6.47 | 6.95 | 6.96 | 6.38 |
| 12 | 7.57 | 6.52 | 5.33 | 6.24 | 6.68 | 6.94 | 5.47 | 6.05 | 6.53 | 7.01 | 7.01 | 6.44 |
| 13 | 7.22 | 6.49 | 5.60 | 6.28 | 6.70 | 6.98 | 5.34 | 6.11 | 6.57 | 7.01 | 6.32 | 6.50 |
| 14 | 7.21 | 6.56 | 5.81 | 6.34 | 6.74 | 7.01 | 4.77 | 6.16 | 6.60 | 6.83 | 6.36 | 6.56 |
| 15 | 6.73 | 6.61 | 5.18 | 6.38 | 6.79 | 7.02 | 4.85 | 6.20 | 6.63 | 6.81 | 6.18 | 6.60 |
| 16 | 6.58 | 6.66 | 5.24 | 6.43 | 6.84 | 7.04 | 4.99 | 6.24 | 6.68 | 6.87 | 6.10 | 6.63 |
| 17 | 6.66 | 6.70 | 5.26 | 6.49 | 6.88 | 7.05 | 5.14 | 6.27 | 6.71 | 6.95 | 6.15 | 6.66 |
| 18 | 6.71 | 6.73 | 4.76 | 6.51 | 6.89 | 7.06 | 5.28 | 6.30 | 6.25 | 7.00 | 6.21 | 6.22 |
| 19 | 6.76 | 6.73 | 5.01 | 6.55 | 6.91 | 7.05 | 5.34 | 6.33 | 6.24 | 7.03 | 6.28 | 5.86 |
| 20 | 6.81 | 6.73 | 5.25 | 6.60 | 6.95 | 7.02 | 5.44 | 6.38 | 6.36 | 7.06 | 6.33 | 6.04 |
| 21 | 6.82 | 6.69 | 5.43 | 6.64 | 6.96 | 6.76 | 5.53 | 6.42 | 6.44 | 7.11 | 6.19 | 6.13 |
| 22 | 6.86 | 6.69 | 5.54 | 6.66 | 6.99 | 6.58 | 5.58 | 6.46 | 6.49 | 7.15 | 5.81 | 6.20 |
| 23 | 6.90 | 6.73 | 5.60 | 6.70 | 7.01 | 6.63 | 5.42 | 6.29 | 6.55 | 7.19 | 5.96 | 6.28 |
| 24 | 6.96 | 6.75 | 5.43 | 6.74 | 7.01 | 6.68 | 5.36 | 6.27 | 6.61 | 6.50 | 6.08 | 6.33 |
| 25 | 7.00 | 6.77 | 5.10 | 6.79 | 7.03 | 6.71 | 5.53 | 6.24 | 6.65 | 6.23 | 6.16 | 6.38 |
| 26 | 7.02 | 6.80 | 5.26 | 6.83 | 7.06 | 6.73 | 5.43 | 6.23 | 6.65 | 6.36 | 6.22 | 6.43 |
| 27 | 6.93 | 6.83 | 5.45 | 6.85 | 7.07 | 6.68 | 5.17 | 6.12 | 6.68 | 6.43 | 6.26 | 6.49 |
| 28 | 6.76 | 6.82 | 5.57 | 6.87 | 7.08 | 6.69 | 5.28 | 6.05 | 6.73 | 6.41 | 6.32 | 6.39 |
| 29 | 6.20 | 6.68 | 5.65 | 6.91 | 7.09 | 6.71 | 5.44 | 6.02 | 6.76 | 6.39 | 6.37 | 5.79 |
| 30 | 5.99 | 6.71 | 5.70 | 6.93 | -- | 6.74 | 5.54 | 6.11 | 6.80 | 6.45 | 6.42 | 5.80 |
| 31 | 6.14 | -- | 5.78 | 6.97 | -- | 6.66 | -- | 6.18 | -- | 6.50 | 6.40 | -- |
| MEAN | 7.04 | 6.58 | 5.90 | 6.40 | 6.88 | 6.90 | 5.17 | 6.05 | 6.50 | 6.81 | 6.43 | 6.39 |
| LOW | 7.64 | 6.83 | 6.95 | 6.97 | 7.09 | 7.09 | 5.58 | 6.46 | 6.80 | 7.19 | 7.01 | 6.75 |
| HIGH | 5.99 | 6.22 | 4.76 | 5.85 | 6.58 | 6.58 | 4.14 | 5.42 | 6.22 | 6.23 | 5.81 | 5.79 |

GROUND-WATER LEVELS IN MASSACHUSETTS

MIDDLESEX COUNTY--Continued

421852071220501. Wayland well WKW 2.

LOCATION.--Lat 42° 18'52", long 71° 22'05", Middlesex County, Hydrologic Unit 01070005, 0.25 mi west of State Highway 27 and 100 ft south of State Highway 30, at Cochituate State Park in Wayland.

Owner: U.S. Geological Survey.

AQUIFER.--Glacial sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Augered observation water-table well, diameter 2.0 in., depth 33.0 ft, screened 31.0 to 33.0 ft.

INSTRUMENTATION.--Monthly measurement with electric or chalked tape.

DATUM.--Elevation of land-surface datum is 157.75 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.76 ft above land-surface datum, 4.0 ft prior to April 1993.

PERIOD OF RECORD.--January 1965 to current year. Prior to October 1974, published in Massachusetts Hydrologic-Data Report No. 17.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 13.96 ft below land-surface datum, Mar. 27, 1972; lowest measured, 18.10 below land-surface datum, Sept. 26, 1995.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|-----------------|-------------|--------|--------------|--------|-------------|--------------|-------------|--------|-------------|--------|-------------|
| OCT 27 | 16.66 | DEC 22 | 15.62 | FEB 24 | 16.25 | APR 28 | 14.69 | JUN 24 | 16.02 | AUG 19 | 16.28 |
| NOV 25 | 16.26 | JAN 21 | 15.98 | MAR 29 | 16.09 | MAY 26 | 15.27 | JUL 21 | 16.61 | SEP 22 | 16.50 |
| WATER YEAR 2004 | HIGHEST | 14.69 | APR 28, 2004 | LOWEST | 16.66 | OCT 27, 2003 | | | | | |

423257071243702. Westford well WWW 160.

LOCATION.--Lat 42° 32'57", long 71° 24'37", Middlesex County, Hydrologic Unit 01070005, 0.1 mi east of State Highway 225 and 150 ft south of Griffin Rd., at Parkerville Soccer Fields in Westford.

Owner: U.S. Geological Survey.

AQUIFER.--Glacial sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Augered observation water-table well, diameter 2.0 in., depth 25.5 ft, screened 20.5 to 25.5 ft.

INSTRUMENTATION.--Monthly measurement with electric or chalked tape.

DATUM.--Elevation of land-surface datum is 210 ft above National Geodetic Vertical Datum of 1929 (from topographic map). Measuring point: Top of casing, 2.04 ft above land-surface datum.

PERIOD OF RECORD.--September 2001 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 9.95 ft below land-surface datum, Mar. 25, 2003; lowest measured, 12.98 below land-surface datum, Aug. 27, 2002.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|-----------------|-------------|--------|--------------|--------|-------------|--------------|-------------|--------|-------------|--------|-------------|
| OCT 31 | 10.69 | JAN 26 | 10.99 | MAR 30 | 10.87 | JUN 29 | 11.44 | AUG 27 | 11.35 | SEP 26 | 11.19 |
| NOV 30 | 11.04 | FEB 26 | 11.05 | APR 29 | 10.37 | JUL 27 | 11.68 | | | | |
| WATER YEAR 2004 | HIGHEST | 10.37 | APR 29, 2004 | LOWEST | 11.68 | JUL 27, 2004 | | | | | |

GROUND-WATER LEVELS IN MASSACHUSETTS

MIDDLESEX COUNTY--Continued

423401071093801. Wilmington well XMW 78.

LOCATION.--Lat 42° 34'01", long 71° 09'38", Middlesex County, Hydrologic Unit 01090001, at building formerly known as Whitefield Public School in Wilmington, about 30 ft west of State Highway 62, and 0.3 mi north of Concord Street.

Owner: Town of Wilmington.

AQUIFER.--Glacial sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Dug observation water-table well, diameter 42 in., depth 12 ft, cased with stone to 12 ft, open end.

INSTRUMENTATION.--Monthly measurement with electric tape by observer. Continuous graphic recorder, March 1958 to September 1982; digital recorder (60-minute interval), October 1984 to current year; satellite telemeter since February 2001.

DATUM.--Elevation of land-surface datum is 95 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top edge of hole in base of steel recorder shelter, 0.27 ft above land-surface datum, 0.42 ft prior to May 1991.

REMARKS.--Missing periods of more than one day are not estimated.

PERIOD OF RECORD.--July 1951 to current year. Prior to October 1974, published in Massachusetts Hydrologic-Data Report No. 17.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 4.12 ft below land-surface datum, Mar. 30, 2001; lowest, 11.27 ft below land-surface datum, Oct. 30, 1957.

EXTREMES FOR CURRENT YEAR.--Highest water level, 6.04 ft below land-surface datum, Apr. 17, 18; lowest, 9.50 ft below land-surface datum, Oct. 10-12.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|-------|-------|------|------|------|-------|------|------|-------|------|------|------|
| 1 | 9.36 | --- | 8.63 | 7.21 | 8.16 | 8.64 | 7.73 | 6.40 | 7.56 | 8.62 | 8.98 | 8.54 |
| 2 | 9.37 | --- | 8.63 | 7.24 | 8.19 | 8.64 | 6.86 | 6.43 | 7.59 | 8.65 | 9.01 | 8.57 |
| 3 | 9.39 | --- | 8.63 | 7.26 | 8.22 | 8.65 | 6.62 | 6.46 | 7.63 | 8.68 | 9.05 | 8.60 |
| 4 | 9.40 | --- | 8.63 | 7.29 | 8.23 | 8.66 | 6.43 | 6.48 | 7.66 | 8.72 | 9.09 | 8.64 |
| 5 | 9.41 | --- | 8.64 | 7.32 | 8.23 | 8.66 | 6.34 | 6.49 | 7.70 | 8.75 | 9.12 | 8.67 |
| 6 | e9.41 | --- | 8.63 | 7.34 | 8.26 | 8.64 | 6.29 | 6.52 | 7.73 | 8.79 | 9.14 | 8.70 |
| 7 | --- | --- | 8.63 | 7.36 | 8.27 | 8.65 | 6.26 | 6.55 | 7.76 | 8.81 | 9.15 | 8.73 |
| 8 | --- | --- | 8.66 | 7.37 | 8.25 | 8.64 | 6.26 | 6.61 | 7.80 | 8.82 | 9.17 | 8.76 |
| 9 | --- | --- | 8.68 | 7.39 | 8.28 | e8.64 | 6.27 | 6.64 | 7.83 | 8.84 | 9.19 | 8.73 |
| 10 | e9.49 | --- | 8.70 | 7.40 | 8.30 | e8.63 | 6.30 | 6.68 | 7.87 | 8.86 | 9.21 | 8.70 |
| 11 | 9.50 | --- | 8.53 | 7.43 | 8.32 | 8.61 | 6.35 | 6.72 | 7.90 | 8.89 | 9.23 | 8.72 |
| 12 | e9.50 | --- | 8.37 | 7.47 | 8.34 | 8.59 | 6.39 | 6.77 | 7.94 | 8.91 | 9.25 | 8.74 |
| 13 | --- | --- | 8.36 | 7.50 | 8.36 | 8.59 | 6.40 | 6.83 | 7.98 | 8.93 | 8.60 | 8.76 |
| 14 | --- | --- | 8.31 | 7.55 | 8.38 | 8.60 | 6.15 | 6.87 | 8.01 | 8.95 | 8.85 | 8.79 |
| 15 | --- | --- | 8.20 | 7.56 | 8.40 | 8.58 | 6.13 | 6.91 | 8.04 | 8.95 | 8.84 | 8.81 |
| 16 | --- | --- | 8.10 | 7.57 | 8.43 | 8.59 | 6.09 | 6.97 | 8.09 | 8.96 | 8.79 | 8.82 |
| 17 | --- | --- | 7.97 | 7.62 | 8.45 | 8.58 | 6.05 | 7.02 | 8.12 | 8.98 | 8.76 | 8.84 |
| 18 | --- | --- | 7.65 | 7.67 | 8.46 | 8.59 | 6.05 | 7.05 | 8.15 | 9.00 | 8.73 | 8.48 |
| 19 | --- | e8.69 | 7.66 | 7.70 | 8.47 | 8.60 | 6.05 | 7.10 | 8.18 | 9.02 | 8.71 | 8.44 |
| 20 | --- | 8.69 | 7.57 | 7.74 | 8.49 | 8.59 | 6.12 | 7.16 | 8.22 | 9.04 | 8.70 | 8.43 |
| 21 | --- | 8.71 | 7.49 | 7.79 | 8.50 | 8.57 | 6.19 | 7.20 | 8.25 | 9.06 | 8.55 | 8.39 |
| 22 | --- | 8.70 | 7.43 | 7.81 | 8.52 | 8.53 | 6.24 | 7.25 | 8.29 | 9.09 | 8.46 | 8.36 |
| 23 | --- | 8.70 | 7.39 | 7.85 | 8.54 | 8.48 | 6.29 | 7.29 | 8.33 | 9.11 | 8.48 | 8.35 |
| 24 | --- | 8.68 | 7.35 | 7.89 | 8.56 | 8.44 | 6.31 | 7.34 | 8.37 | 8.92 | 8.46 | 8.35 |
| 25 | --- | 8.68 | 7.28 | 7.92 | 8.57 | 8.41 | 6.35 | 7.37 | 8.40 | 8.92 | 8.45 | 8.36 |
| 26 | --- | 8.68 | 7.26 | 7.96 | 8.59 | 8.37 | 6.37 | 7.41 | 8.43 | 8.93 | 8.43 | 8.38 |
| 27 | --- | 8.68 | 7.23 | 7.99 | 8.61 | 8.34 | 6.31 | 7.43 | 8.46 | 8.94 | 8.42 | 8.42 |
| 28 | --- | 8.67 | 7.20 | 8.01 | 8.62 | 8.32 | 6.32 | 7.45 | 8.49 | 8.93 | 8.41 | 8.45 |
| 29 | --- | 8.64 | 7.17 | 8.05 | 8.63 | 8.28 | 6.35 | 7.47 | 8.53 | 8.93 | 8.44 | 8.41 |
| 30 | e8.92 | 8.65 | 7.16 | 8.08 | --- | 8.25 | 6.37 | 7.50 | e8.58 | 8.94 | 8.48 | 8.35 |
| 31 | --- | --- | 7.18 | 8.12 | --- | 8.22 | --- | 7.53 | --- | 8.95 | 8.51 | --- |
| MEAN | --- | --- | 7.98 | 7.63 | 8.40 | 8.53 | 6.34 | 6.96 | 8.06 | 8.90 | 8.80 | 8.58 |
| LOW | --- | --- | 8.70 | 8.12 | 8.63 | 8.66 | 7.73 | 7.53 | 8.58 | 9.11 | 9.25 | 8.84 |
| HIGH | --- | --- | 7.16 | 7.21 | 8.16 | 8.22 | 6.05 | 6.40 | 7.56 | 8.62 | 8.41 | 8.35 |

e Estimated

422819071065701. Winchester well XOW 14.

LOCATION.--Lat 42° 28'19", long 71° 06'57", Middlesex County, Hydrologic Unit 01090001, at 220 Forest Street and 100 ft north of Forest Street in Winchester.

Owner: Private owner.

AQUIFER.--Glacial till of Pleistocene age.

WELL CHARACTERISTICS.--Dug observation water-table well, diameter 36 in., depth 17.0 ft, cased with stone to 17.0 ft, open end.

INSTRUMENTATION.--Monthly measurement with electric or chalked tape.

DATUM.--Elevation of land-surface datum is 116.29 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top edge of angle iron, at land-surface datum.

PERIOD OF RECORD.--July 1940 to current year. Prior to October 1974, published in Massachusetts Hydrologic-Data Report No. 17.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.03 ft below land-surface datum, Mar. 26, 1969; lowest measured, 15.60 ft below land-surface datum, Oct. 31, 1957.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|-----------------|-------------|--------|--------------|--------|-------------|--------------|-------------|--------|-------------|--------|-------------|
| OCT 30 | 8.29 | DEC 22 | 6.67 | FEB 24 | 13.68 | APR 28 | 7.43 | JUL 27 | 10.10 | SEP 24 | 8.47 |
| NOV 24 | 10.00 | JAN 20 | 10.77 | MAR 30 | 10.02 | JUN 30 | 11.92 | AUG 23 | 8.48 | | |
| WATER YEAR 2004 | HIGHEST | 6.67 | DEC 22, 2003 | LOWEST | 13.68 | FEB 24, 2004 | | | | | |

GROUND-WATER LEVELS IN MASSACHUSETTS

NANTUCKET COUNTY

411555070021901. Nantucket well NBW 228.

LOCATION.--Lat 41° 15'55", long 70° 02'19", Nantucket County, Hydrologic Unit 01090002, 165 ft south of Milestone Road and 300 ft east of Madequecham Valley Brook in Nantucket.

Owner: Nantucket Conservation Foundation.

AQUIFER.--Glacial sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Augered observation water-table well, diameter 2.0 in., depth 35.6 ft, screened 32.6 to 35.6 ft.

INSTRUMENTATION.--Monthly measurement with electric or chalked tape.

DATUM.--Elevation of land-surface datum is 39 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.34 ft above land-surface datum, 0.7 ft prior to November 1994.

PERIOD OF RECORD.--March 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 20.51 ft below land-surface datum, July 28, 1997; lowest measured, 27.90 ft below land-surface datum, Feb. 23, 1981.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|------------|-------------|---------|-------------|--------------|-------------|--------|-------------|--------------|-------------|--------|-------------|
| OCT 01 | 23.67 | DEC 01 | 24.99 | FEB 26 | 25.02 | APR 27 | 24.34 | JUL 29 | 23.76 | SEP 29 | 24.74 |
| | 28 24.29 | | 29 25.32 | MAR 26 | 24.94 | JUN 29 | 23.39 | AUG 24 | 24.16 | | |
| WATER YEAR | 2004 | HIGHEST | 23.39 | JUN 29, 2004 | | LOWEST | 25.32 | DEC 29, 2003 | | | |

NORFOLK COUNTY

421250071090901. Dedham well DDW 231.

LOCATION.--Lat 42° 12'50", long 71° 09'09", Norfolk County, Hydrologic Unit 01090001, 50 ft south of State Highway 128 and 0.3 mi west of University Avenue in Dedham.

Owner: U.S. Geological Survey.

AQUIFER.--Glacial till of Pleistocene age.

WELL CHARACTERISTICS.--Augered observation water-table well, diameter 2.0 in., depth 21.9 ft, screened 19.9 to 21.9 ft.

INSTRUMENTATION.--Monthly measurement with electric or chalked tape.

DATUM.--Elevation of land-surface datum is 65 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.3 ft above land-surface datum. Prior to July 17, 1978, 1.5 ft above land-surface datum.

PERIOD OF RECORD.--January 1965 to current year. Prior to October 1974, published in Massachusetts Hydrologic-Data Report No. 17.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.45 ft below land-surface datum, Mar. 28, 1978; lowest measured, 15.95 ft below land-surface datum, Oct. 28, 1997.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|------------|-------------|---------|-------------|--------------|-------------|--------|-------------|--------------|-------------|--------|-------------|
| OCT 27 | 11.61 | DEC 22 | 4.25 | MAR 29 | 5.62 | MAY 26 | 6.20 | JUL 21 | 9.90 | SEP 22 | 9.58 |
| NOV 25 | 8.82 | JAN 21 | 6.29 | APR 28 | 3.55 | JUN 24 | 8.85 | AUG 19 | 9.98 | | |
| WATER YEAR | 2004 | HIGHEST | 3.55 | APR 28, 2004 | | LOWEST | 11.61 | OCT 27, 2003 | | | |

421435071165701. Dover well DVW 10.

LOCATION.--Lat 42° 14'35", long 71° 16'57", Norfolk County, Hydrologic Unit 01090001, at Dover Public School about 400 ft southwest of and about 400 ft west of Center Street in Dover.

Owner: U.S. Geological Survey.

AQUIFER.--Glacial sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Augered observation water-table well, diameter 2 in., depth 54 ft, screened 52 to 54 ft.

INSTRUMENTATION.--Monthly measurement with electric or chalked tape.

DATUM.--Elevation of land-surface datum is 160 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 3.0 ft above land-surface datum.

PERIOD OF RECORD.--January 1965 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 29.95 ft below land-surface datum, Apr. 20, 1987; lowest measured, 36.87 ft below land-surface datum, Jan. 21, 1966.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|------------|-------------|---------|-------------|--------------|-------------|--------|-------------|--------------|-------------|--------|-------------|
| OCT 27 | 34.09 | DEC 22 | 33.50 | MAR 29 | 33.46 | MAY 26 | 31.59 | JUL 21 | 33.16 | SEP 22 | 34.12 |
| NOV 25 | 34.00 | JAN 21 | 32.42 | APR 28 | 31.47 | JUN 24 | 32.47 | AUG 19 | 33.73 | | |
| WATER YEAR | 2004 | HIGHEST | 31.47 | APR 28, 2004 | | LOWEST | 34.12 | SEP 22, 2004 | | | |

GROUND-WATER LEVELS IN MASSACHUSETTS

NORFOLK COUNTY--Continued

420432071151201. Foxborough well FXW 3.

LOCATION.--Lat 42° 04' 32", long 71° 15' 12", Norfolk County, Hydrologic Unit 01090004, at Foxborough State Hospital, near railroad tracks, 100 ft east of driveway, and 250 ft north of Chestnut Street in Foxborough.

Owner: U.S. Geological Survey.

AQUIFER.--Glacial sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Augered observation water-table well, diameter 2 in., depth 32 ft, screened 30 to 32 ft.

INSTRUMENTATION.--Monthly measurement with electric or chalked tape.

DATUM.--Elevation of land-surface datum is 290 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 3.0 ft above land-surface datum.

PERIOD OF RECORD.--January 1965 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 16.24 ft below land-surface datum, Mar. 25, 1968; lowest measured, 21.42 ft below land-surface datum, Dec. 28, 1965.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|-----------------|-------------|--------|--------------|--------|-------------|--------------|-------------|--------|-------------|--------|-------------|
| OCT 23 | 20.07 | DEC 23 | 17.82 | FEB 24 | 18.90 | APR 28 | 17.71 | JUN 24 | 18.90 | AUG 19 | 19.57 |
| NOV 20 | 19.42 | JAN 22 | 18.43 | MAR 29 | 18.95 | MAY 26 | 18.34 | JUL 21 | 19.27 | SEP 22 | 19.61 |
| WATER YEAR 2004 | HIGHEST | 17.71 | APR 28, 2004 | LOWEST | 20.07 | OCT 23, 2003 | | | | | |

420717071221301 KINGSBURY POND NEAR NORFOLK, MA

LOCATION.--Lat 42° 07' 17", long 71° 22' 13", Norfolk County, Hydrologic Unit 01090001, on southeast corner of pond, 150 ft northwest of Miller Street, 2.3 mi west of Norfolk.

AQUIFER.--Glacial sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Standpipe, 3-in. diameter, with sealed bottom; connected through siphon effect with pond by 0.75-in. diameter polyethylene tubing.

INSTRUMENTATION.--Water-stage recorder.

DATUM.--Elevation of gage is measuring point at base of instrument shelter floor, 137.68 ft above National Geodetic Vertical Datum (NGVD) of 1929.

PERIOD OF RECORD.--November 2000 to current year.

REMARKS.--Missing periods of more than one day are not estimated.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 133.53 ft, June 26, 2003; minimum, 126.33 ft, Nov. 5, 2002.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 133.53 ft, June 26; minimum, 126.33 ft, Nov. 5.

ELEVATION, IN FEET ABOVE NGVD OF 1929, OCTOBER 2003 TO SEPTEMBER 2004

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|--------|--------|--------|--------|--------|---------|--------|--------|--------|--------|--------|--------|
| 1 | 130.76 | 130.17 | 130.07 | 130.70 | 131.06 | 130.98 | 130.76 | 131.83 | 132.63 | 131.92 | 130.97 | 130.29 |
| 2 | 130.72 | 130.15 | 130.05 | 130.72 | 131.07 | 130.97 | 130.84 | 131.87 | 132.65 | 131.95 | 130.93 | 130.25 |
| 3 | 130.67 | 130.13 | 130.03 | 130.74 | 131.07 | e130.97 | 130.83 | 131.92 | 132.67 | 131.92 | 130.88 | 130.21 |
| 4 | 130.63 | 130.12 | 130.02 | 130.77 | 131.07 | --- | 130.82 | 132.03 | 132.68 | 131.87 | 130.83 | 130.17 |
| 5 | 130.59 | 130.11 | 130.02 | 130.83 | 131.08 | --- | 130.84 | 132.06 | 132.66 | 131.90 | 130.82 | 130.13 |
| 6 | 130.54 | 130.11 | 130.08 | 130.87 | 131.07 | --- | 130.82 | 132.10 | 132.65 | 131.93 | 130.78 | 130.08 |
| 7 | 130.50 | 130.10 | 130.16 | 130.89 | 131.05 | --- | 130.82 | 132.13 | 132.64 | 131.90 | 130.72 | 130.04 |
| 8 | 130.46 | 130.08 | 130.15 | 130.92 | 131.06 | --- | 130.81 | 132.16 | 132.62 | 131.86 | 130.67 | 130.02 |
| 9 | 130.42 | 130.07 | 130.14 | 130.94 | 131.07 | e130.87 | 130.81 | 132.20 | 132.61 | 131.82 | 130.62 | 130.04 |
| 10 | 130.38 | 130.06 | 130.12 | 130.96 | 131.07 | 130.86 | 130.81 | 132.25 | 132.60 | 131.77 | 130.57 | 130.02 |
| 11 | 130.34 | 130.05 | 130.17 | 130.97 | 131.07 | 130.84 | 130.80 | 132.28 | 132.57 | 131.74 | 130.52 | 129.98 |
| 12 | 130.32 | 130.04 | 130.24 | 130.98 | 131.08 | 130.81 | 130.81 | 132.31 | 132.54 | 131.70 | 130.48 | 129.94 |
| 13 | 130.30 | 130.04 | 130.23 | 130.99 | 131.08 | 130.80 | 130.90 | 132.34 | 132.51 | 131.67 | 130.70 | 129.90 |
| 14 | 130.26 | 130.03 | 130.24 | 131.01 | 131.07 | 130.78 | 131.11 | 132.36 | 132.48 | 131.66 | 130.68 | 129.87 |
| 15 | 130.33 | 130.01 | 130.37 | 131.01 | 131.09 | 130.76 | 131.16 | 132.37 | 132.46 | 131.62 | 130.73 | 129.84 |
| 16 | 130.30 | 130.00 | 130.37 | 131.02 | 131.09 | 130.75 | 131.18 | 132.40 | 132.43 | 131.58 | 130.73 | 129.81 |
| 17 | 130.26 | 130.00 | 130.40 | 131.03 | 131.08 | 130.78 | 131.19 | 132.42 | 132.40 | 131.54 | 130.70 | 129.77 |
| 18 | 130.23 | 130.00 | 130.49 | 131.04 | 131.07 | 130.77 | 131.22 | 132.43 | 132.37 | 131.50 | 130.67 | 129.85 |
| 19 | 130.20 | 130.00 | 130.50 | 131.04 | 131.07 | 130.75 | 131.24 | 132.49 | 132.35 | 131.47 | 130.63 | 129.88 |
| 20 | 130.17 | 130.02 | 130.50 | 131.05 | 131.06 | 130.73 | 131.26 | 132.49 | 132.31 | 131.43 | 130.60 | 129.84 |
| 21 | 130.13 | 130.06 | 130.50 | 131.05 | 131.04 | 130.74 | 131.29 | 132.49 | 132.26 | 131.38 | 130.61 | 129.81 |
| 22 | 130.11 | 130.06 | 130.51 | 131.05 | 131.03 | 130.72 | 131.31 | 132.49 | 132.22 | 131.34 | 130.64 | 129.79 |
| 23 | 130.09 | 130.06 | 130.52 | 131.06 | 131.03 | 130.70 | 131.40 | 132.49 | 132.18 | 131.29 | 130.60 | 129.77 |
| 24 | 130.05 | 130.05 | 130.54 | 131.06 | 131.02 | 130.68 | 131.45 | 132.51 | 132.14 | 131.30 | 130.57 | 129.74 |
| 25 | 130.02 | 130.06 | 130.59 | 131.06 | 131.02 | 130.66 | 131.49 | 132.52 | 132.11 | 131.28 | 130.54 | 129.71 |
| 26 | 129.99 | 130.05 | 130.60 | 131.06 | 131.02 | 130.64 | 131.56 | 132.52 | 132.13 | 131.23 | 130.50 | 129.68 |
| 27 | 130.04 | 130.05 | 130.61 | 131.07 | 131.01 | 130.63 | 131.66 | 132.56 | 132.08 | 131.18 | 130.47 | 129.65 |
| 28 | 130.07 | 130.05 | 130.64 | 131.06 | 131.00 | 130.61 | 131.72 | 132.62 | 132.04 | 131.14 | 130.43 | 129.70 |
| 29 | 130.18 | 130.09 | 130.65 | 131.06 | 130.99 | 130.59 | 131.75 | 132.65 | 132.01 | 131.10 | 130.39 | 129.87 |
| 30 | 130.21 | 130.08 | 130.66 | 131.06 | --- | 130.57 | 131.79 | 132.63 | 131.96 | 131.06 | 130.35 | 129.86 |
| 31 | 130.19 | --- | 130.68 | 131.06 | --- | 130.58 | --- | 132.62 | --- | 131.01 | 130.33 | --- |
| MEAN | 130.31 | 130.06 | 130.35 | 130.97 | 131.05 | --- | 131.15 | 132.34 | 132.40 | 131.55 | 130.63 | 129.92 |
| MAX | 130.76 | 130.17 | 130.68 | 131.07 | 131.09 | --- | 131.79 | 132.65 | 132.68 | 131.95 | 130.97 | 130.29 |
| MIN | 129.99 | 130.00 | 130.02 | 130.70 | 130.99 | --- | 130.76 | 131.83 | 131.96 | 131.01 | 130.33 | 129.65 |

e Estimated

GROUND-WATER LEVELS IN MASSACHUSETTS

NORFOLK COUNTY--Continued

420545071174001. Norfolk well NNN 27.

LOCATION.--Lat 42°05'45", long 71°17'40", Norfolk County, Hydrologic Unit 01090001, 15 ft northwest of State Highway 1A and 0.1 mi northeast of Valley Street in Norfolk.

Owner: U.S. Geological Survey.

AQUIFER.--Glacial sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Augered observation water-table well, diameter 2 in. (previously reported as 1.25 in.), depth 18.4 ft, screened 16.4 to 18.4 ft.

INSTRUMENTATION.--Monthly measurement with electric or chalked tape; digital recorder (60-minute interval) with satellite telemeter since August 2001.

DATUM.--Elevation of land-surface datum is 160 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of plywood floor in base of steel shelter, 3.57 ft above land-surface datum; prior to August 2001, top of casing, 1.7 ft above land-surface datum.

REMARKS.--Missing periods of more than one day are not estimated.

PERIOD OF RECORD.--January 1965 to current year. Prior to October 1974, published in Massachusetts Hydrologic-Data Report No. 17.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 3.94 ft below land-surface datum, Mar. 28, 2001, and Apr. 20, 1987; lowest, 7.99 ft below land-surface datum, July 30, 1997.

EXTREMES FOR CURRENT YEAR.--Highest water level, 4.86 ft below land-surface datum, Dec. 18; lowest, 7.25 ft below land-surface datum, Aug. 12.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1 | 6.82 | 5.88 | 6.13 | 5.58 | 6.21 | 6.41 | 5.39 | 5.50 | 6.08 | 6.90 | 7.07 | 6.92 |
| 2 | 6.82 | 5.92 | 6.16 | 5.61 | 6.23 | 6.39 | 5.04 | 5.53 | 6.07 | 6.78 | 7.08 | 6.96 |
| 3 | 6.85 | 5.95 | 6.18 | 5.62 | 6.24 | 6.39 | 5.16 | 5.54 | 6.05 | 6.83 | 7.11 | 6.99 |
| 4 | 6.81 | 5.99 | 6.20 | 5.63 | 6.21 | 6.38 | 5.25 | 5.46 | 6.06 | 6.89 | 7.14 | 7.03 |
| 5 | 6.81 | 5.99 | 6.22 | 5.53 | 6.25 | 6.36 | 5.28 | 5.53 | 6.11 | 6.74 | 6.98 | 7.07 |
| 6 | 6.87 | 6.00 | 6.22 | 5.55 | 6.22 | 6.26 | 5.37 | 5.57 | 6.13 | 6.66 | 7.04 | 7.10 |
| 7 | 6.89 | 6.03 | 6.23 | 5.58 | 6.05 | 6.24 | 5.43 | 5.60 | 6.14 | 6.73 | 7.10 | 7.12 |
| 8 | 6.91 | 6.07 | 6.26 | 5.61 | 6.03 | 6.23 | 5.48 | 5.64 | 6.18 | 6.78 | 7.13 | 7.14 |
| 9 | 6.93 | 6.10 | 6.28 | 5.64 | 6.06 | 6.23 | 5.53 | 5.62 | 6.21 | 6.81 | 7.17 | 6.98 |
| 10 | 6.95 | 6.12 | 6.29 | 5.67 | 6.07 | 6.25 | 5.57 | 5.66 | 6.24 | 6.86 | 7.19 | 7.03 |
| 11 | 6.96 | 6.12 | 5.95 | 5.70 | 6.09 | 6.24 | 5.62 | 5.69 | 6.27 | 6.89 | 7.22 | 7.09 |
| 12 | 6.83 | 6.13 | 5.56 | 5.72 | 6.11 | 6.25 | 5.66 | 5.72 | 6.31 | 6.93 | 7.24 | 7.13 |
| 13 | 6.80 | 6.10 | 5.61 | 5.75 | 6.13 | 6.28 | 5.49 | 5.75 | 6.35 | 6.92 | 7.10 | 7.16 |
| 14 | 6.87 | 6.16 | 5.64 | 5.78 | 6.14 | 6.30 | 4.91 | 5.78 | 6.37 | 6.86 | 7.11 | 7.19 |
| 15 | 6.50 | 6.19 | 5.21 | 5.80 | 6.18 | 6.30 | 4.92 | 5.80 | 6.40 | 6.89 | 6.82 | 7.21 |
| 16 | 6.54 | 6.22 | 5.31 | 5.82 | 6.21 | 6.32 | 5.02 | 5.84 | 6.44 | 6.93 | 6.83 | 7.21 |
| 17 | 6.58 | 6.24 | 5.26 | 5.84 | 6.24 | 6.27 | 5.13 | 5.87 | 6.47 | 6.96 | 6.85 | 7.21 |
| 18 | 6.56 | 6.26 | 4.98 | 5.86 | 6.24 | 6.30 | 5.23 | 5.89 | 6.49 | 6.98 | 6.88 | 6.77 |
| 19 | 6.57 | 6.27 | 5.09 | 5.88 | 6.25 | 6.33 | 5.29 | 5.81 | 6.49 | 6.94 | 6.90 | 6.67 |
| 20 | 6.58 | 6.23 | 5.20 | 5.91 | 6.28 | 6.33 | 5.36 | 5.90 | 6.54 | 6.98 | 6.93 | 6.75 |
| 21 | 6.58 | 6.06 | 5.28 | 5.94 | 6.28 | 6.14 | 5.42 | 5.93 | 6.58 | 7.02 | 6.73 | 6.79 |
| 22 | 6.59 | 6.11 | 5.34 | 5.96 | 6.31 | 6.12 | 5.47 | 5.96 | 6.61 | 7.04 | 6.56 | 6.82 |
| 23 | 6.58 | 6.13 | 5.40 | 5.99 | 6.32 | 6.12 | 5.37 | 5.98 | 6.64 | 7.07 | 6.63 | 6.85 |
| 24 | 6.60 | 6.13 | 5.37 | 6.02 | 6.33 | 6.12 | 5.41 | 5.99 | 6.68 | 6.91 | 6.68 | 6.88 |
| 25 | 6.62 | 6.13 | 5.27 | 6.05 | 6.34 | 6.12 | 5.48 | 6.01 | 6.72 | 6.88 | 6.72 | 6.90 |
| 26 | 6.62 | 6.16 | 5.33 | 6.08 | 6.36 | 6.12 | 5.38 | 6.03 | 6.74 | 6.93 | 6.75 | 6.92 |
| 27 | 6.41 | 6.19 | 5.40 | 6.09 | 6.37 | 6.09 | 5.26 | 6.00 | 6.77 | 6.97 | 6.79 | 6.96 |
| 28 | 6.27 | 6.17 | 5.45 | 6.11 | 6.39 | 6.08 | 5.32 | 5.98 | 6.81 | 6.99 | 6.82 | 6.61 |
| 29 | 5.89 | 6.06 | 5.48 | 6.13 | 6.40 | 6.07 | 5.39 | 6.01 | 6.83 | 7.00 | 6.86 | 5.99 |
| 30 | 5.81 | 6.12 | 5.52 | 6.15 | --- | 6.07 | 5.45 | 6.06 | 6.86 | 7.03 | 6.90 | 6.10 |
| 31 | 5.85 | --- | 5.55 | 6.18 | --- | 5.97 | --- | 6.09 | --- | 7.07 | 6.87 | --- |
| MEAN | 6.62 | 6.11 | 5.66 | 5.83 | 6.23 | 6.23 | 5.34 | 5.80 | 6.42 | 6.91 | 6.94 | 6.92 |
| LOW | 6.96 | 6.27 | 6.29 | 6.18 | 6.40 | 6.41 | 5.66 | 6.09 | 6.86 | 7.07 | 7.24 | 7.21 |
| HIGH | 5.81 | 5.88 | 4.98 | 5.53 | 6.03 | 5.97 | 4.91 | 5.46 | 6.05 | 6.66 | 6.56 | 5.99 |

GROUND-WATER LEVELS IN MASSACHUSETTS

NORFOLK COUNTY--Continued

420954070564501. Weymouth well XGW 2.

LOCATION.--Lat 42° 09'54", long 70° 56'45", Norfolk County, Hydrologic Unit 01090001, 40 ft south of main gate guard house at U.S. Naval Air Station at Weymouth.

Owner: U.S. Geological Survey.

AQUIFER.--Glacial till of Pleistocene age.

WELL CHARACTERISTICS.--Augered observation water-table well, diameter 2 in., depth 30 ft, screened 28 to 30 ft.

INSTRUMENTATION.--Monthly measurement with electric or chalked tape.

DATUM.--Elevation of land-surface datum is 180 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 0.45 ft above land-surface datum, 3.0 ft prior to November 1989.

PERIOD OF RECORD.--January 1965 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.57 ft below land-surface datum, Apr. 2, 1993; lowest measured, 22.63 ft below land-surface datum, Nov. 21, 1980.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|-----------------|-------------|--------|--------------|--------|-------------|--------------|-------------|--------|-------------|--------|-------------|
| OCT 21 | 17.00 | DEC 22 | 8.03 | FEB 25 | 11.84 | APR 30 | 6.75 | JUN 24 | 11.55 | AUG 27 | 15.47 |
| NOV 21 | 15.02 | JAN 26 | 10.75 | MAR 30 | 10.60 | MAY 25 | 9.36 | JUL 27 | 14.72 | SEP 27 | 16.66 |
| WATER YEAR 2004 | HIGHEST | 6.75 | APR 30, 2004 | LOWEST | 17.00 | OCT 21, 2003 | | | | | |

421147070571901. Weymouth well XGW 3.

LOCATION.--Lat 42° 11'47", long 70° 57'19", Norfolk County, Hydrologic Unit 01090001, about 100 ft east of State Highway 18 and about 600 ft off State Highway 3 in Weymouth.

Owner: U.S. Geological Survey.

AQUIFER.--Glacial sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Augered observation water-table well, diameter 2 in., depth 22.3 ft, screened 20.3 to 22.3 ft.

INSTRUMENTATION.--Monthly measurement with electric or chalked tape.

DATUM.--Elevation of land-surface datum is 90 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.5 ft above land-surface datum.

REMARKS.--Water level affected by pumping.

PERIOD OF RECORD.--January 1965 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.91 ft below land-surface datum, Jan. 27, 1978; lowest measured, 18.10 ft below land-surface datum, Sept. 27, 1965.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|-----------------|-------------|--------|--------------|--------|-------------|--------------|-------------|--------|-------------|--------|-------------|
| OCT 21 | 5.02 | DEC 22 | 4.06 | FEB 25 | 4.95 | APR 30 | 4.22 | JUN 24 | 5.46 | SEP 27 | 5.24 |
| NOV 21 | 5.04 | JAN 26 | 5.29 | MAR 30 | 4.65 | MAY 25 | 4.85 | AUG 27 | 5.06 | | |
| WATER YEAR 2004 | HIGHEST | 4.06 | DEC 22, 2003 | LOWEST | 5.46 | JUN 24, 2004 | | | | | |

421120070562801. Weymouth well XGW 4.

LOCATION.--Lat 42° 11'20", long 70° 56'28", Norfolk County, Hydrologic Unit 01090001, at median strip of State Highway 3 and 0.8 mi south of State Highway 18 in Weymouth.

Owner: U.S. Geological Survey.

AQUIFER.--Glacial sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Augered observation water-table well, diameter 2 in., depth 22.6 ft, screened 20.6 to 22.6 ft.

INSTRUMENTATION.--Monthly measurement with electric or chalked tape.

DATUM.--Elevation of land-surface datum is 90 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.5 ft above land-surface datum.

PERIOD OF RECORD.--January 1965 to current year. Prior to October 1974, published in Massachusetts Hydrologic-Data Report No. 17.

EXTREMES FOR PERIOD OF RECORD.--Highest water-level measured, 4.39 ft below land-surface datum, Apr. 2, 1993; lowest measured, 10.45 ft below land-surface datum, Sept. 27, 1965.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|-----------------|-------------|--------|--------------|--------|-------------|--------------|-------------|--------|-------------|--------|-------------|
| OCT 21 | 7.15 | DEC 22 | 5.85 | FEB 25 | 7.17 | APR 30 | 5.51 | JUN 24 | 7.42 | AUG 27 | 7.13 |
| NOV 21 | 6.57 | JAN 26 | 7.10 | MAR 30 | 6.46 | MAY 25 | 6.61 | JUL 27 | 7.50 | SEP 27 | 7.20 |
| WATER YEAR 2004 | HIGHEST | 5.51 | APR 30, 2004 | LOWEST | 7.50 | JUL 27, 2004 | | | | | |

GROUND-WATER LEVELS IN MASSACHUSETTS

PLYMOUTH COUNTY

420321070433502. Duxbury well D4W 79.

LOCATION.--Lat 42°03'21", long 70°43'35", Plymouth County, Hydrologic Unit 01090002, 30 ft west of State Highway 3 and about 300 ft north of State Highway 14 in Duxbury.

Owner: U.S. Geological Survey.

AQUIFER.--Glacial sand and silty clay of Pleistocene age.

WELL CHARACTERISTICS.--Augered observation water-table well, diameter 2.0 in., depth 23.5 ft, screened 21.5 to 23.5 ft.

INSTRUMENTATION.--Monthly measurement with electric or chalked tape, digital recorder (60-minute interval) with satellite telemeter since August 2001.

DATUM.--Elevation of land-surface datum is 55 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of plywood floor in base of steel shelter, 3.18 ft above land-surface datum; prior to August 2001, top of casing, 1.5 ft above land-surface datum.

REMARKS.--Missing periods of more than one day are not estimated.

PERIOD OF RECORD.--January 1965 to current year. Prior to October 1974, published in Massachusetts Hydrologic-Data Report No. 17.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 6.10 ft below land-surface datum, Jan. 26, 1978; lowest, 10.68 ft below land-surface datum, Sept. 28, 1965.

EXTREMES FOR CURRENT YEAR.--Highest water level, 6.86 ft below land-surface datum, Dec. 16; lowest, 9.12 ft below land-surface datum, Aug. 13, 14.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1 | 8.67 | 7.66 | 7.92 | 7.51 | 7.89 | 8.10 | 7.88 | 7.51 | 8.07 | 8.57 | 8.90 | 8.89 |
| 2 | 8.68 | 7.69 | 7.94 | 7.55 | 7.92 | 8.10 | 7.38 | 7.55 | 8.08 | 8.58 | 8.93 | 8.90 |
| 3 | 8.70 | 7.72 | 7.97 | 7.57 | 7.96 | 8.08 | 7.03 | 7.57 | 8.08 | 8.58 | 8.95 | 8.92 |
| 4 | 8.72 | 7.75 | 8.00 | 7.58 | 7.97 | 8.06 | 6.97 | 7.56 | 8.08 | 8.58 | 8.98 | 8.95 |
| 5 | 8.71 | 7.76 | 8.03 | 7.55 | 7.96 | 8.05 | 7.00 | 7.56 | 8.09 | 8.60 | 9.00 | 8.98 |
| 6 | 8.70 | 7.72 | 8.01 | 7.49 | 7.96 | 8.01 | 7.06 | 7.59 | 8.11 | 8.59 | 8.99 | 9.01 |
| 7 | 8.70 | 7.71 | 7.66 | 7.47 | 7.87 | 7.96 | 7.14 | 7.62 | 8.11 | 8.58 | 8.99 | 9.03 |
| 8 | 8.72 | 7.76 | 7.39 | 7.44 | 7.75 | 7.94 | 7.21 | 7.68 | 8.11 | 8.58 | 9.00 | 8.97 |
| 9 | 8.74 | 7.85 | 7.35 | 7.44 | 7.74 | 7.96 | 7.28 | 7.72 | 8.12 | 8.60 | 9.02 | 8.70 |
| 10 | 8.76 | 7.91 | 7.38 | 7.46 | 7.75 | 7.98 | 7.35 | 7.72 | 8.14 | 8.62 | 9.05 | 8.61 |
| 11 | 8.78 | 7.94 | 7.37 | 7.47 | 7.78 | 7.98 | 7.41 | 7.73 | 8.16 | 8.65 | 9.08 | 8.61 |
| 12 | 8.78 | 7.96 | 7.17 | 7.48 | 7.82 | 7.98 | 7.45 | 7.76 | 8.19 | 8.68 | 9.10 | 8.63 |
| 13 | 8.60 | 7.97 | 7.11 | 7.47 | 7.85 | 8.00 | 7.45 | 7.80 | 8.22 | 8.71 | 9.12 | 8.66 |
| 14 | 8.47 | 7.98 | 7.13 | 7.45 | 7.88 | 8.04 | 7.31 | 7.83 | 8.24 | 8.70 | 9.07 | 8.70 |
| 15 | 8.40 | 8.03 | 7.00 | 7.45 | 7.91 | 8.05 | 7.16 | 7.85 | 8.27 | 8.66 | 8.93 | 8.73 |
| 16 | 8.28 | 8.06 | 6.87 | 7.44 | 7.96 | 8.07 | 7.13 | 7.88 | 8.29 | 8.64 | 8.68 | 8.74 |
| 17 | 8.24 | 8.09 | 6.88 | 7.45 | 8.00 | 8.07 | 7.17 | 7.92 | 8.33 | 8.65 | 8.54 | 8.73 |
| 18 | 8.22 | 8.11 | 6.88 | 7.46 | 8.01 | 8.08 | 7.23 | 7.93 | 8.35 | 8.68 | 8.51 | 8.68 |
| 19 | 8.19 | 8.12 | 6.94 | 7.47 | 8.00 | 8.11 | 7.28 | 7.94 | 8.36 | 8.71 | 8.53 | 8.37 |
| 20 | 8.19 | 8.12 | 7.03 | 7.50 | 8.03 | 8.12 | 7.33 | 7.97 | 8.37 | 8.72 | 8.55 | 8.22 |
| 21 | 8.20 | 8.11 | 7.10 | 7.54 | 8.04 | 8.07 | 7.40 | 8.00 | 8.40 | 8.74 | 8.59 | 8.20 |
| 22 | 8.22 | 8.09 | 7.15 | 7.56 | 8.04 | 7.93 | 7.44 | 8.02 | 8.42 | 8.76 | 8.61 | 8.22 |
| 23 | 8.24 | 8.10 | 7.21 | 7.57 | 8.04 | 7.88 | 7.47 | 8.04 | 8.45 | 8.79 | 8.63 | 8.25 |
| 24 | 8.27 | 8.11 | 7.25 | 7.60 | 8.04 | 7.88 | 7.45 | 8.06 | 8.48 | 8.82 | 8.67 | 8.30 |
| 25 | 8.30 | 8.12 | 7.27 | 7.65 | 8.04 | 7.89 | 7.47 | 8.08 | 8.50 | 8.84 | 8.72 | 8.34 |
| 26 | 8.30 | 8.13 | 7.29 | 7.73 | 8.06 | 7.90 | 7.49 | 8.10 | 8.53 | 8.86 | 8.75 | 8.38 |
| 27 | 8.26 | 8.15 | 7.33 | 7.77 | 8.08 | 7.90 | 7.41 | 8.10 | 8.53 | 8.89 | 8.79 | 8.40 |
| 28 | 8.10 | 8.16 | 7.37 | 7.79 | 8.09 | 7.91 | 7.38 | 8.09 | 8.52 | 8.90 | 8.82 | 8.42 |
| 29 | 7.91 | 8.07 | 7.40 | 7.81 | 8.10 | 7.93 | 7.43 | 8.05 | 8.54 | 8.89 | 8.85 | 8.30 |
| 30 | 7.72 | 7.94 | 7.44 | 7.83 | --- | 7.95 | 7.46 | 8.03 | 8.55 | 8.87 | 8.89 | 8.04 |
| 31 | 7.66 | --- | 7.47 | 7.86 | --- | 7.96 | --- | 8.04 | --- | 8.88 | 8.91 | --- |
| MEAN | 8.40 | 7.96 | 7.36 | 7.56 | 7.95 | 8.00 | 7.32 | 7.85 | 8.29 | 8.71 | 8.84 | 8.60 |
| LOW | 8.78 | 8.16 | 8.03 | 7.86 | 8.10 | 8.12 | 7.88 | 8.10 | 8.55 | 8.90 | 9.12 | 9.03 |
| HIGH | 7.66 | 7.66 | 6.87 | 7.44 | 7.74 | 7.88 | 6.97 | 7.51 | 8.07 | 8.57 | 8.51 | 8.04 |

GROUND-WATER LEVELS IN MASSACHUSETTS

PLYMOUTH COUNTY

420317070432901. Duxbury well D4W 80.

LOCATION.--Lat 42° 03' 17", long 70° 43' 29", Plymouth County, Hydrologic Unit 01090002, 78 ft south of State Highway 14 and 250 ft east of State Highway 3 in Duxbury.

Owner: The Commonwealth of Massachusetts Department of Public Works.

AQUIFER.--Bedrock.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 6.0 in., depth 181 ft, cased to 59 ft, open hole.

INSTRUMENTATION.--Monthly measurement with electric or chalked tape.

DATUM.--Elevation of land-surface datum is 65 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of hole in concrete cover, at land-surface datum.

PERIOD OF RECORD.--April 1965 to current year. Prior to October 1974, published in Massachusetts Hydrologic-Data Report No. 17.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 18.98 ft below land-surface datum, Feb. 26, 1998; lowest measured, 24.02 ft below land-surface datum, Sept. 28, 1965.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|-----------------|---------------|--------------|--------------|--------------|-------------|--------------|-------------|--------|-------------|--------|-------------|
| OCT 23 | 21.75 | DEC 22 | 20.59 | FEB 24 | 21.55 | APR 28 | 20.82 | JUN 24 | 21.83 | AUG 25 | 22.10 |
| NOV 19 | 21.55 | JAN 23 | 20.60 | MAR 26 | 21.50 | MAY 24 | 21.45 | JUL 23 | 22.10 | SEP 30 | 21.64 |
| WATER YEAR 2004 | HIGHEST 20.59 | DEC 22, 2003 | LOWEST 22.10 | JUL 23, 2004 | | AUG 25, 2004 | | | | | |

420056070575701. East Bridgewater well EBW 30.

LOCATION.--Lat 42° 00' 56", long 70° 57' 57", Plymouth County, Hydrologic Unit 01090004, about 100 ft north of State Highway 106 and 800 ft west of State Highway 18 in East Bridgewater.

Owner: East Bridgewater Medical Center.

AQUIFER.--Glacial till of Pleistocene age.

WELL CHARACTERISTICS.--Dug observation water-table well, diameter 36 in., depth 24 ft, cased with stone to 24 ft, open end.

INSTRUMENTATION.--Monthly measurement with electric or chalked tape.

DATUM.--Elevation of land-surface datum is 85 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of stone casing curb, 2.6 ft above land-surface datum.

PERIOD OF RECORD.--July 1958 to current year. Prior to October 1974, published in Massachusetts Hydrologic-Data Report No. 17.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.18 ft below land-surface datum, Feb. 26, 1998; lowest measured, 17.83 ft below land-surface datum, Dec. 28, 1965.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|-----------------|--------------|--------------|--------------|--------------|-------------|--------|-------------|--------|-------------|--------|-------------|
| OCT 23 | 11.30 | DEC 22 | 4.80 | FEB 24 | 9.10 | APR 28 | 4.15 | JUN 23 | 8.90 | AUG 25 | 12.75 |
| NOV 19 | 9.70 | JAN 23 | 7.10 | MAR 26 | 7.90 | MAY 24 | 6.51 | JUL 23 | 11.42 | SEP 30 | 14.10 |
| WATER YEAR 2004 | HIGHEST 4.15 | APR 28, 2004 | LOWEST 14.10 | SEP 30, 2004 | | | | | | | |

420353070520301. Hanson well HGW 76.

LOCATION.--Lat 42° 03' 53", long 70° 52' 03", Plymouth County, Hydrologic Unit 01090002, 100 ft south of State Highway 14 and 150 ft west of town hall in Hanson.

Owner: U.S. Geological Survey.

AQUIFER.--Glacial sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Augered observation water-table well, diameter 2.0 in., depth 26.6 ft, screened 24.6 to 26.6 ft.

INSTRUMENTATION.--Monthly measurement with electric or chalked tape.

DATUM.--Elevation of land-surface datum is 71 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 1.5 ft above land-surface datum.

REMARKS.--Water level affected by Wampatuck Pond.

PERIOD OF RECORD.--June 1964 to current year. Prior to October 1974, published in Massachusetts Hydrologic-Data Report No. 17.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.50 ft below land-surface datum, Mar. 26, 1969; lowest measured, 6.53 ft below land-surface datum, Sept. 25, 1980.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|-----------------|--------------|--------------|-------------|--------------|-------------|--------|-------------|--------|-------------|--------|-------------|
| OCT 23 | 4.80 | DEC 22 | 4.10 | FEB 24 | 4.79 | APR 28 | 4.52 | JUN 24 | 4.83 | AUG 25 | 4.88 |
| NOV 19 | 4.94 | JAN 23 | 4.86 | MAR 26 | 4.68 | MAY 24 | 4.67 | JUL 23 | 5.07 | SEP 30 | 4.46 |
| WATER YEAR 2004 | HIGHEST 4.10 | DEC 22, 2003 | LOWEST 5.07 | JUL 23, 2004 | | | | | | | |

GROUND-WATER LEVELS IN MASSACHUSETTS

PLYMOUTH COUNTY--Continued

415228070554601. Lakeville well LKW 14.

LOCATION.--Lat 41° 52'28", long 70° 55'46", Plymouth County, Hydrologic Unit 01090004, 30 ft west of parking lot at Lakeville State Hospital in Lakeville.

Owner: U.S. Geological Survey.

AQUIFER.--Glacial sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Augered observation water-table well, diameter 2 in., depth 41 ft, screened 39 to 41 ft.

INSTRUMENTATION.--Monthly measurement with electric tape by observer. Digital recorder (60-min punch) July 1986 to current year. Satellite telemeter at well since September 2001.

DATUM.--Elevation of land-surface datum is 105 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top edge of hole in base of aluminum recorder shelter, 1.5 ft above land-surface datum.

REMARKS.--Missing periods of more than one day are not estimated.

PERIOD OF RECORD.--June 1964 to current year. Prior to October 1974, published in Massachusetts Hydrologic-Data Report No. 17.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 8.56 ft below land-surface datum, May 13, 1998; lowest, 23.59 ft below land-surface datum, Oct. 26, 1966.

EXTREMES FOR CURRENT YEAR.--Highest water level, 11.14 ft below land-surface datum, Apr. 22; lowest, 17.47 ft below land-surface datum, Sept. 19, 20, 26-28.

**DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES**

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|-------|-------|--------|-------|-------|-------|--------|-------|-------|-------|-------|-------|
| 1 | 14.73 | 15.06 | 14.58 | 11.72 | 13.03 | 13.72 | 13.25 | 11.22 | 12.75 | 14.34 | 16.00 | 16.89 |
| 2 | 14.77 | 14.96 | 14.60 | 11.76 | 13.09 | 13.73 | 13.14 | 11.24 | 12.80 | 14.40 | 16.05 | 16.91 |
| 3 | 14.84 | 14.86 | 14.61 | 11.77 | 13.12 | 13.78 | 12.93 | 11.28 | 12.85 | 14.46 | 16.11 | 16.93 |
| 4 | 14.87 | 14.78 | 14.58 | 11.83 | 13.17 | 13.80 | 12.70 | 11.34 | 12.89 | 14.53 | 16.17 | 16.96 |
| 5 | 14.93 | 14.70 | 14.55 | 11.87 | 13.24 | 13.81 | 12.51 | 11.39 | 12.92 | 14.59 | 16.22 | 17.00 |
| 6 | 14.98 | 14.64 | 14.48 | 11.90 | 13.24 | 13.81 | 12.36 | 11.40 | 12.95 | 14.63 | 16.26 | 17.03 |
| 7 | 15.03 | 14.60 | e14.45 | 11.90 | 13.21 | 13.88 | 12.22 | 11.41 | 12.97 | 14.70 | 16.31 | 17.06 |
| 8 | 15.08 | 14.56 | 14.48 | 11.88 | 13.29 | 13.89 | 12.10 | 11.50 | 13.00 | 14.75 | 16.37 | 17.09 |
| 9 | 15.13 | 14.54 | 14.45 | 11.87 | 13.27 | 13.92 | 12.01 | 11.49 | 13.03 | 14.81 | 16.42 | 17.13 |
| 10 | 15.18 | 14.50 | 14.40 | 11.87 | 13.22 | 13.92 | 11.96 | 11.54 | 13.08 | 14.88 | 16.47 | 17.16 |
| 11 | 15.21 | 14.48 | 14.30 | 11.89 | 13.25 | 13.85 | 11.93 | 11.58 | 13.13 | 14.95 | 16.53 | 17.20 |
| 12 | 15.23 | 14.46 | 14.16 | 11.86 | 13.28 | 13.82 | 11.91 | 11.64 | 13.19 | 15.00 | 16.58 | 17.23 |
| 13 | 15.28 | 14.41 | 13.93 | 11.91 | 13.26 | 13.89 | 11.87 | 11.71 | 13.23 | 15.05 | 16.61 | 17.27 |
| 14 | 15.33 | 14.44 | 13.65 | 12.02 | 13.28 | 13.91 | 11.80 | 11.76 | 13.26 | 15.07 | 16.66 | 17.31 |
| 15 | 15.33 | 14.47 | 13.35 | 12.02 | 13.35 | 13.86 | 11.72 | 11.79 | 13.31 | 15.11 | 16.68 | 17.35 |
| 16 | 15.40 | 14.51 | 13.11 | 12.07 | 13.39 | 13.87 | 11.57 | 11.87 | 13.37 | 15.17 | 16.68 | 17.38 |
| 17 | 15.42 | 14.52 | 12.80 | 12.16 | 13.41 | 13.86 | 11.41 | 11.94 | 13.42 | 15.24 | 16.67 | 17.41 |
| 18 | 15.42 | 14.54 | 12.55 | 12.16 | 13.38 | 13.90 | 11.32 | 11.96 | 13.49 | 15.30 | 16.67 | 17.44 |
| 19 | 15.42 | 14.50 | 12.32 | 12.24 | 13.39 | 13.91 | 11.20 | 12.03 | 13.53 | 15.34 | 16.67 | 17.46 |
| 20 | 15.42 | 14.48 | 12.13 | 12.32 | 13.46 | 13.89 | 11.18 | 12.10 | 13.61 | 15.39 | 16.66 | 17.46 |
| 21 | 15.35 | 14.55 | 11.98 | 12.39 | 13.45 | 13.83 | 11.18 | 12.14 | 13.67 | 15.45 | 16.65 | 17.45 |
| 22 | 15.34 | 14.61 | 11.84 | 12.42 | 13.51 | 13.86 | 11.15 | 12.20 | 13.73 | 15.51 | 16.67 | 17.44 |
| 23 | 15.34 | 14.63 | 11.76 | 12.48 | 13.55 | 13.80 | 11.21 | 12.27 | 13.79 | 15.57 | 16.68 | 17.45 |
| 24 | 15.40 | 14.60 | 11.68 | 12.54 | 13.56 | 13.71 | 11.23 | 12.33 | 13.87 | 15.62 | 16.71 | 17.44 |
| 25 | 15.43 | 14.60 | 11.63 | 12.63 | 13.59 | 13.62 | 11.32 | 12.40 | 13.94 | 15.66 | 16.71 | 17.44 |
| 26 | 15.40 | 14.63 | 11.61 | 12.69 | 13.64 | 13.54 | e11.28 | 12.45 | 13.99 | 15.71 | 16.72 | 17.45 |
| 27 | 15.36 | 14.64 | 11.63 | 12.71 | 13.65 | 13.46 | 11.25 | 12.50 | 14.06 | 15.76 | 16.74 | 17.47 |
| 28 | 15.39 | 14.58 | 11.63 | 12.74 | 13.67 | 13.44 | 11.30 | 12.55 | 14.13 | 15.81 | 16.77 | 17.46 |
| 29 | 15.34 | 14.54 | 11.59 | 12.81 | 13.69 | 13.39 | 11.30 | 12.62 | 14.20 | 15.85 | 16.80 | 17.44 |
| 30 | 15.33 | 14.61 | 11.59 | 12.86 | --- | 13.34 | 11.23 | 12.67 | 14.27 | 15.89 | 16.83 | 17.38 |
| 31 | 15.20 | --- | 11.67 | 12.94 | --- | 13.30 | --- | 12.71 | --- | 15.95 | 16.85 | --- |
| MEAN | 15.22 | 14.60 | 13.10 | 12.20 | 13.37 | 13.75 | 11.78 | 11.90 | 13.41 | 15.18 | 16.55 | 17.27 |
| LOW | 15.43 | 15.06 | 14.61 | 12.94 | 13.69 | 13.92 | 13.25 | 12.71 | 14.27 | 15.95 | 16.85 | 17.47 |
| HIGH | 14.73 | 14.41 | 11.59 | 11.72 | 13.03 | 13.30 | 11.15 | 11.22 | 12.75 | 14.34 | 16.00 | 16.89 |

e Estimated

415433070583302. Middleborough well MTW 82.

LOCATION.--Lat 41° 54'33", long 70° 58'33", Plymouth County, Hydrologic Unit 01090004, 15 ft southeast of southbound side of Interstate 495 and 435 ft southeast of Puddingshear Brook in Middleborough.

Owner: U.S. Geological Survey.

AQUIFER.--Glacial till of Pleistocene age.

WELL CHARACTERISTICS.--Augered observation water-table well, diameter 2.0 in., depth 26.5 ft, screened 24.5 to 26.5 ft.

INSTRUMENTATION.--Monthly measurement with electric or chalked tape.

DATUM.--Elevation of land-surface datum is 45 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 3.5 ft above land-surface datum.

PERIOD OF RECORD.--January 1965 to current year. Prior to October 1974, published in Massachusetts Hydrologic-Data Report No. 17.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.50 ft below land-surface datum, Mar. 24, 1983; lowest measured, 17.58 ft below land-surface datum, Oct. 24, 1980.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|-----------------|-------------|---------|-------------|--------------|-------------|--------|-------------|--------------|-------------|--------|-------------|
| OCT 22 | 13.43 | DEC 22 | 3.50 | FEB 24 | 8.81 | APR 28 | 4.38 | JUN 23 | 10.57 | AUG 25 | 14.13 |
| NOV 19 | 11.50 | JAN 21 | 5.86 | MAR 26 | 9.13 | MAY 26 | 6.78 | JUL 21 | 13.61 | SEP 30 | 12.28 |
| WATER YEAR 2004 | | HIGHEST | 3.50 | DEC 22, 2003 | | LOWEST | 14.13 | AUG 25, 2004 | | | |

GROUND-WATER LEVELS IN MASSACHUSETTS

PLYMOUTH COUNTY--Continued

415453070434901. Plymouth well PWW 22.

LOCATION.--Lat 41° 54' 53", long 70° 43' 49", Plymouth County, Hydrologic Unit 01090004, 10 ft from northeast corner of main building at Plymouth Airport.

Owner: U.S. Geological Survey.

AQUIFER.--Glacial outwash of Pleistocene age.

WELL CHARACTERISTICS.--Augered observation water-table well, diameter 2.0 in., depth 40 ft, screened 30 to 40 ft; prior to August 1990, driven observation water-table well, diameter 1.25 in., depth 42 ft, screened 40 to 42 ft at same location.

INSTRUMENTATION.--Monthly measurement with electric or chalked tape.

DATUM.--Elevation of land-surface datum is 145 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, at land-surface datum.

PERIOD OF RECORD.--November 1956 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 19.82 ft below land-surface datum, May 26, 1958; lowest measured, 28.99 ft below land-surface datum, Jan. 28, 1966.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|------------|-------------|---------|-------------|--------------|-------------|--------|-------------|--------------|-------------|--------|-------------|
| OCT 22 | 23.60 | DEC 22 | 23.35 | FEB 25 | 23.52 | APR 30 | 23.44 | JUN 23 | 23.82 | AUG 25 | 24.82 |
| NOV 19 | 24.07 | JAN 23 | 23.23 | MAR 26 | 24.11 | MAY 26 | 23.50 | JUL 23 | 24.36 | SEP 30 | 25.25 |
| WATER YEAR | 2004 | HIGHEST | 23.23 | JAN 23, 2004 | | LOWEST | 25.25 | SEP 30, 2004 | | | |

415217070393102. Plymouth well PWW 494.

LOCATION.--Lat 41° 52' 17", long 70° 39' 31", Plymouth County, Hydrologic Unit 01090002, in Myles Standish State Forest, in gravel pit 50 ft southeast of intersection of Lower College Pond Road and Crawford Road, approximately 5 mi northeast of South Carver.

Owner: Massachusetts Department of Environmental Management.

AQUIFER.--Glacial outwash of Pleistocene age.

WELL CHARACTERISTICS.--Driven observation water-table well, diameter 1.5 in., depth 47 ft, screened 42 to 47 ft.

INSTRUMENTATION.--Monthly measurement with electric or chalked tape.

DATUM.--Elevation of land-surface datum is 129 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 1.17 ft above land-surface datum.

PERIOD OF RECORD.--August 1985 to current year. Prior to April 1989, three random measurements.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 24.28 ft below land-surface datum, July 28, 1998; lowest measured, 33.23 ft below land-surface datum, Nov. 24, 1993.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|------------|-------------|---------|-------------|--------------|-------------|--------|-------------|--------------|-------------|--------|-------------|
| OCT 22 | 29.74 | DEC 22 | 29.63 | FEB 25 | 29.69 | APR 29 | 29.49 | JUN 23 | 29.84 | AUG 25 | 30.58 |
| NOV 19 | 30.03 | JAN 23 | 29.48 | MAR 26 | 30.03 | MAY 26 | 29.58 | JUL 23 | 30.23 | SEP 30 | 31.02 |
| WATER YEAR | 2004 | HIGHEST | 29.48 | JAN 23, 2004 | | LOWEST | 31.02 | SEP 30, 2004 | | | |

414518070435701. Wareham well WFW 51.

LOCATION.--Lat 41° 45' 18", long 70° 43' 57", Plymouth County, Hydrologic Unit 01090002, 50 ft east of U.S. Highway 6 in Wareham.

Owner: Private owner.

AQUIFER.--Glacial outwash of Pleistocene age.

WELL CHARACTERISTICS.--Dug observation water-table well, diameter 30 in., depth 12.5 ft, cased with tile to 12.5 ft, open end. Prior to September 1980, well depth was 12.5 ft.

INSTRUMENTATION.--Monthly measurement with electric or chalked tape.

DATUM.--Elevation of land-surface datum is 21 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top edge of tile casing, 2.3 ft above land-surface datum.

PERIOD OF RECORD.--July 1959 to current year. Prior to October 1974, published in Massachusetts Hydrologic-Data Report No. 17.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.28 ft below land-surface datum, May 28, 2003; lowest measured, dry, several months in water years 1980-84.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|------------|-------------|---------|-------------|--------------|-------------|--------|-------------|--------------|-------------|--------|-------------|
| OCT 22 | 9.68 | DEC 22 | 8.16 | FEB 25 | 8.31 | APR 28 | 7.16 | JUN 23 | 8.41 | AUG 25 | 9.00 |
| NOV 20 | 9.52 | JAN 21 | 7.89 | MAR 26 | 8.09 | MAY 26 | 7.90 | JUL 21 | 9.04 | SEP 29 | 9.51 |
| WATER YEAR | 2004 | HIGHEST | 7.16 | APR 28, 2004 | | LOWEST | 9.68 | OCT 22, 2003 | | | |

GROUND-WATER LEVELS IN MASSACHUSETTS

WORCESTER COUNTY

422058072085501. Hardwick well HHW 1.

LOCATION.--Lat 42° 20' 58", long 72° 08' 55", Worcester County, Hydrologic Unit 01080204, 30 ft southeast of State Highway 32 and 0.6 mi southwest of Hardwick Road in Hardwick.

Owner: U.S. Geological Survey.

AQUIFER.--Glacial sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Augered observation water-table well, diameter 2.0 in., depth 33.2 ft, screened 31.2 to 33.2 ft.

INSTRUMENTATION.--Monthly measurement with electric or chalked tape.

DATUM.--Elevation of land-surface datum is 580 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 3.5 ft above land-surface datum.

PERIOD OF RECORD.--January 1965 to current year. Prior to October 1974, published in Massachusetts Hydrologic-Data Report No. 17.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 9.17 ft below land-surface datum, Apr. 24, 2000; lowest measured, 17.77 ft below land-surface datum, Nov. 22, 1965.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|-----------------|---------------|--------------|--------------|--------------|-------------|--------|-------------|--------|-------------|--------|-------------|
| OCT 25 | 15.17 | DEC 24 | 10.44 | FEB 22 | 15.09 | APR 19 | 10.20 | JUN 24 | 14.74 | AUG 30 | 16.20 |
| NOV 23 | 13.99 | JAN 24 | 13.57 | MAR 27 | 14.15 | MAY 26 | 13.52 | JUL 26 | 15.73 | SEP 22 | 15.43 |
| WATER YEAR 2004 | HIGHEST 10.20 | APR 19, 2004 | LOWEST 16.20 | AUG 30, 2004 | | | | | | | |

422020072145901. Hardwick well HHW 31.

LOCATION.--Lat 42° 20' 20", long 72° 14' 59", Worcester County, Hydrologic Unit 01080204, 5 ft north of Patrill Hollow Road and approximately 250 ft west of Muddy Brook in Hardwick.

Owner: Town of Hardwick.

AQUIFER.--Glacial sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Augered observation water-table well, diameter 2.0 in., depth 71.0 ft, screened 67.0 ft to 71.0 ft.

INSTRUMENTATION.--Monthly measurement with electric or chalked tape.

DATUM.--Elevation of land-surface datum is 490 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 3.0 ft above land-surface datum.

REMARKS.--Ground-water level, since about April 2003, affected by nearby Muddy Brook, which is affected by backwater from beaver activity.

PERIOD OF RECORD.--November 1984 to September 2004 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 9.42 ft below land-surface datum (see REMARKS) Dec. 19, 2003; lowest measured, 12.34 ft below land-surface datum, Nov. 21, 1997.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|-----------------|--------------|--------------|-------------|--------------|-------------|--------|-------------|
| OCT 24 | 9.79 | NOV 21 | 9.79 | DEC 19 | 9.42 | JAN 21 | 9.85 |
| WATER YEAR 2004 | HIGHEST 9.42 | DEC 19, 2003 | LOWEST 9.85 | JAN 21, 2004 | | | |

420610071421402. Northbridge well NXW 54.

LOCATION.--Lat 42° 06' 10", long 71° 42' 14", Worcester County, Hydrologic Unit 01090003, about 100 ft northeast of the intersection of State Highway 146 and Main Street in Northbridge.

Owner: U.S. Geological Survey.

AQUIFER.--Glacial sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Augered observation water-table well, diameter 2 in., depth 12 ft, screened 10 to 12 ft.

INSTRUMENTATION.--Monthly measurement with electric or chalked tape.

DATUM.--Elevation of land-surface datum is 370 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.87 ft above land-surface datum, 2.0 ft prior to September 1992.

PERIOD OF RECORD.--August 1984 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.02 ft below land-surface datum, June 27, 1998; lowest measured, 5.14 ft below land-surface datum, Oct. 22, 1986.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|-----------------|--------------|--------------|-------------|--------------|-------------|--------|-------------|--------|-------------|--------|-------------|
| OCT 25 | 4.18 | DEC 24 | 3.41 | FEB 22 | 4.22 | APR 30 | 3.24 | JUN 29 | 4.04 | AUG 31 | 4.25 |
| NOV 23 | 3.91 | JAN 24 | 3.93 | MAR 27 | 4.23 | MAY 21 | 3.57 | JUL 30 | 4.23 | SEP 30 | 4.06 |
| WATER YEAR 2004 | HIGHEST 3.24 | APR 30, 2004 | LOWEST 4.25 | AUG 31, 2004 | | | | | | | |

GROUND-WATER LEVELS IN MASSACHUSETTS

WORCESTER COUNTY--Continued

422906072124301. Petersham well PHW 16.

LOCATION.--Lat 42° 29'06", long 72° 12'43", Worcester County, Hydrologic Unit 01080204, 0.6 mi east of West Street Cemetery, 500 ft south of West Street, and 100 ft west of access road in Petersham.

Owner: Private owner.

AQUIFER.--Glacial sand and gravel of the Pleistocene age.

WELL CHARACTERISTICS.--Augered observation water-table well, diameter 2.0-in. PVC, depth 39.0 ft, screened 29.0 to 39.0 ft.

INSTRUMENTATION.--Monthly measurement with electric or chalked tape.

DATUM.--Elevation of land-surface datum is 790 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 3.0 ft above land-surface datum.

PERIOD OF RECORD.--January 1984 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.71 ft below land-surface datum, June 5, 1984; lowest measured, 16.93 ft below land-surface datum, Dec. 19, 2001.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|-----------------|-------------|---------|-------------|--------------|-------------|--------|-------------|--------------|-------------|--------|-------------|
| OCT 21 | 14.89 | DEC 16 | 12.93 | FEB 18 | 14.35 | MAY 20 | 12.81 | JUL 26 | 15.03 | SEP 22 | 15.13 |
| NOV 18 | 13.39 | JAN 26 | 13.42 | APR 23 | 9.44 | JUN 28 | 14.24 | AUG 17 | 15.45 | | |
| WATER YEAR 2004 | | HIGHEST | 9.44 | APR 23, 2004 | | LOWEST | 15.45 | AUG 17, 2004 | | | |

421851071312601. Southborough well SSW 12.

LOCATION.--Lat 42° 18'51", long 71° 31'26", Worcester County, Hydrologic Unit 01070005, 50 ft north of Overlook Drive circle, approximately 0.75 mi northeast of Southborough center.

Owner: Town of Southborough.

AQUIFER.--Glacial till of Pleistocene age.

WELL CHARACTERISTICS.--Drive-washed observation water-table well, diameter 1.25 in., depth 20 ft, screened 18 to 20 ft.

INSTRUMENTATION.--Monthly measurement with electric or chalked tape.

DATUM.--Elevation of land-surface datum is 450 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 0.5 ft above land-surface datum.

PERIOD OF RECORD.--July 1990 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.84 ft below land-surface datum, Apr. 1, 1993; lowest measured, 16.90 ft below land-surface datum, Dec. 20, 2001.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|-----------------|-------------|---------|-------------|--------------|-------------|--------|-------------|--------------|-------------|--------|-------------|
| OCT 27 | 9.88 | DEC 22 | 2.10 | FEB 24 | 6.46 | APR 28 | 1.64 | JUN 24 | 8.06 | AUG 19 | 10.22 |
| NOV 25 | 5.18 | JAN 21 | 5.31 | MAR 29 | 2.83 | MAY 26 | 5.83 | JUL 21 | 10.24 | SEP 22 | 9.19 |
| WATER YEAR 2004 | | HIGHEST | 1.64 | APR 28, 2004 | | LOWEST | 10.24 | JUL 21, 2004 | | | |

422805071480801. Sterling well SYW 1.

LOCATION.--Lat 42° 28'05", long 71° 48'08", Worcester County, Hydrologic Unit 01070004, 45 ft northeast of Justice Hill Road and 0.8 mi west of South Nelson Road in Sterling.

Owner: Private owner.

AQUIFER.--Glacial till of Pleistocene age.

WELL CHARACTERISTICS.--Dug observation water-table well, diameter 24 in., depth 15 ft, cased with stone to 15 ft, open end.

INSTRUMENTATION.--Monthly measurement with electric or chalked tape.

DATUM.--Elevation of land-surface datum is 710 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top edge of angle iron, at land-surface datum.

PERIOD OF RECORD.--May 1947 to current year. Prior to October 1974, published in Massachusetts Hydrologic-Data Report No. 17.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.71 ft below land-surface datum, Feb. 23, 2003; dry, Nov. 28, 1964.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|-----------------|-------------|---------|-------------|--------------|-------------|--------|-------------|--------------|-------------|--------|-------------|
| OCT 25 | 7.86 | DEC 24 | 1.80 | FEB 22 | 4.05 | APR 19 | 2.47 | JUN 23 | 5.77 | AUG 20 | 10.10 |
| NOV 23 | 3.50 | JAN 24 | 3.75 | MAR 27 | 2.47 | MAY 20 | 3.27 | JUL 22 | 8.65 | SEP 23 | 7.24 |
| WATER YEAR 2004 | | HIGHEST | 1.80 | DEC 24, 2003 | | LOWEST | 10.10 | AUG 20, 2004 | | | |

GROUND-WATER LEVELS IN MASSACHUSETTS

WORCESTER COUNTY--Continued

422520071483001. Sterling well SYW 177.

LOCATION.--Lat 42°25'20", long 71°48'30", Worcester County, Hydrologic Unit 01070004, 20 ft east of State Route 140 and 200 ft northwest of Fox Run Road in Sterling, MA.

Owner: Metropolitan District Commission.

AQUIFER.--Glacial sand and gravel of pleistocene age.

WELL CHARACTERISTICS.--Augered observation water-table well, diameter 2.0 in., depth 24.4 ft, screened 14.4 to 24.4 ft.

INSTRUMENTATION.--Monthly or more frequent measurements with electric or chalked tape.

DATUM.--Elevation of land-surface datum is 505 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.2 ft above land-surface datum.

PERIOD OF RECORD.--June 1995 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 12.40 ft below land-surface datum, Jan. 29, 1996; lowest measured, 16.17 ft below land-surface datum, Sept. 29, 2000.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|-----------------|-------------|---------|-------------|--------------|-------------|--------|-------------|--------------|-------------|--------|-------------|
| OCT 25 | 14.90 | DEC 24 | 13.66 | FEB 22 | 14.75 | APR 19 | 13.20 | JUN 23 | 14.71 | AUG 20 | 15.33 |
| NOV 23 | 14.35 | JAN 24 | 14.24 | MAR 27 | 14.39 | MAY 20 | 14.18 | JUL 22 | 15.07 | SEP 23 | 14.55 |
| WATER YEAR 2004 | | HIGHEST | 13.20 | APR 19, 2004 | | LOWEST | 15.33 | AUG 20, 2004 | | | |

23717072043101. Templeton well TMW 3.

LOCATION.--Lat 42°37'17", long 72°04'31", Worcester County, Hydrologic Unit 01080202, 60 ft east of U.S. Highway 202 and 0.2 mi south of Winchendon town line in Templeton.

Owner: U.S. Geological Survey.

AQUIFER.--Glacial sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Augered observation water-table well, diameter 1.25 in., depth 13.8 ft, screened 11.8 to 13.8 ft.

INSTRUMENTATION.--Monthly measurement with electric or chalked tape.

DATUM.--Elevation of land-surface datum is 900 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 4.2 ft above land-surface datum.

PERIOD OF RECORD.--December 1957 to current year. Prior to October 1974, published in Massachusetts Hydrologic-Data Report No. 17.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.99 ft below land-surface datum, Jan. 25, 1996; lowest measured, 5.10 ft below land-surface datum, Sept. 29, 1964.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|-----------------|-------------|---------|-------------|--------------|-------------|--------|-------------|--------------|-------------|--------|-------------|
| OCT 25 | 3.60 | DEC 24 | 2.30 | FEB 22 | 3.80 | MAY 04 | 3.29 | JUL 01 | 4.01 | SEP 22 | 3.22 |
| NOV 23 | 3.22 | JAN 24 | 3.62 | MAR 27 | 3.27 | 20 | 3.66 | 26 | 3.88 | | |
| WATER YEAR 2004 | | HIGHEST | 2.30 | DEC 24, 2003 | | LOWEST | 4.01 | JUL 01, 2004 | | | |

420314071514001. Webster well WLW 1.

LOCATION.--Lat 42°03'14", long 71°51'40", Worcester County, Hydrologic Unit 01100001, 100 ft east of State Highway 52 and 100 ft south of Memorial Beach Drive in Webster.

Owner: Town of Webster.

AQUIFER.--Glacial sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Driven observation water-table well, diameter 2.5 in., depth 27.0 ft, cased to 27.0 ft, open end.

INSTRUMENTATION.--Monthly measurement with electric or chalked tape.

DATUM.--Elevation of land-surface datum is 500 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 3.4 ft above land-surface datum.

PERIOD OF RECORD.--September 1958 to November 1979, October 1981 to current year. Prior to October 1974, published in Massachusetts Hydrologic-Data Report No. 17.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 10.28 ft below land-surface datum, Mar. 25, 1968; lowest measured, 17.91 ft below land-surface datum, Nov. 23, 2001.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|-----------------|-------------|---------|-------------|--------------|-------------|--------|-------------|--------------|-------------|--------|-------------|
| OCT 25 | 14.72 | DEC 24 | 13.35 | FEB 22 | 14.71 | APR 30 | 12.31 | JUN 29 | 14.77 | AUG 31 | 15.61 |
| NOV 23 | 13.95 | JAN 24 | 13.73 | MAR 27 | 14.48 | MAY 21 | 13.72 | JUL 30 | 14.88 | SEP 30 | 15.80 |
| WATER YEAR 2004 | | HIGHEST | 12.31 | APR 30, 2004 | | LOWEST | 15.80 | SEP 30, 2004 | | | |

GROUND-WATER LEVELS IN MASSACHUSETTS

WORCESTER COUNTY--Continued

422341071464901. West Boylston well WSW 26.

LOCATION.--Lat 42°23'41", long 71°46'49", Worcester County, Hydrologic Unit 01070004, 50 ft west of Prescott Street and about 0.2 mi south of Pleasant Street in West Boylston, MA.

Owner: Metropolitan District Commission.

AQUIFER.--Glacial sand and gravel of pleistocene age.

WELL CHARACTERISTICS.--Augered observation water-table well, diameter 2.0 in., depth 16.8 ft, screened 6.8 to 16.8 ft.

INSTRUMENTATION.--Monthly or more frequent measurements with electric or chalked tape.

DATUM.--Elevation of land-surface datum is 485 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 3.0 ft above land-surface datum.

PERIOD OF RECORD.--June 1995 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.30 ft below land-surface datum, Jan. 29, 1996; lowest measured, 11.48 ft below land-surface datum, Oct. 27, 1997.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|-----------------|-------------|--------|--------------|--------|-------------|--------------|-------------|--------|-------------|--------|-------------|
| OCT 25 | 7.10 | DEC 24 | 3.77 | FEB 22 | 6.95 | APR 19 | 2.34 | JUN 23 | 7.13 | AUG 20 | 9.37 |
| NOV 23 | 5.05 | JAN 24 | 5.45 | MAR 27 | 5.85 | MAY 20 | 5.35 | JUL 22 | 8.27 | SEP 23 | 6.75 |
| WATER YEAR 2004 | HIGHEST | 2.34 | APR 19, 2004 | LOWEST | 9.37 | AUG 20, 2004 | | | | | |

421410072081301. West Brookfield well WUW 2.

LOCATION.--Lat 42° 14'10", long 72° 08'13", Worcester County, Hydrologic Unit 01080204, about 50 ft north of State Highway 9 and about 500 ft south of State Highway 67 in West Brookfield.

Owner: U.S. Geological Survey.

AQUIFER.--Glacial sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Augered observation water-table well, diameter 1.25 in., depth 43.0 ft, screened 40 to 43 ft.

INSTRUMENTATION.--Monthly measurement with electric or chalked tape.

DATUM.--Elevation of land-surface datum is 630 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 0.3 ft above land-surface datum.

PERIOD OF RECORD.--October 1959 to current year. Prior to October 1974, published in Massachusetts Hydrologic-Data Report No. 17.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 15.79 ft below land-surface datum, May 22, 1983; lowest measured, 23.63 ft below land-surface datum, Feb. 21, 1966.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|-----------------|-------------|--------|--------------|--------|-------------|--------------|-------------|--------|-------------|--------|-------------|
| OCT 25 | 18.65 | DEC 24 | 18.64 | FEB 22 | 18.67 | MAY 26 | 17.85 | JUL 26 | 18.74 | SEP 22 | 19.20 |
| NOV 23 | 19.00 | JAN 24 | 18.28 | APR 21 | 18.38 | JUN 24 | 18.28 | AUG 12 | 18.96 | | |
| WATER YEAR 2004 | HIGHEST | 17.85 | MAY 26, 2004 | LOWEST | 19.20 | SEP 22, 2004 | | | | | |

424204072015201. Winchendon well XNW 13.

LOCATION.--Lat 42° 42'04", long 72° 01'52", Worcester County, Hydrologic Unit 01080202, about 50 ft east of Forristall Road, 0.2 mi north of Elmwood Road, and 1.6 mi northeast of Winchendon.

Owner: Private owner.

AQUIFER.--Glacial till of Pleistocene age.

WELL CHARACTERISTICS.--Dug observation water-table well, diameter 24 in., depth 13.5 ft, cased with stone to 13.5 ft, open end.

INSTRUMENTATION.--Monthly measurement with electric or chalked tape.

DATUM.--Elevation of land-surface datum is 1,209.36 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of extension pipe, 3.8 ft above land-surface datum.

PERIOD OF RECORD.--October 1939 to current year. Prior to October 1974, published in Massachusetts Hydrologic-Data Report No. 17.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.86 ft below land-surface datum, Mar. 20, 1948; lowest measured, 13.50 ft below land-surface datum, Nov. 19, 1993.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|-----------------|-------------|--------|--------------|--------|-------------|--------------|-------------|--------|-------------|--------|-------------|
| OCT 25 | 7.73 | DEC 24 | 3.29 | FEB 22 | 6.17 | MAY 04 | 3.02 | JUL 01 | 7.42 | AUG 17 | 10.25 |
| NOV 23 | 4.45 | JAN 24 | 4.85 | MAR 27 | 4.24 | 20 | 4.18 | 26 | 9.10 | SEP 22 | 6.78 |
| WATER YEAR 2004 | HIGHEST | 3.02 | MAY 04, 2004 | LOWEST | 10.25 | AUG 17, 2004 | | | | | |

GROUND-WATER LEVELS IN RHODE ISLAND

KENT COUNTY

414223071453701. Coventry well COW 342.

LOCATION.--Lat 41° 42' 23", long 71° 45' 37", Kent County, Hydrologic Unit 01090004, town of Coventry, Plainfield Pike (Rt. 14) 1/4 mi from intersection with Rt. 117.

Owner: Private owner.

AQUIFER.--Sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Dug observation water-table well, diameter 30 in., depth 13.1 ft, cased with stone to 13.1 ft, open end.

INSTRUMENTATION.--Monthly measurement with chalked tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land-surface datum is 380 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of well casing, 0.29 ft above land-surface datum; 2.18 ft above land-surface datum prior to Aug. 24, 2000.

PERIOD OF RECORD.--October 1953 to December 1961, December 1990 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.14 ft below land-surface datum, Apr. 22, 2004; lowest measured, 11.91 ft below land-surface datum, Aug. 24, 1999.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|------------|-------------|---------|-------------|--------------|-------------|--------|-------------|--------------|-------------|--------|-------------|
| OCT 07 | 11.38 | NOV 25 | 8.80 | JAN 27 | 8.71 | APR 09 | 6.61 | MAY 20 | 8.41 | AUG 25 | 10.73 |
| 20 | 10.02 | DEC 05 | 9.12 | FEB 25 | 9.22 | 22 | 6.14 | JUN 23 | 9.81 | SEP 28 | 10.82 |
| NOV 07 | 7.91 | 29 | 6.75 | MAR 30 | 8.56 | MAY 06 | 7.22 | JUL 28 | 10.87 | | |
| WATER YEAR | 2004 | HIGHEST | 6.14 | APR 22, 2004 | | LOWEST | 11.38 | OCT 07, 2003 | | | |

414022071332801. Coventry well COW 411.

LOCATION.--Lat 41° 40' 22", long 71° 33' 28", Kent County, Hydrologic Unit 01090004, town of Coventry, about 75 ft west of house on Powhatten Avenue, 1.3 mi southeast of Washington.

Owner: Private owner.

AQUIFER.--Sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Dug observation water-table well, diameter 24 in., depth 26 ft, cased with concrete to 26 ft, open end.

INSTRUMENTATION.--Monthly measurement with chalked tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land-surface datum is 260 ft above National Geodetic Vertical Datum of 1929. Measuring point: Hole in top of concrete cover, 1.24 ft above land-surface datum.

PERIOD OF RECORD.--October 1961 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 16.43 ft below land-surface datum, Apr. 23, 1983; dry on Oct. 25, 1986.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|------------|-------------|---------|-------------|--------------|-------------|--------|-------------|--------------|-------------|--------|-------------|
| OCT 07 | 22.21 | NOV 24 | 22.05 | JAN 27 | 21.90 | APR 09 | 20.95 | MAY 20 | 20.60 | AUG 25 | 21.91 |
| 20 | 22.32 | DEC 05 | 22.30 | FEB 25 | 22.25 | 22 | 20.13 | JUN 23 | 21.60 | SEP 28 | 22.15 |
| NOV 07 | 21.77 | 30 | 21.24 | MAR 30 | 22.16 | MAY 06 | 20.18 | JUL 28 | 22.25 | | |
| WATER YEAR | 2004 | HIGHEST | 20.13 | APR 22, 2004 | | LOWEST | 22.32 | OCT 20, 2003 | | | |

414315071410701. Coventry well COW 466.

LOCATION.--Lat 41° 43' 15", long 71° 41' 07", Kent County, Hydrologic Unit 01090004, town of Coventry, Audubon Society, Parker Woodland. Maple Valley Road at Flat River.

Owner: Audobon Society.

AQUIFER.--Till of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 2.0 in., depth 17.8 ft, cased to 7.6 ft, screened from 7.6 ft to 17.0 ft.

INSTRUMENTATION.--Monthly measurement with electric or chalked tape by Rhode Island Department of Environmental Management.

DATUM.--Elevation of land-surface datum is 345 ft above National Geodetic Vertical Datum of 1929. Measuring point: Notch in PVC casing, 0.8 ft above land-surface datum.

PERIOD OF RECORD.--September 1992 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.91 ft below land-surface datum, Nov. 20, 1995; lowest measured, 5.61 ft below land-surface datum, Aug. 26, 2002.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|------------|-------------|---------|-------------|--------------|-------------|--------|-------------|--------------|-------------|--------|-------------|
| OCT 07 | 3.61 | NOV 25 | 2.88 | FEB 24 | 2.95 | APR 09 | 2.70 | MAY 20 | 2.96 | JUL 28 | 4.50 |
| 20 | 2.97 | DEC 05 | 2.98 | 25 | 3.00 | 22 | 2.70 | 24 | 2.90 | 29 | 4.47 |
| 29 | 2.08 | 29 | 2.77 | MAR 25 | 2.79 | 28 | 2.64 | JUN 23 | 3.57 | AUG 25 | 3.67 |
| NOV 07 | 2.75 | JAN 27 | 3.01 | 30 | 2.88 | MAY 06 | 2.78 | 28 | 3.85 | SEP 28 | 3.62 |
| WATER YEAR | 2004 | HIGHEST | 2.08 | OCT 29, 2003 | | LOWEST | 4.50 | JUL 28, 2004 | | | |

GROUND-WATER LEVELS IN RHODE ISLAND

KENT COUNTY--Continued

414106071223901. Warwick well WCW 59.

LOCATION.--Lat 41° 41' 06", long 71° 22' 39", Kent County, Hydrologic Unit 01090004, town of Warwick, Warwick Neck, Our Lady of Providence Seminary. Former Senator Aldrich mansion. Next to Rocky Point Amusement Park.

Owner: Our Lady of Providence Seminary.

AQUIFER.--Till of Pleistocene age.

WELL CHARACTERISTICS.--Dug observation water-table well, diameter 30 in., depth 27.0 ft, cased with stone to 27.0 ft, open end.

INSTRUMENTATION.--Monthly measurement with chalked tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land-surface datum is 125 ft above National Geodetic Vertical Datum of 1929. Measuring point: hole in cement cap, 3.26 ft above land-surface datum; prior to June 18, 2003, spray painted arrow on rock, 3.00 ft above land-surface datum.

PERIOD OF RECORD.--April 1949 to December 1955, November 1990 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.46 ft below land-surface datum, Feb. 20, 1993; lowest measured, 24.77 ft below land-surface datum, Oct. 31, 1949.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|-----------------|-------------|---------|-------------|--------------|-------------|--------|-------------|--------------|-------------|--------|-------------|
| OCT 20 | 8.95 | DEC 29 | 4.62 | FEB 25 | 5.14 | APR 22 | 4.60 | JUN 23 | 7.21 | AUG 25 | 9.01 |
| NOV 24 | 5.21 | JAN 27 | 5.45 | MAR 30 | 4.96 | MAY 20 | 5.37 | JUL 28 | 11.01 | SEP 28 | 10.10 |
| WATER YEAR 2004 | | HIGHEST | 4.60 | APR 22, 2004 | | LOWEST | 11.01 | JUL 28, 2004 | | | |

413907071465001. West Greenwich well GWG 181.

LOCATION.--Lat 41° 39' 07", long 71° 46' 50", Kent County, Hydrologic Unit 01090005, town of West Greenwich, about 50 ft from southeast corner of a house 1.3 mi north of intersection of Hazard and Muddy Brook Roads, and 1.8 mi northwest of West Greenwich Center.

Owner: Private owner.

AQUIFER.--Sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Dug observation water-table well, diameter 30 in., depth 18.5 ft, lined with stone to 18.5 ft, shored.

INSTRUMENTATION.--Monthly measurement with chalked tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land-surface datum is 380 ft above National Geodetic Vertical Datum of 1929. Measuring point: Hole in top of concrete cover, 0.54 ft above land-surface datum.

PERIOD OF RECORD.--January 1969 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 12.15 ft below land-surface datum, Jan. 27, 1979; lowest measured, 17.78 ft below land-surface datum, Dec. 22, 1984.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|-----------------|-------------|---------|-------------|--------------|-------------|--------|-------------|--------------|-------------|--------|-------------|
| OCT 07 | 16.13 | NOV 25 | 15.60 | JAN 27 | 15.57 | APR 09 | 13.85 | MAY 20 | 15.29 | AUG 25 | 16.41 |
| 20 | 16.18 | DEC 05 | 15.80 | FEB 25 | 15.76 | 22 | 13.43 | JUN 23 | 16.08 | SEP 28 | 16.30 |
| NOV 07 | 14.58 | 29 | 14.07 | MAR 30 | 15.21 | MAY 06 | 14.62 | JUL 28 | 16.46 | | |
| WATER YEAR 2004 | | HIGHEST | 13.43 | APR 22, 2004 | | LOWEST | 16.46 | JUL 28, 2004 | | | |

413645071332901. West Greenwich well GWG 206.

LOCATION.--Lat 41° 36' 45", long 71° 33' 29", Kent County, Hydrologic Unit 01090004, town of West Greenwich, Hopkins Hill Road.

Owner: Private owner.

AQUIFER.--Till of Pleistocene age.

WELL CHARACTERISTICS.--Dug observation water-table well, diameter 24 in., depth 9.6 ft, cased with stone to 9.6 ft, open end.

INSTRUMENTATION.--Monthly measurement with chalked tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land-surface datum is 374.26 ft above National Geodetic Vertical Datum of 1929. Measuring point: arrow on board over well, 3.05 ft above land-surface datum.

PERIOD OF RECORD.--October 1955 to June 1960, January 1989 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.85 ft below land-surface datum, Oct. 17, 1955; lowest measured, dry, Aug. 26, Sept. 22, Oct. 25, 1993, Sept. 27, 1995, Oct. 23, 1997.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|-----------------|-------------|---------|-------------|--------------|-------------|--------|-------------|--------------|-------------|--------|-------------|
| OCT 07 | 5.10 | NOV 24 | 4.21 | JAN 27 | 4.29 | APR 09 | 3.75 | MAY 20 | 4.10 | AUG 25 | 4.85 |
| 20 | 4.76 | DEC 05 | 4.31 | FEB 25 | 4.15 | 22 | 3.79 | JUN 23 | 4.60 | SEP 28 | 5.02 |
| NOV 07 | 4.06 | 30 | 3.93 | MAR 30 | 3.97 | MAY 06 | 3.68 | JUL 28 | 5.18 | | |
| WATER YEAR 2004 | | HIGHEST | 3.68 | MAY 06, 2004 | | LOWEST | 5.18 | JUL 28, 2004 | | | |

GROUND-WATER LEVELS IN RHODE ISLAND

NEWPORT COUNTY

41322007115501. Little Compton well LTW 142.

LOCATION.--Lat 41° 32'20", long 71° 11'55", Newport County, Hydrologic Unit 01090004, town of Little Compton, East of Rt. 77 at intersection with Old Main Road.

Owner: State of Rhode Island.

AQUIFER.--Till of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 2.0 in., depth 23.1 ft, cased to 12.9 ft, screened from 12.9 ft to 22.3 ft.

INSTRUMENTATION.--Monthly measurement with electric or chalked tape by Rhode Island Department of Environmental Management.

DATUM.--Elevation of land-surface datum is 100 ft above National Geodetic Vertical Datum of 1929. Measuring point: Notch in PVC casing, 1.4 ft above land-surface datum.

PERIOD OF RECORD.--September 1992 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.98 ft below land-surface datum, May 25, 2004; lowest measured, dry, Aug. 25, Sept. 29, Oct. 26, Dec. 2, 1993.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|-----------------|-------------|---------|-------------|--------------|-------------|--------|-------------|--------------|-------------|--------|-------------|
| OCT 28 | 17.40 | DEC 29 | 9.53 | FEB 25 | 15.43 | APR 28 | 9.94 | JUN 28 | 16.42 | AUG 30 | 16.12 |
| NOV 26 | 13.15 | JAN 26 | 14.04 | MAR 29 | 13.83 | MAY 25 | 2.98 | JUL 29 | 17.98 | SEP 21 | 15.96 |
| WATER YEAR 2004 | | HIGHEST | 2.98 | MAY 25, 2004 | | LOWEST | 17.98 | JUL 29, 2004 | | | |

413325071152401. Portsmouth well POW 551.

LOCATION.--Lat 41° 33'25", long 71° 15'24", Newport County, Hydrologic Unit 01090004, town of Portsmouth, State police barracks, Portsmouth Terrace on East Main St. (Rt. 138); just south of Union St.

Owner: State of Rhode Island.

AQUIFER.--Till of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 2.0 in., depth 51.9 ft, cased to 41.7 ft, screened from 41.7 ft to 51.1 ft.

INSTRUMENTATION.--Monthly measurement with electric or chalked tape by Rhode Island Department of Environmental Management.

DATUM.--Elevation of land-surface datum is 245 ft above National Geodetic Vertical Datum of 1929. Measuring point: Notch in PVC casing, 2.50 ft above land-surface datum.

PERIOD OF RECORD.--September 1992 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 24.42 ft below land-surface datum, Mar. 21, 2000; lowest measured, dry, Sept. 29, Oct. 26, 1993.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|-----------------|-------------|---------|-------------|--------------|-------------|--------|-------------|--------------|-------------|--------|-------------|
| OCT 30 | 43.41 | DEC 30 | 30.68 | FEB 26 | 40.25 | APR 27 | 29.98 | JUN 29 | 41.54 | SEP 21 | 41.92 |
| NOV 26 | 36.51 | JAN 28 | 37.08 | MAR 30 | 37.14 | MAY 25 | 37.14 | AUG 27 | 43.54 | | |
| WATER YEAR 2004 | | HIGHEST | 29.98 | APR 27, 2004 | | LOWEST | 43.54 | AUG 27, 2004 | | | |

413442071093801. Tiverton well TIW 274.

LOCATION.--Lat 41° 34'42", long 71° 09'38", Newport County, Hydrologic Unit 01090004, town of Tiverton, 305 Lake Road.

Owner: Private owner.

AQUIFER.--Till of Pleistocene age.

WELL CHARACTERISTICS.--Dug observation water-table well, diameter 36 in., depth 13.18 ft, cased with concrete to 13.18 ft, open end.

INSTRUMENTATION.--Monthly measurement with electric or chalked tape by Rhode Island Department of Environmental Management.

DATUM.--Elevation of land-surface datum is 160 ft above National Geodetic Vertical Datum of 1929. Measuring point: Spray painted arrow on cross beam, 2.12 ft above land-surface datum; prior to July 18, 2001, 1.90 ft above land-surface datum.

PERIOD OF RECORD.--December 1990 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.43 ft below land-surface datum, Mar. 27, 2002; lowest measured, 13.61 ft below land-surface datum, June. 26, 2000.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|-----------------|-------------|---------|-------------|--------------|-------------|--------|-------------|--------------|-------------|--------|-------------|
| OCT 28 | 3.98 | DEC 29 | 1.49 | FEB 26 | 1.95 | APR 28 | 0.82 | JUN 28 | 5.74 | AUG 30 | 6.34 |
| NOV 26 | 1.30 | JAN 26 | 3.74 | MAR 30 | 1.29 | MAY 26 | 2.98 | JUL 29 | 3.26 | SEP 21 | 5.22 |
| WATER YEAR 2004 | | HIGHEST | 0.82 | APR 28, 2004 | | LOWEST | 6.34 | AUG 30, 2004 | | | |

GROUND-WATER LEVELS IN RHODE ISLAND

PROVIDENCE COUNTY

415710071402201. Burrillville well BUW 187.

LOCATION.--Lat 41° 57' 10", long 71° 40' 22", Providence County, Hydrologic Unit 01090003, town of Burrillville, 25 ft east of road and 75 ft southwest of a house 0.6 mi north of intersection of Harrisville and Lapham Farm Roads, and 0.9 mi south of Harrisville.

Owner: Brothers of the Sacred Heart.

AQUIFER.--Sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Dug observation water-table well, diameter 24 in., depth 19.8 ft, lined with stone to 19.8 ft, shored.

INSTRUMENTATION.--Monthly measurement with chalked tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land-surface datum is 462 ft above National Geodetic Vertical Datum of 1929. Measuring point: Hole in top of concrete cover, 0.58 ft above land-surface datum.

PERIOD OF RECORD.--January 1968 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 10.74 ft below land-surface datum, Apr. 23, 1983; lowest measured, 18.83 ft below land-surface datum, Nov. 3, 1970.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|-----------------|-------------|---------|-------------|--------------|-------------|--------|-------------|--------------|-------------|--------|-------------|
| OCT 20 | 16.18 | DEC 29 | 14.73 | FEB 25 | 15.40 | APR 22 | 13.92 | JUN 23 | 15.22 | AUG 25 | 16.31 |
| NOV 25 | 15.38 | JAN 27 | 15.07 | MAR 30 | 15.36 | MAY 20 | 14.25 | JUL 28 | 16.01 | SEP 28 | 16.28 |
| WATER YEAR 2004 | | HIGHEST | 13.92 | APR 22, 2004 | | LOWEST | 16.31 | AUG 25, 2004 | | | |

415546071474701. Burrillville well BUW 395.

LOCATION.--Lat 41° 55' 46", long 71° 47' 47", Providence County, Hydrologic Unit 01100001, town of Burrillville, Pulaski Memorial State Park, near southeast corner of parking area #3.

Owner: State of Rhode Island.

AQUIFER.--Till of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 2.0 in., depth 17.7 ft, cased to 7.8 ft, screened from 7.8 ft to 17.2 ft.

INSTRUMENTATION.--Monthly measurement with electric or chalked tape by Rhode Island Department of Environmental Management.

DATUM.--Elevation of land-surface datum is 575 ft above National Geodetic Vertical Datum of 1929. Measuring point: Notch in PVC casing, 1.1 ft above land-surface datum.

PERIOD OF RECORD.--September 1992 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.70 ft below land-surface datum, June 11, 2003; lowest measured, dry, Sept. 26, 1995.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|-----------------|-------------|---------|-------------|--------------|-------------|--------|-------------|--------------|-------------|--------|-------------|
| OCT 30 | 8.78 | DEC 29 | 5.90 | FEB 26 | 7.72 | APR 29 | 5.70 | JUN 29 | 8.90 | AUG 30 | 10.29 |
| NOV 28 | 8.23 | JAN 29 | 7.09 | MAR 30 | 6.50 | MAY 26 | 7.71 | JUL 27 | 10.14 | SEP 23 | 10.26 |
| WATER YEAR 2004 | | HIGHEST | 5.70 | APR 29, 2004 | | LOWEST | 10.29 | AUG 30, 2004 | | | |

4158470711471401. Burrillville well BUW 396.

LOCATION.--Lat 41° 58' 47", long 71° 47' 14", Providence County, Hydrologic Unit 01100001, town of Burrillville, Buck Hill Road, 0.3 mi west of Wakefield Road; north side of road at turn-out, near stream. Near power-line pole #64.

Owner: State of Rhode Island.

AQUIFER.--Till of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 2.0 in., depth 17.4 ft, cased to 7.2 ft, screened from 7.2 ft to 16.6 ft.

INSTRUMENTATION.--Monthly measurement with electric or chalked tape by Rhode Island Department of Environmental Management.

DATUM.--Elevation of land-surface datum is 530 ft above National Geodetic Vertical Datum of 1929. Measuring point: Notch in PVC casing, 0.8 ft above land-surface datum.

PERIOD OF RECORD.--September 1992 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.32 ft below land-surface datum, Mar. 28, 1994; lowest measured, 7.65 ft below land-surface datum, Aug. 25, 1999.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|-----------------|-------------|---------|-------------|--------------|-------------|--------|-------------|--------------|-------------|--------|-------------|
| OCT 29 | 6.11 | JAN 27 | 5.19 | MAR 30 | 5.35 | MAY 27 | 4.59 | JUL 28 | 4.89 | SEP 23 | 6.02 |
| NOV 28 | 5.53 | FEB 26 | 4.99 | APR 28 | 4.45 | JUN 28 | 5.01 | AUG 27 | 5.33 | SEP 28 | 6.00 |
| DEC 29 | 4.71 | | | | | | | | | | |
| WATER YEAR 2004 | | HIGHEST | 4.45 | APR 28, 2004 | | LOWEST | 6.11 | OCT 29, 2003 | | | |

GROUND-WATER LEVELS IN RHODE ISLAND

PROVIDENCE COUNTY--Continued

415606071462201. Burrillville well BUW 397.

LOCATION.--Lat 41° 56'06", long 71° 46'22", Providence County, Hydrologic Unit 01100001, town of Burrillville, Pulaski Memorial State Park, Center Trail, east of buw 395.

Owner: State of Rhode Island.

AQUIFER.--Till of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 2.0 in., depth 25.6 ft, cased to 15.2 ft, screened from 15.2 ft to 24.8 ft.

INSTRUMENTATION.--Monthly measurement with electric or chalked tape by Rhode Island Department of Environmental Management.

DATUM.--Elevation of land-surface datum is 705 ft above National Geodetic Vertical Datum of 1929. Measuring point: Notch in PVC casing, 2.0 ft above land-surface datum.

PERIOD OF RECORD.--September 1992 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 7.00 ft below land-surface datum, Mar. 28, 1994; lowest measured, dry, several times in water years 1993, 1998, 1999.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|------------|-------------|---------|-------------|--------------|-------------|--------|-------------|--------------|-------------|--------|-------------|
| OCT 30 | 21.82 | DEC 29 | 11.04 | MAR 30 | 16.78 | MAY 26 | 12.10 | JUL 27 | 20.51 | SEP 23 | 22.84 |
| NOV 28 | 19.34 | JAN 27 | 17.20 | APR 29 | 8.90 | JUN 29 | 18.05 | AUG 30 | 22.00 | | |
| WATER YEAR | 2004 | HIGHEST | 8.90 | APR 29, 2004 | | LOWEST | 22.84 | SEP 23, 2004 | | | |

415559071471201. Burrillville well BUW 398.

LOCATION.--Lat 41° 55'59", long 71° 47'12", Providence County, Hydrologic Unit 01100001, town of Burrillville, Pulaski Park, Center Trail.

Owner: State of Rhode Island.

AQUIFER.--Till of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 2.0 in., depth 13.5 ft, cased to 3.3 ft, screened from 3.3 ft to 12.7 ft.

INSTRUMENTATION.--Monthly measurement with electric or chalked tape by Rhode Island Department of Environmental Management.

DATUM.--Elevation of land-surface datum is 615 ft above National Geodetic Vertical Datum of 1929. Measuring point: Notch in PVC casing, 1.7 ft above land-surface datum.

PERIOD OF RECORD.--September 1992 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.65 ft below land-surface datum, Mar. 28, 1994; lowest measured, dry, several times in water year 1998.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|------------|-------------|---------|-------------|--------------|-------------|--------|-------------|--------------|-------------|--------|-------------|
| OCT 30 | 9.20 | DEC 29 | 6.06 | MAR 30 | 7.91 | MAY 26 | 7.58 | JUL 27 | 10.90 | SEP 23 | 11.18 |
| NOV 28 | 9.45 | JAN 27 | 9.30 | APR 29 | 5.48 | JUN 29 | 8.85 | AUG 30 | 11.11 | | |
| WATER YEAR | 2004 | HIGHEST | 5.48 | APR 29, 2004 | | LOWEST | 11.18 | SEP 23, 2004 | | | |

414448071323001. Cranston well CRW 439.

LOCATION.--Lat 41° 44'48", long 71° 32'30", Providence County, Hydrologic Unit 01090004, town of Cranston, J.L. Curran Park, west side of Laten Knight Road, 0.3 mi north of Hope Road.

Owner: State of Rhode Island.

AQUIFER.--Till of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 2.0 in., depth 23.1 ft, cased to 12.9 ft, screened from 12.9 ft to 22.3 ft.

INSTRUMENTATION.--Monthly measurement with electric or chalked tape by Rhode Island Department of Environmental Management.

DATUM.--Elevation of land-surface datum is 395 ft above National Geodetic Vertical Datum of 1929. Measuring point: Notch in PVC casing, 1.55 ft above land-surface datum; prior to May 5, 2003, 1.8 ft above land-surface datum.

PERIOD OF RECORD.--September 1992 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.57 ft below land-surface datum, Mar. 24, 1998; lowest measured, dry, Oct. 26, Nov. 29, 1994.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|------------|-------------|---------|-------------|--------------|-------------|--------|-------------|--------------|-------------|--------|-------------|
| OCT 29 | 19.35 | DEC 22 | 11.40 | FEB 24 | 14.58 | APR 28 | 8.15 | JUN 28 | 16.47 | AUG 25 | 19.29 |
| NOV 26 | 17.62 | JAN 27 | 12.56 | MAR 25 | 14.78 | MAY 24 | 12.01 | JUL 29 | 19.42 | SEP 21 | 19.66 |
| WATER YEAR | 2004 | HIGHEST | 8.15 | APR 28, 2004 | | LOWEST | 19.66 | SEP 21, 2004 | | | |

GROUND-WATER LEVELS IN RHODE ISLAND

PROVIDENCE COUNTY--Continued

415626071254601. Cumberland well CUW 265.

LOCATION.--Lat 41° 56'26", long 71° 25'46", Providence County, Hydrologic Unit 01090003, town of Cumberland, at 27 Scott Street, 900 ft northeast of intersection of Scott Street and Mendon Road in Ashton.

Owner: Private owner.

AQUIFER.--Sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Dug observation water-table well, diameter 24 in., depth 20 ft, lined with stone to 20 ft, shored.

INSTRUMENTATION.--Monthly measurement with chalked tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land-surface datum is 130 ft above National Geodetic Vertical Datum of 1929. Measuring point: hole in cement cap, 0.34 ft above land-surface datum; prior to July 10, 2003, hole in wooden cover, 0.06 ft above land-surface datum.

PERIOD OF RECORD.--August 1946 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 9.20 ft below land-surface datum, Jan. 27, 1979; lowest measured, 17.20 ft below land-surface datum, Sept. 29, 1949.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|-----------------|---------------|--------------|--------------|--------------|-------------|--------|-------------|--------|-------------|--------|-------------|
| OCT 20 | 10.51 | DEC 29 | 10.66 | FEB 25 | 12.76 | APR 22 | 10.29 | JUN 23 | 13.82 | AUG 25 | 12.05 |
| NOV 25 | 12.49 | JAN 27 | 12.77 | MAR 30 | 11.99 | MAY 20 | 11.95 | JUL 28 | 14.74 | SEP 28 | 12.65 |
| WATER YEAR 2004 | HIGHEST 10.29 | APR 22, 2004 | LOWEST 14.74 | JUL 28, 2004 | | | | | | | |

414420071422301. Foster well FOW 40.

LOCATION.--Lat 41° 44'20", long 71° 42'23", Providence County, Hydrologic Unit 01090004, town of Foster, Plainfield Pike.

Owner: Private owner.

AQUIFER.--Till of Pleistocene age.

WELL CHARACTERISTICS.--Dug observation water-table well, diameter 48 in., depth 15.4 ft, cased with stone to 15.4 ft, open end.

INSTRUMENTATION.--Monthly measurement with chalked tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land-surface datum is 630 ft above National Geodetic Vertical Datum of 1929. Measuring point: hole in cement cap, 0.57 ft above land-surface datum; prior to July 15, 1998, spray painted arrow at top of casing, 0.40 ft above land-surface datum.

PERIOD OF RECORD.--July 1953 to February 1959, April 1991 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.29 ft below land-surface datum, May 27, 1954; lowest measured, 13.97 ft below land-surface datum, Oct. 28, 1957.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|-----------------|--------------|--------------|-------------|--------------|-------------|--------|-------------|--------|-------------|--------|-------------|
| OCT 20 | 4.90 | DEC 29 | 3.31 | FEB 25 | 4.60 | APR 22 | 3.81 | JUN 23 | 6.93 | AUG 25 | 7.23 |
| NOV 25 | 4.40 | JAN 27 | 5.62 | MAR 30 | 3.65 | MAY 20 | 5.50 | JUL 28 | 9.08 | SEP 28 | 5.92 |
| WATER YEAR 2004 | HIGHEST 3.31 | DEC 29, 2003 | LOWEST 9.08 | JUL 28, 2004 | | | | | | | |

414357071405101. Foster well FOW 290.

LOCATION.--Lat 41° 43'57", long 71° 40'51", Providence County, Hydrologic Unit 01090004, town of Foster, Parker Woodland, Audobon Society. Pig Hill Road, 1 mi north of Maple Valley Road.

Owner: State of Rhode Island.

AQUIFER.--Till of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 2.0 in., depth 15.4 ft, cased to 5.2 ft, screened from 5.2 ft to 14.6 ft.

INSTRUMENTATION.--Monthly measurement with electric or chalked tape by Rhode Island Department of Environmental Management.

DATUM.--Elevation of land-surface datum is 345 ft above National Geodetic Vertical Datum of 1929. Measuring point: Notch in PVC casing, 1.6 ft above land-surface datum.

PERIOD OF RECORD.--September 1992 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.36 ft below land-surface datum, Mar. 28, 1994; lowest measured, dry, several times in water years 1993, 1994, and 1998.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|-----------------|--------------|--------------|--------------|--------------|-------------|--------|-------------|--------|-------------|--------|-------------|
| OCT 29 | 9.63 | DEC 22 | 4.44 | FEB 24 | 6.90 | APR 28 | 3.73 | JUN 28 | 9.08 | AUG 25 | 12.67 |
| NOV 25 | 6.66 | JAN 27 | 5.94 | MAR 25 | 6.36 | MAY 24 | 5.71 | JUL 29 | 11.80 | SEP 28 | 13.08 |
| WATER YEAR 2004 | HIGHEST 3.73 | APR 28, 2004 | LOWEST 13.08 | SEP 28, 2004 | | | | | | | |

GROUND-WATER LEVELS IN RHODE ISLAND

PROVIDENCE COUNTY--Continued

415437071242201. Lincoln well LIW 84.

LOCATION.--Lat 41° 54'37", long 71° 24'22", Providence County, Hydrologic Unit 0190003, town of Lincoln, at north side of Maplehurst Farms building, and 800 ft west of Blackstone River bridge in Lonsdale.

Owner: Maplehurst Farms, Inc.

AQUIFER.--Sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 8 in., depth 107 ft, cased to 107 ft, open end.

INSTRUMENTATION.--Monthly measurement with chalked tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land-surface datum is 60 ft above National Geodetic Vertical Datum of 1929. Measuring point: Inside lower lip of 8-in. pipe, 3.32 ft above land-surface datum.

REMARKS.--Water level affected by Blackstone River floods.

PERIOD OF RECORD.--June 1946 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, +0.97 ft above land-surface datum, Jan. 28, 1976, lowest measured, 7.36 ft below land-surface datum, Aug. 24, 1999.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|-----------------|--------------|--------------|-------------|--------------|-------------|--------|-------------|--------|-------------|--------|-------------|
| OCT 20 | 5.07 | DEC 29 | 3.96 | FEB 25 | 5.47 | APR 22 | 3.57 | JUN 23 | 5.33 | AUG 25 | 5.19 |
| NOV 25 | 5.13 | JAN 27 | 5.43 | MAR 30 | 5.13 | MAY 20 | 4.60 | JUL 28 | 5.36 | SEP 28 | 5.22 |
| WATER YEAR 2004 | HIGHEST 3.57 | APR 22, 2004 | LOWEST 5.47 | FEB 25, 2004 | | | | | | | |

415948071325001 North Smithfield well NSW 21.

LOCATION.--Lat 41° 59'48", long 71° 32'50", Providence County, Hydrologic Unit 1090003, town of North Smithfield, 500 ft southwest of State Highway 146A, 900 ft west of intersection of State Highway 146A and Harkness Road at Branch Village.

Owner: Private owner.

AQUIFER.--Sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Dug domestic water-table well, diameter 24 in., depth 16 ft, cased with tile to 16 ft, open end.

INSTRUMENTATION.--Monthly measurement with chalked tape by U.S. Geological Survey personnel.

DATUM.--Land-surface datum is 238.68 ft above National Geodetic Vertical Datum of 1929. Measuring point: Hole in concrete cover at top of tile casing, 1.84 ft below land-surface datum.

REMARKS.--Well used for domestic supply; water levels affected by pumping, 1947-80.

PERIOD OF RECORD.--May 1947 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.67 ft below land-surface datum, Mar. 26, 1969; lowest measured, 11.71 ft below land-surface datum, Oct. 28, 1957.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|-----------------|--------------|--------------|-------------|--------------|-------------|--------|-------------|--------|-------------|--------|-------------|
| OCT 20 | 8.89 | DEC 29 | 6.05 | FEB 25 | 7.90 | APR 22 | 5.76 | JUN 23 | 8.42 | AUG 25 | 8.52 |
| NOV 25 | 7.66 | JAN 27 | 7.74 | MAR 30 | 6.92 | MAY 20 | 7.14 | JUL 28 | 9.11 | SEP 28 | 8.74 |
| WATER YEAR 2004 | HIGHEST 5.76 | APR 22, 2004 | LOWEST 9.11 | JUL 28, 2004 | | | | | | | |

GROUND-WATER LEVELS IN RHODE ISLAND

PROVIDENCE COUNTY--Continued

414746071255601. Providence well PRW 48.

LOCATION.--Lat 41° 47' 46", long 71° 25' 56", Providence County, Hydrologic Unit 01090004, city of Providence, at 333 Adelaide Avenue, and 800 ft northwest of Adelaide and 800 ft west of Narragansett Avenues.

Owner: Gorham Division of Textron.

AQUIFER.--Sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 8 in., depth 124 ft, cased to 116 ft, screened 116 to 124 ft.

INSTRUMENTATION.--Monthly measurement with chalked tape by U.S. Geological Survey personnel.

DATUM.--Land-surface datum is 45.79 ft, above National Geodetic Vertical Datum of 1929. Measuring point: Top edge of hole in center of steel cover, 0.48 ft below land-surface datum.

REMARKS.--Water level affected by pumping from one or more nearby wells.

PERIOD OF RECORD.--December 1944 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.78 ft below land-surface datum, Apr. 23, 1983; lowest measured, 10.22 ft below land-surface datum, Oct. 20, 1947.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|-----------------|-------------|---------|-------------|--------------|-------------|--------|-------------|--------------|-------------|--------|-------------|
| OCT 20 | 4.51 | DEC 29 | 3.45 | FEB 25 | 4.40 | APR 22 | 3.64 | JUN 23 | 4.39 | AUG 25 | 4.52 |
| NOV 24 | 4.33 | JAN 27 | 4.18 | MAR 30 | 4.62 | MAY 20 | 4.14 | JUL 28 | 4.69 | SEP 28 | 4.59 |
| WATER YEAR 2004 | | HIGHEST | 3.45 | DEC 29, 2003 | | LOWEST | 4.69 | JUL 28, 2004 | | | |

WASHINGTON COUNTY

412214071394001. Charlestown well CHW 18.

LOCATION.--Lat 41° 22' 14", long 71° 39' 40", Washington County, Hydrologic Unit 01090005, town of Charlestown, 1,900 ft southeast of U.S. Highway 1, at former U.S. Navy Auxiliary Air Station.

Owner: U.S. General Services Administration.

AQUIFER.--Sand and clay of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 8 in., depth 32 ft, cased to 32 ft, open end.

INSTRUMENTATION.--Monthly measurement with chalked tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land-surface datum is 26 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, at land-surface datum.

PERIOD OF RECORD.--October 1946 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 10.09 ft below land-surface datum, Apr. 23, 1983; lowest measured, 21.63 ft below land-surface datum, Dec. 29, 1965.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|-----------------|-------------|---------|-------------|--------------|-------------|--------|-------------|--------------|-------------|--------|-------------|
| OCT 07 | 18.87 | NOV 24 | 19.21 | JAN 27 | 17.78 | APR 09 | 14.97 | MAY 20 | 15.27 | AUG 25 | 18.99 |
| 20 | 19.26 | DEC 05 | 19.31 | FEB 25 | 18.14 | 22 | 13.31 | JUN 23 | 17.39 | SEP 28 | 18.78 |
| NOV 07 | 19.40 | 30 | 17.27 | MAR 30 | 18.31 | MAY 06 | 14.29 | JUL 28 | 18.89 | | |
| WATER YEAR 2004 | | HIGHEST | 13.31 | APR 22, 2004 | | LOWEST | 19.40 | NOV 07, 2003 | | | |

GROUND-WATER LEVELS IN RHODE ISLAND

WASHINGTON COUNTY--Continued

412434071422401. Charlestown well CHW 586.

LOCATION.--Lat 41°24'34", long 71°42'24", Washington County, Hydrologic Unit 01090005, town of Charlestown, Burlingame State Park, 0.7 mi from Buckeye Road on Clawson Trail.

Owner: State of Rhode Island.

AQUIFER.--Till of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 2.0 in., depth 14.3 ft, cased to 4.1 ft, screened from 4.1 ft to 13.5 ft.

INSTRUMENTATION.--Monthly measurement with electric or chalked tape by Rhode Island Department of Environmental Management.

DATUM.--Elevation of land-surface datum is 125 ft above National Geodetic Vertical Datum of 1929. Measuring point: Notch in PVC casing, 1.3 ft above land-surface datum.

PERIOD OF RECORD.--September 1992 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.84 ft below land-surface datum, Mar. 28, 2002; lowest measured, dry, Aug. 26, 1999.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|------------|-------------|---------|-------------|--------------|-------------|--------|--------------|--------|-------------|--------|-------------|
| OCT 07 | 4.13 | NOV 28 | 3.64 | FEB 25 | 3.70 | APR 09 | 3.59 | MAY 20 | 3.79 | JUL 28 | 4.11 |
| 20 | 3.88 | DEC 05 | 3.70 | 26 | 3.70 | 22 | 3.61 | 23 | 3.78 | AUG 24 | 3.99 |
| 30 | 3.28 | 30 | 3.64 | MAR 29 | 3.68 | 28 | 3.48 | JUN 23 | 3.96 | 25 | 3.93 |
| NOV 07 | 3.48 | JAN 28 | 4.04 | 30 | 3.67 | MAY 06 | 3.58 | 29 | 4.04 | SEP 28 | 3.94 |
| 24 | 3.64 | | | | | | | | | | |
| WATER YEAR | 2004 | HIGHEST | 3.28 | OCT 30, 2003 | LOWEST | 4.13 | OCT 07, 2003 | | | | |

412424071423601. Charlestown well CHW 587.

LOCATION.--Lat 41°24'24", long 71°42'36", Washington County, Hydrologic Unit 01090005, town of Charlestown, Burlingame State Park, 0.8 mi from Buckeye Brook Road on Mills Trail.

Owner: State of Rhode Island.

AQUIFER.--Till of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 2.0 in., depth 12.5 ft, cased to 2.3 ft, screened from 2.3 ft to 11.7 ft.

INSTRUMENTATION.--Monthly measurement with electric or chalked tape by Rhode Island Department of Environmental Management.

DATUM.--Elevation of land-surface datum is 90 ft above National Geodetic Vertical Datum of 1929. Measuring point: Notch in PVC casing, 1.6 ft above land-surface datum.

PERIOD OF RECORD.--September 1992 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.35 ft below land-surface datum, Mar. 24, 1999; lowest measured, 12.56 ft below land-surface datum, July 30, 2002.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|------------|-------------|---------|-------------|--------------|-------------|--------|--------------|--------|-------------|--------|-------------|
| OCT 07 | 11.20 | NOV 28 | 8.18 | FEB 25 | 8.35 | APR 09 | 4.06 | MAY 20 | 7.85 | JUL 28 | 11.48 |
| 20 | 11.15 | DEC 05 | 8.77 | 26 | 8.44 | 22 | 4.10 | 23 | 8.30 | AUG 24 | 10.35 |
| 30 | 8.79 | 30 | 6.11 | MAR 29 | 7.31 | 28 | 5.04 | JUN 23 | 10.34 | 25 | 10.51 |
| NOV 07 | 6.90 | JAN 28 | 8.62 | 30 | 7.34 | MAY 06 | 5.91 | 29 | 10.48 | SEP 28 | 10.17 |
| 24 | 8.09 | | | | | | | | | | |
| WATER YEAR | 2004 | HIGHEST | 4.06 | APR 09, 2004 | LOWEST | 11.48 | JUL 28, 2004 | | | | |

GROUND-WATER LEVELS IN RHODE ISLAND

WASHINGTON COUNTY--Continued

413423071431901. Exeter well EXW 6.

LOCATION.--Lat 41° 34'23", long 71° 43'19", Washington County, Hydrologic Unit 01090005, town of Exeter, in Arcadia State Forest, 150 ft west of Wood River, 250 ft south of Ten Rod Road, and 2.0 mi west of Millville.

Owner: State Dept. of Natural Resources.

AQUIFER.--Sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Dug observation water-table well, diameter 30 in., depth 10 ft, cased with concrete to 10 ft, open end.

INSTRUMENTATION.--Monthly measurement with chalked tape by U.S. Geological Survey personnel.

DATUM.--Land-surface datum is 132.80 ft above National Geodetic Vertical Datum of 1929. Measuring point: hole in cement cap, 0.40 ft above land-surface datum; prior to July 10, 1998, hole in top of wooden cover, at land-surface datum.

REMARKS.--Water level affected by stage of nearby Wood River.

PERIOD OF RECORD.--December 1948 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.34 ft below land-surface datum, Jan. 27, 1979; lowest measured, 7.97 ft below land-surface datum, Sept. 26, 1981.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|------------|-------------|---------|-------------|--------------|-------------|--------|-------------|--------------|-------------|--------|-------------|
| OCT 07 | 6.56 | NOV 25 | 5.86 | JAN 27 | 5.54 | APR 09 | 4.78 | MAY 20 | 5.06 | AUG 25 | 6.60 |
| 20 | 6.35 | DEC 05 | 5.97 | FEB 25 | 5.69 | 22 | 4.23 | JUN 23 | 5.90 | SEP 28 | 6.84 |
| NOV 07 | 5.65 | 29 | 4.27 | MAR 30 | 5.61 | MAY 06 | 4.21 | JUL 28 | 6.61 | | |
| WATER YEAR | 2004 | HIGHEST | 4.21 | MAY 06, 2004 | | LOWEST | 6.84 | SEP 28, 2004 | | | |

413505071452801. Exeter well EXW 158.

LOCATION.--Lat 41° 35'05", long 71° 45'28", Washington County, Hydrologic Unit 01090005, town of Exeter, Escoheag Hill Road.

Owner: State of Rhode Island.

AQUIFER.--Till of Pleistocene age.

WELL CHARACTERISTICS.--Dug observation water-table well, diameter 36 in., depth 18.3 ft, cased with stone to 18.3 ft, open end.

INSTRUMENTATION.--Monthly measurement with chalked tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land-surface datum is 315 ft above National Geodetic Vertical Datum of 1929. Measuring point: Spray painted arrow on rock, at land-surface datum.

PERIOD OF RECORD.--September 1953 to February 1959, November 1990 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.85 ft below land-surface datum, Mar. 25, 1994; lowest measured, dry, several times during water years 1994 and 1998.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|------------|-------------|---------|-------------|--------------|-------------|--------|-------------|--------------|-------------|--------|-------------|
| OCT 07 | 15.26 | NOV 25 | 8.07 | JAN 27 | 7.49 | APR 09 | 5.31 | MAY 20 | 7.20 | AUG 25 | 16.30 |
| 20 | 15.51 | DEC 05 | 8.10 | FEB 25 | 7.75 | 22 | 4.63 | JUN 23 | 11.51 | SEP 28 | 16.66 |
| NOV 07 | 9.76 | 29 | 5.07 | MAR 30 | 7.48 | MAY 06 | 5.23 | JUL 28 | 15.62 | | |
| WATER YEAR | 2004 | HIGHEST | 4.63 | APR 22, 2004 | | LOWEST | 16.66 | SEP 28, 2004 | | | |

413400071363101. Exeter well EXW 238.

LOCATION.--Lat 41° 34'00", long 71° 36'31", Washington County, Hydrologic Unit 01090005, town of Exeter, Tripps Corner Road.

Owner: Private owner.

AQUIFER.--Till of Pleistocene age.

WELL CHARACTERISTICS.--Dug observation water-table well, diameter 24 in., depth 14.4 ft, cased with stone to 14.4 ft, open end.

INSTRUMENTATION.--Monthly measurement with chalked tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land-surface datum is 333.80 ft above National Geodetic Vertical Datum of 1929. Measuring point: hole in cement cap, 0.45 ft above land-surface datum; prior to June 18, 2003, spray painted arrow on rock, at land-surface datum.

PERIOD OF RECORD.--October 1955 to June 1960, May 1991 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 9.37 ft below land-surface datum Oct. 17, 1955; lowest measured, 13.61 ft below land-surface datum, July 22, 1999.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|------------|-------------|---------|-------------|--------------|-------------|--------|-------------|--------------|-------------|--------|-------------|
| OCT 07 | 12.50 | NOV 24 | 11.95 | JAN 27 | 12.16 | APR 09 | 11.26 | MAY 20 | 12.03 | AUG 25 | 12.15 |
| 20 | 11.94 | DEC 05 | 12.05 | FEB 25 | 12.13 | 22 | 11.34 | JUN 23 | 12.44 | SEP 28 | 12.49 |
| NOV 07 | 11.63 | 30 | 11.51 | MAR 30 | 11.92 | MAY 06 | 11.38 | JUL 28 | 12.74 | | |
| WATER YEAR | 2004 | HIGHEST | 11.26 | APR 09, 2004 | | LOWEST | 12.74 | JUL 28, 2004 | | | |

GROUND-WATER LEVELS IN RHODE ISLAND

WASHINGTON COUNTY--Continued

413135071314201. Exeter well EXW 278.

LOCATION.--Lat 41° 31'35", long 71° 31'42", Washington County, Hydrologic Unit 01090005, town of Exeter, Liberty Road 1.04 mi from Rt. 2.

Owner: Private owner.

AQUIFER.--Till of Pleistocene age.

WELL CHARACTERISTICS.--Dug observation water-table well, diameter 24 in, depth 23.9 ft, cased with stone to 23.9 ft, open end.

INSTRUMENTATION.--Monthly measurement with chalked tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land-surface datum is 230.90 ft above National Geodetic Vertical Datum of 1929. Measuring point: hole in cement cap, 1.77 ft above land-surface datum; prior to July 9, 1998, spray painted arrow at top of casing, 1.20 ft above land-surface datum.

PERIOD OF RECORD.--August 1954 to June 1960, March 1991 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.06 ft below land-surface datum, May 29, 1991; lowest measured, dry, several times in water years 1993, 1994, and 1998.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|------------|-------------|---------|-------------|--------------|-------------|--------|-------------|--------------|-------------|--------|-------------|
| OCT 07 | 14.59 | NOV 24 | 13.88 | JAN 27 | 12.26 | APR 09 | 7.64 | MAY 20 | 10.35 | AUG 25 | 19.40 |
| | 20 16.70 | DEC 05 | 14.18 | FEB 25 | 12.94 | | 22 7.06 | JUN 23 | 13.64 | SEP 28 | 20.48 |
| NOV 07 | 14.69 | | 30 9.44 | MAR 30 | 12.10 | MAY 06 | 7.58 | JUL 28 | 17.27 | | |
| WATER YEAR | 2004 | HIGHEST | 7.06 | APR 22, 2004 | | LOWEST | 20.48 | SEP 28, 2004 | | | |

413358071433801. Exeter well EXW 475.

LOCATION.--Lat 41° 33'58", long 71° 43'38", Washington County, Hydrologic Unit 01090005, town of Exeter, 70 ft east of Mt. Tom Road, 50 ft north of Blitzkrieg Trail, and 2.4 mi northwest of Barbersville.

Owner: State Department of Environmental Management.

AQUIFER.--Sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 8 in, depth 40 ft, cased to 38 ft, screened 38 to 40 ft.

INSTRUMENTATION.--Continuous graphic recorder March 1981 to May 1988, digital recorder (60-min punch) June 1988 to current year.

DATUM.--Land-surface datum is 142.92 ft above National Geodetic Vertical Datum of 1929. Measuring point: Floor of recorder shelter, 3.38 ft above land-surface datum.

PERIOD OF RECORD.--March 1981 to current year.

REMARKS.--Missing periods of more than one day are not estimated.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 9.58 ft below land-surface datum, Apr. 28, 29, 1983; lowest, 16.74 ft below land-surface datum, Oct. 19, 1981, Sept. 17, 1995.

EXTREMES FOR CURRENT YEAR.--Highest water level, 12.51 ft below land-surface datum, May 4; lowest, 16.19 ft below land-surface datum, Sept. 28.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 15.39 | 15.16 | 14.94 | 13.73 | 14.00 | 14.40 | 14.43 | 12.54 | 13.28 | 14.37 | 15.38 | 15.87 |
| 2 | 15.41 | 15.11 | 14.96 | 13.71 | 14.03 | 14.41 | 14.26 | 12.54 | 13.30 | 14.41 | 15.41 | 15.88 |
| 3 | 15.43 | 15.07 | 14.97 | 13.68 | 14.04 | 14.43 | 14.09 | 12.53 | 13.33 | 14.45 | 15.44 | 15.90 |
| 4 | 15.45 | 15.04 | 14.97 | 13.67 | 14.05 | 14.44 | 13.96 | 12.52 | 13.37 | 14.49 | 15.47 | 15.92 |
| 5 | 15.47 | 15.01 | 14.98 | 13.65 | 14.08 | 14.45 | 13.86 | 12.52 | 13.40 | 14.52 | 15.47 | 15.94 |
| 6 | 15.49 | 14.99 | 14.97 | 13.63 | 14.08 | 14.45 | 13.79 | 12.53 | 13.43 | 14.56 | 15.46 | 15.96 |
| 7 | 15.51 | 14.97 | 14.98 | 13.63 | 14.01 | 14.45 | 13.74 | 12.54 | 13.46 | 14.59 | 15.49 | 15.98 |
| 8 | 15.53 | 14.97 | 15.00 | 13.61 | 14.03 | 14.45 | 13.70 | 12.60 | 13.50 | 14.63 | 15.51 | 16.00 |
| 9 | 15.55 | 14.97 | 15.01 | 13.61 | 14.04 | 14.47 | 13.67 | 12.61 | 13.52 | 14.66 | 15.53 | 16.02 |
| 10 | 15.57 | 14.96 | 15.02 | 13.61 | 14.03 | 14.48 | 13.65 | 12.63 | 13.56 | 14.70 | 15.56 | 16.03 |
| 11 | 15.59 | 14.95 | 14.98 | 13.61 | 14.05 | 14.47 | 13.64 | 12.65 | 13.60 | 14.74 | 15.58 | 16.05 |
| 12 | 15.61 | 14.94 | 14.90 | 13.60 | 14.08 | 14.48 | 13.63 | 12.69 | 13.65 | 14.78 | 15.60 | 16.07 |
| 13 | 15.62 | 14.92 | 14.86 | 13.60 | 14.08 | 14.50 | 13.59 | 12.72 | 13.69 | 14.81 | 15.62 | 16.09 |
| 14 | 15.64 | 14.92 | 14.82 | 13.62 | 14.09 | 14.51 | 13.34 | 12.75 | 13.72 | --- | 15.64 | 16.10 |
| 15 | 15.63 | 14.93 | 14.76 | 13.61 | 14.12 | 14.52 | 13.19 | 12.77 | 13.76 | --- | 15.64 | 16.12 |
| 16 | 15.62 | 14.93 | 14.70 | 13.62 | 14.15 | 14.53 | 13.06 | 12.82 | 13.80 | --- | 15.63 | 16.14 |
| 17 | 15.62 | 14.93 | 14.64 | 13.65 | 14.17 | 14.53 | 12.95 | 12.86 | 13.84 | --- | 15.63 | 16.15 |
| 18 | 15.63 | 14.93 | 14.52 | 13.65 | 14.17 | 14.55 | 12.86 | 12.88 | 13.88 | --- | 15.64 | 16.15 |
| 19 | 15.63 | 14.92 | 14.40 | 13.68 | 14.18 | 14.56 | 12.78 | 12.91 | 13.91 | --- | 15.66 | 16.07 |
| 20 | 15.64 | 14.92 | 14.30 | 13.71 | 14.20 | 14.57 | 12.73 | 12.95 | 13.94 | --- | 15.68 | 16.06 |
| 21 | 15.63 | 14.92 | 14.22 | 13.75 | 14.21 | 14.55 | 12.70 | 12.97 | 13.98 | --- | 15.69 | 16.06 |
| 22 | 15.64 | 14.93 | 14.14 | 13.76 | 14.24 | 14.56 | 12.66 | 13.01 | 14.02 | --- | 15.70 | 16.07 |
| 23 | 15.65 | 14.93 | 14.09 | 13.78 | 14.27 | 14.56 | 12.64 | 13.03 | 14.06 | --- | 15.71 | 16.09 |
| 24 | 15.67 | 14.93 | 14.03 | 13.80 | 14.28 | 14.57 | 12.61 | 13.07 | 14.10 | --- | 15.72 | 16.11 |
| 25 | 15.68 | 14.93 | 13.96 | 13.85 | 14.31 | 14.57 | 12.61 | 13.10 | 14.13 | --- | 15.74 | 16.13 |
| 26 | 15.69 | 14.94 | 13.91 | 13.87 | 14.33 | 14.56 | 12.58 | 13.13 | 14.17 | --- | 15.76 | 16.16 |
| 27 | 15.68 | 14.94 | 13.87 | 13.88 | 14.35 | 14.54 | 12.54 | 13.16 | 14.21 | --- | 15.78 | 16.17 |
| 28 | 15.65 | 14.93 | 13.84 | 13.89 | 14.36 | 14.56 | 12.54 | 13.17 | 14.25 | --- | 15.80 | 16.18 |
| 29 | 15.53 | 14.93 | 13.80 | 13.92 | 14.38 | 14.56 | 12.55 | 13.19 | 14.29 | 15.29 | 15.82 | 16.11 |
| 30 | 15.33 | 14.94 | 13.76 | 13.93 | --- | 14.55 | 12.54 | 13.22 | 14.33 | 15.32 | 15.83 | 15.98 |
| 31 | 15.23 | --- | 13.74 | 13.96 | --- | 14.53 | --- | 13.25 | --- | 15.35 | 15.85 | --- |
| MEAN | 15.56 | 14.96 | 14.52 | 13.72 | 14.15 | 14.51 | 13.23 | 12.83 | 13.78 | --- | 15.63 | 16.05 |
| LOW | 15.69 | 15.16 | 15.02 | 13.96 | 14.38 | 14.57 | 14.43 | 13.25 | 14.33 | --- | 15.85 | 16.18 |
| HIGH | 15.23 | 14.92 | 13.74 | 13.60 | 14.00 | 14.40 | 12.54 | 12.52 | 13.28 | --- | 15.38 | 15.87 |

GROUND-WATER LEVELS IN RHODE ISLAND

WASHINGTON COUNTY--Continued

413252071323601. Exeter well EXW 554.

LOCATION.--Lat 41° 32'52", long 71° 32'36", Washington County, hydrologic Unit 01090005, town of Exeter, about 1,500 ft south of fire station at Exeter State (Dr. Joseph H. Ladd) School. One half mile west of Rt. 2 on Dawley Rd. and approximately 100 ft north of center line of Dawley Rd.
Owner: State Dept. of Public Welfare.

AQUIFER.--Sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 2.0 in, depth 25.1 ft, cased to 22.8 ft, screened from 22.8 ft to 24.8 ft.

INSTRUMENTATION.--Digital recorder (15-minute interval), October 2002 to present; prior to October 2002, monthly measurement with chalked tape by U.S. Geological Survey personnel.

DATUM.--Land-surface datum is 156.92 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.40 ft above land-surface datum.

REMARKS.--Replacement well for EXW16, which was influenced by parking lot runoff.

PERIOD OF RECORD.--December 1988 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 7.03 ft below land-surface datum, Mar. 28, 2001; lowest, 12.20 ft below land-surface datum, Nov. 29, 1994.

EXTREMES FOR CURRENT YEAR.--Highest water level, 8.47 ft below land-surface datum, Apr. 15; lowest, 11.09 ft below land-surface datum, Sept. 17.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|-------|-------|-------|------|-------|-------|------|------|-------|-------|-------|-------|
| 1 | 10.11 | 9.90 | 10.21 | 9.30 | 9.99 | 10.10 | 9.68 | 9.07 | 9.82 | 10.40 | 10.81 | 10.84 |
| 2 | 10.13 | 9.89 | 10.23 | 9.33 | 10.00 | 10.11 | 9.20 | 9.11 | 9.84 | 10.42 | 10.82 | 10.86 |
| 3 | 10.15 | 9.87 | 10.25 | 9.36 | 10.00 | 10.13 | 9.06 | 9.12 | 9.87 | 10.44 | 10.84 | 10.88 |
| 4 | 10.17 | 9.87 | 10.26 | 9.39 | 9.86 | 10.14 | 8.94 | 9.04 | 9.89 | 10.47 | 10.87 | 10.90 |
| 5 | 10.19 | 9.85 | 10.27 | 9.39 | 9.85 | 10.15 | 8.86 | 9.06 | 9.91 | 10.45 | 10.73 | 10.91 |
| 6 | 10.21 | 9.83 | 10.27 | 9.41 | 9.83 | 10.10 | 8.83 | 9.11 | 9.93 | 10.45 | 10.71 | 10.93 |
| 7 | 10.23 | 9.82 | 10.29 | 9.43 | 9.59 | 10.10 | 8.84 | 9.16 | 9.94 | 10.48 | 10.73 | 10.95 |
| 8 | 10.25 | 9.84 | 10.30 | 9.44 | 9.49 | 10.11 | 8.88 | 9.21 | 9.96 | 10.50 | 10.77 | 10.96 |
| 9 | 10.27 | 9.86 | 10.32 | 9.47 | 9.47 | 10.14 | 8.93 | 9.25 | 9.99 | 10.52 | 10.81 | 10.97 |
| 10 | 10.29 | 9.87 | 10.32 | 9.50 | 9.50 | 10.15 | 9.00 | 9.29 | 10.01 | 10.54 | 10.84 | 10.99 |
| 11 | 10.29 | 9.89 | 10.16 | 9.53 | 9.56 | 10.15 | 9.05 | 9.32 | 10.04 | 10.56 | 10.87 | 11.01 |
| 12 | 10.29 | 9.90 | 9.96 | 9.55 | 9.61 | 10.16 | 9.10 | 9.36 | 10.06 | 10.58 | 10.89 | 11.02 |
| 13 | 10.31 | 9.90 | 9.98 | 9.58 | 9.66 | 10.18 | 9.00 | 9.40 | 10.09 | 10.55 | 10.88 | 11.04 |
| 14 | 10.33 | 9.93 | 9.97 | 9.61 | 9.71 | 10.21 | 8.56 | 9.43 | 10.09 | 10.52 | 10.82 | 11.05 |
| 15 | 10.19 | 9.97 | 9.66 | 9.63 | 9.76 | 10.21 | 8.49 | 9.46 | 10.10 | 10.55 | 10.65 | 11.06 |
| 16 | 10.20 | 10.0 | 9.55 | 9.66 | 9.79 | 10.22 | 8.56 | 9.50 | 10.13 | 10.58 | 10.56 | 11.06 |
| 17 | 10.24 | 10.02 | 9.44 | 9.68 | 9.83 | 10.23 | 8.60 | 9.52 | 10.15 | 10.60 | 10.55 | 11.08 |
| 18 | 10.24 | 10.04 | 9.24 | 9.69 | 9.86 | 10.25 | 8.63 | 9.55 | 10.16 | 10.62 | 10.56 | 10.96 |
| 19 | 10.25 | 10.05 | 9.13 | 9.71 | 9.88 | 10.25 | 8.65 | 9.58 | 10.15 | 10.63 | 10.58 | 10.81 |
| 20 | 10.28 | 10.04 | 9.07 | 9.73 | 9.91 | 10.25 | 8.69 | 9.61 | 10.18 | 10.65 | 10.60 | 10.82 |
| 21 | 10.28 | 10.06 | 9.05 | 9.76 | 9.93 | 10.16 | 8.75 | 9.64 | 10.21 | 10.67 | 10.61 | 10.83 |
| 22 | 10.29 | 10.09 | 9.05 | 9.78 | 9.95 | 10.12 | 8.80 | 9.66 | 10.23 | 10.69 | 10.56 | 10.85 |
| 23 | 10.31 | 10.10 | 9.07 | 9.80 | 9.97 | 10.11 | 8.85 | 9.69 | 10.24 | 10.71 | 10.59 | 10.88 |
| 24 | 10.34 | 10.12 | 9.07 | 9.82 | 9.99 | 10.10 | 8.87 | 9.71 | 10.27 | 10.72 | 10.62 | 10.90 |
| 25 | 10.36 | 10.13 | 9.06 | 9.85 | 10.01 | 10.10 | 8.92 | 9.74 | 10.29 | 10.72 | 10.65 | 10.93 |
| 26 | 10.36 | 10.14 | 9.08 | 9.88 | 10.04 | 10.10 | 8.92 | 9.76 | 10.30 | 10.74 | 10.67 | 10.96 |
| 27 | 10.31 | 10.16 | 9.11 | 9.89 | 10.05 | 10.10 | 8.89 | 9.75 | 10.32 | 10.75 | 10.70 | 10.99 |
| 28 | 10.21 | 10.16 | 9.15 | 9.90 | 10.07 | 10.11 | 8.94 | 9.74 | 10.35 | 10.76 | 10.74 | 10.99 |
| 29 | 10.02 | 10.17 | 9.18 | 9.92 | 10.09 | 10.12 | 8.99 | 9.76 | 10.36 | 10.76 | 10.77 | 10.62 |
| 30 | 9.91 | 10.19 | 9.22 | 9.94 | --- | 10.12 | 9.02 | 9.80 | 10.38 | 10.78 | 10.80 | 10.49 |
| 31 | 9.91 | --- | 9.26 | 9.96 | --- | 10.07 | --- | 9.83 | --- | 10.79 | 10.82 | --- |
| MEAN | 10.22 | 9.99 | 9.65 | 9.64 | 9.84 | 10.15 | 8.88 | 9.46 | 10.11 | 10.60 | 10.72 | 10.92 |
| LOW | 10.36 | 10.19 | 10.32 | 9.96 | 10.09 | 10.25 | 9.68 | 9.83 | 10.38 | 10.79 | 10.89 | 11.08 |
| HIGH | 9.91 | 9.82 | 9.05 | 9.30 | 9.47 | 10.07 | 8.49 | 9.04 | 9.82 | 10.40 | 10.55 | 10.49 |

413126071455501. Hopkinton well HOW 67.

LOCATION.--Lat 41° 31'26", long 71° 45'55", Washington County, Hydrologic Unit 01090005, town of Hopkinton, Beach Pond Road, Rt. 138.
Owner: Private.

AQUIFER.--Till of Pleistocene age.

WELL CHARACTERISTICS.--Dug observation water-table well, diameter 30 in, depth 22.9 ft, cased with stone to 22.9 ft, open end.

INSTRUMENTATION.--Monthly measurement with chalked tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land-surface datum is 335 ft above National Geodetic Vertical Datum of 1929. Measuring point: top of casing at land-surface datum.

PERIOD OF RECORD.--August 1953 to February 1959, November 1990 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 9.55 ft below land-surface datum, Mar. 28, 2001; lowest measured, dry, Oct. 29, 1957.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|------------|-------------|---------|-------------|--------------|-------------|--------|-------------|--------------|-------------|--------|-------------|
| OCT 07 | 18.23 | NOV 25 | 16.28 | JAN 27 | 15.22 | APR 09 | 12.11 | MAY 20 | 13.45 | AUG 25 | 20.05 |
| | 20 18.30 | DEC 05 | 16.53 | FEB 25 | 15.92 | | 22 9.98 | JUN 23 | 16.62 | SEP 28 | 20.16 |
| NOV 07 | 15.56 | | 29 12.54 | MAR 30 | 15.82 | MAY 06 | 11.47 | JUL 28 | 19.00 | | |
| WATER YEAR | 2004 | HIGHEST | 9.98 | APR 22, 2004 | | LOWEST | 20.16 | SEP 28, 2004 | | | |

GROUND-WATER LEVELS IN RHODE ISLAND

WASHINGTON COUNTY--Continued

410947071344803. New Shoreham well NHW 258.

LOCATION.--Lat 41°09'47", long 71°34'48", Washington County, Hydrologic Unit 01090005, town of New Shoreham, Lakeside Drive near Indian Cemetery.

Owner: State of Rhode Island, D.O.T.

AQUIFER.--Till of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 2.0 in, depth 19.0 ft, cased to 14.0 ft, screened from 14.0 ft to 19.0 ft.

INSTRUMENTATION.--Monthly measurement with electric or chalked tape by observer.

DATUM.--Elevation of land-surface datum is 120 ft above National Geodetic Vertical Datum of 1929. Measuring point: Notch in PVC casing, 0.85 ft above land-surface datum.

PERIOD OF RECORD.--August 1990 and September 1990, June 1991 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 9.95 ft below land-surface datum, Apr. 21, 2003; lowest measured, 13.83 ft below land-surface datum, Nov. 21, 1993.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|-----------------|---------------|--------------|--------------|--------|-------------|--------|-------------|--------|-------------|--------|-------------|
| OCT 26 | 12.63 | DEC 23 | 11.90 | FEB 22 | 11.71 | APR 25 | 10.40 | JUN 27 | 11.69 | AUG 24 | 11.85 |
| NOV 28 | 12.42 | JAN 27 | 11.61 | MAR 29 | 11.32 | MAY 23 | 10.89 | JUL 26 | 11.81 | SEP 26 | 12.13 |
| WATER YEAR 2004 | HIGHEST 10.40 | APR 25, 2004 | LOWEST 12.63 | | | | | | | | |

413148071281601. North Kingstown well NKW 255.

LOCATION.--Lat 41°31'48", long 71°28'16", Washington County, Hydrologic Unit 01090004, town of North Kingstown, 100 ft east of Pendar Road, 0.6 mi south of intersection of Pendar and Tower Hill Roads, and 1.0 mi south of Allenton.

Owner: Private owner.

AQUIFER.--Sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Dug observation water-table well, diameter 24 in, depth 14 ft, cased with concrete to 14 ft, open end.

INSTRUMENTATION.--Monthly measurement with chalked tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land-surface datum is 50 ft above National Geodetic Vertical Datum of 1929. Measuring point: Hole in top of concrete cover, 0.24 ft above land-surface datum.

PERIOD OF RECORD.--August 1954 to December 1963, January 1966 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.81 ft below land-surface datum, Mar. 26, 1968; lowest measured, 13.03 ft below land-surface datum, Oct. 26, 1981.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|-----------------|--------------|--------------|-------------|--------|-------------|--------|-------------|--------|-------------|--------|-------------|
| OCT 07 | 8.25 | NOV 24 | 7.81 | JAN 27 | 8.21 | APR 09 | 6.42 | MAY 20 | 7.40 | AUG 25 | 8.82 |
| 20 | 7.69 | DEC 05 | 8.09 | FEB 25 | 8.56 | 22 | 5.93 | JUN 23 | 8.38 | SEP 28 | 8.73 |
| NOV 07 | 7.20 | 30 | 7.08 | MAR 30 | 8.24 | MAY 06 | 6.60 | JUL 28 | 9.30 | | |
| WATER YEAR 2004 | HIGHEST 5.93 | APR 22, 2004 | LOWEST 9.30 | | | | | | | | |

GROUND-WATER LEVELS IN RHODE ISLAND

WASHINGTON COUNTY--Continued

412932071374302. Richmond well RIW 417.

LOCATION.--Lat 41°29'32", long 71°37'43", Washington County, Hydrologic Unit 01090005, town of Richmond, about 50 ft south of State Highway 138, about 75 ft west of Beaver River, and 3.3 mi north of Kenyon.

Owner: State Department of Transportation.

AQUIFER.--Sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 6 in, depth 40 ft, cased to 37 ft, screened 37 to 40 ft.

INSTRUMENTATION.--Continuous graphic recorder December 1975 to May 1988, digital recorder (60 minute) June 1988 to current year.

DATUM.--Land-surface datum is 115.56 ft above National Geodetic Vertical Datum of 1929. Measuring point: Floor of recorder shelter, 0.60 ft above land-surface datum.

REMARKS.--Water level affected by stage of nearby Beaver River. Missing periods of more than one day are not estimated.

PERIOD OF RECORD.--December 1975 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 4.08 ft below land-surface datum, Apr. 25, 1983; lowest, 8.02 ft below land-surface datum, Oct. 3, 1980.

EXTREMES FOR CURRENT YEAR.--Highest water level, 5.14 ft below land-surface datum, Apr. 14; lowest, 7.50 ft below land-surface datum, Sept. 15.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1 | 7.16 | 6.65 | 6.86 | 6.03 | 6.56 | 6.60 | 5.97 | 5.59 | 6.21 | 6.87 | 7.34 | 7.30 |
| 2 | 7.17 | 6.68 | 6.88 | 6.04 | 6.58 | 6.61 | 5.59 | 5.62 | 6.21 | 6.89 | 7.35 | 7.32 |
| 3 | 7.18 | 6.72 | 6.90 | 6.05 | 6.59 | 6.61 | 5.56 | 5.62 | 6.24 | 6.91 | 7.36 | 7.34 |
| 4 | 7.18 | 6.76 | 6.91 | 6.06 | 6.48 | 6.61 | 5.54 | 5.53 | 6.27 | 6.95 | 7.38 | 7.36 |
| 5 | 7.18 | 6.77 | 6.93 | 6.01 | 6.49 | 6.62 | 5.54 | 5.55 | 6.30 | 6.93 | 7.25 | 7.37 |
| 6 | 7.19 | 6.73 | 6.93 | 5.97 | 6.47 | 6.54 | 5.55 | 5.59 | 6.32 | 6.89 | 7.22 | 7.39 |
| 7 | 7.20 | 6.72 | 6.92 | 6.00 | 6.18 | 6.48 | 5.58 | 5.62 | 6.34 | 6.94 | 7.25 | 7.41 |
| 8 | 7.22 | 6.75 | 6.92 | 6.05 | 6.15 | 6.50 | 5.60 | 5.66 | 6.36 | 6.97 | 7.31 | 7.42 |
| 9 | 7.22 | 6.76 | 6.92 | 6.09 | 6.20 | 6.52 | 5.62 | 5.69 | 6.37 | 6.99 | 7.36 | 7.40 |
| 10 | 7.24 | 6.77 | 6.92 | 6.11 | 6.24 | 6.55 | 5.66 | 5.72 | 6.41 | 7.02 | 7.39 | 7.41 |
| 11 | 7.25 | 6.78 | 6.75 | 6.14 | 6.26 | 6.56 | 5.69 | 5.76 | 6.45 | 7.05 | 7.40 | 7.42 |
| 12 | 7.26 | 6.77 | 6.47 | 6.15 | 6.29 | 6.58 | 5.73 | 5.80 | 6.48 | 7.07 | 7.42 | 7.44 |
| 13 | 7.26 | 6.76 | 6.47 | 6.16 | 6.32 | 6.60 | 5.61 | 5.84 | 6.51 | 7.04 | 7.25 | 7.46 |
| 14 | 7.28 | 6.76 | 6.50 | 6.18 | 6.35 | 6.62 | 5.20 | 5.87 | 6.51 | 6.99 | 7.18 | 7.48 |
| 15 | 7.14 | 6.78 | 6.26 | 6.20 | 6.36 | 6.63 | 5.14 | 5.90 | 6.52 | 7.02 | 7.00 | 7.50 |
| 16 | 7.11 | 6.79 | 6.19 | 6.21 | 6.39 | 6.64 | 5.16 | 5.94 | 6.56 | 7.05 | 6.90 | 7.48 |
| 17 | 7.16 | 6.80 | 6.17 | 6.23 | 6.43 | 6.64 | 5.18 | 5.97 | 6.58 | 7.09 | 6.96 | 7.47 |
| 18 | 7.16 | 6.82 | 5.96 | 6.25 | 6.44 | 6.64 | 5.23 | 5.99 | 6.60 | 7.11 | 7.03 | 7.27 |
| 19 | 7.17 | 6.83 | 5.91 | 6.26 | 6.45 | 6.65 | 5.28 | 6.01 | 6.60 | 7.14 | 7.08 | 7.05 |
| 20 | 7.18 | 6.82 | 5.93 | 6.29 | 6.48 | 6.65 | 5.33 | 6.05 | 6.62 | 7.16 | 7.11 | 7.10 |
| 21 | 7.19 | 6.82 | 5.96 | 6.32 | 6.49 | 6.51 | 5.39 | 6.06 | 6.65 | 7.19 | 7.12 | 7.17 |
| 22 | 7.19 | 6.83 | 5.96 | 6.34 | 6.50 | 6.44 | 5.42 | 6.07 | 6.67 | 7.21 | 7.03 | 7.22 |
| 23 | 7.20 | 6.83 | 5.97 | 6.36 | 6.51 | 6.45 | 5.46 | 6.12 | 6.69 | 7.23 | 7.04 | 7.27 |
| 24 | 7.22 | 6.84 | 5.97 | 6.38 | 6.53 | 6.47 | 5.45 | 6.15 | 6.72 | 7.24 | 7.10 | 7.30 |
| 25 | 7.23 | 6.84 | 5.91 | 6.39 | 6.55 | 6.49 | 5.49 | 6.18 | 6.75 | 7.25 | 7.16 | 7.32 |
| 26 | 7.24 | 6.83 | 5.91 | 6.43 | 6.57 | 6.49 | 5.49 | 6.20 | 6.77 | 7.27 | 7.19 | 7.35 |
| 27 | 7.17 | 6.84 | 5.95 | 6.46 | 6.58 | 6.49 | 5.42 | 6.16 | 6.79 | 7.29 | 7.21 | 7.36 |
| 28 | 7.03 | 6.84 | 5.98 | 6.47 | 6.60 | 6.49 | 5.46 | 6.13 | 6.81 | 7.30 | 7.23 | 7.35 |
| 29 | 6.78 | 6.84 | 5.98 | 6.48 | 6.60 | 6.49 | 5.50 | 6.11 | 6.83 | 7.29 | 7.25 | 6.90 |
| 30 | 6.56 | 6.86 | 5.99 | 6.51 | --- | 6.50 | 5.54 | 6.17 | 6.85 | 7.31 | 7.27 | 6.74 |
| 31 | 6.61 | --- | 6.00 | 6.54 | --- | 6.43 | --- | 6.21 | --- | 7.33 | 7.28 | --- |
| MEAN | 7.14 | 6.79 | 6.36 | 6.23 | 6.44 | 6.55 | 5.48 | 5.90 | 6.53 | 7.10 | 7.21 | 7.31 |
| LOW | 7.28 | 6.86 | 6.93 | 6.54 | 6.60 | 6.65 | 5.97 | 6.21 | 6.85 | 7.33 | 7.42 | 7.50 |
| HIGH | 6.56 | 6.65 | 5.91 | 5.97 | 6.15 | 6.43 | 5.14 | 5.53 | 6.21 | 6.87 | 6.90 | 6.74 |

GROUND-WATER LEVELS IN RHODE ISLAND

WASHINGTON COUNTY--Continued

412844071422802. Richmond well RIW 600.

LOCATION.--Lat 41°28'44", long 71°42'28", Washington County, Hydrologic Unit 01090005, town of Richmond, about 50 ft west of Hope Valley Road, and 1.5 mi northeast of Woodville.

Owner: State Department of Transportation.

AQUIFER.--Sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 8 in, depth 54 ft, cased to 49 ft, screened 49 to 54 ft.

INSTRUMENTATION.--Continuous graphic recorder September 1977 to May 1988, digital recorder (60 minute) June 1988 to current year, satellite telemeter since May 2003.

DATUM.--Land-surface datum is 100.17 ft, above National Geodetic Vertical Datum of 1929. Measuring point: Floor of recorder shelter, 2.63 ft above land-surface datum.

PERIOD OF RECORD.--September 1977 to current year.

REMARKS.--Missing periods of more than one day are not estimated.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 31.42 ft below land-surface datum, June 11, 1982; lowest, 36.04 ft below land-surface datum, Sept. 26, 27, 2002.

EXTREMES FOR CURRENT YEAR.--Highest water level, 31.82 ft below land-surface datum, Apr. 28; lowest, 34.86 ft below land-surface datum, Sept. 28.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 33.95 | 33.80 | 33.61 | 33.27 | 33.62 | 33.75 | 33.32 | 31.83 | 32.93 | 33.78 | 34.37 | 34.59 |
| 2 | 33.96 | 33.75 | 33.61 | 33.25 | 33.64 | 33.75 | 33.25 | 31.83 | 32.96 | 33.80 | 34.39 | 34.60 |
| 3 | 33.98 | 33.70 | 33.63 | 33.24 | 33.64 | 33.76 | 33.14 | 31.84 | 33.00 | 33.83 | 34.41 | 34.62 |
| 4 | 34.00 | 33.65 | 33.63 | 33.26 | 33.65 | 33.77 | 33.03 | 31.85 | 33.03 | 33.85 | 34.42 | 34.63 |
| 5 | 34.01 | 33.60 | 33.62 | 33.27 | 33.66 | 33.77 | 32.95 | 31.87 | 33.05 | 33.88 | 34.44 | 34.65 |
| 6 | 34.02 | 33.57 | 33.61 | 33.27 | 33.64 | 33.74 | 32.89 | 31.87 | 33.08 | 33.89 | 34.44 | 34.67 |
| 7 | 34.03 | 33.57 | 33.60 | 33.27 | 33.57 | 33.73 | 32.85 | 31.88 | 33.10 | 33.91 | 34.45 | 34.68 |
| 8 | 34.04 | 33.59 | 33.62 | 33.28 | 33.54 | 33.71 | 32.80 | 31.93 | 33.13 | 33.92 | 34.46 | 34.70 |
| 9 | 34.05 | 33.62 | 33.63 | 33.29 | 33.51 | 33.71 | 32.76 | 31.94 | 33.15 | 33.94 | 34.47 | 34.71 |
| 10 | 34.07 | 33.62 | 33.62 | 33.30 | 33.49 | 33.70 | 32.72 | 31.97 | 33.19 | 33.97 | 34.49 | 34.72 |
| 11 | 34.07 | 33.63 | 33.59 | 33.32 | 33.50 | 33.67 | 32.69 | 32.00 | 33.22 | 34.00 | 34.50 | 34.74 |
| 12 | 34.08 | 33.64 | 33.58 | 33.33 | 33.52 | 33.65 | 32.67 | 32.04 | 33.25 | 34.02 | 34.51 | 34.75 |
| 13 | 34.09 | 33.63 | 33.56 | 33.35 | 33.52 | 33.65 | 32.63 | 32.09 | 33.28 | 34.04 | 34.53 | 34.77 |
| 14 | 34.10 | 33.65 | 33.53 | 33.38 | 33.53 | 33.64 | 32.57 | 32.13 | 33.31 | 34.05 | 34.53 | 34.79 |
| 15 | 34.08 | 33.67 | 33.50 | 33.39 | 33.57 | 33.63 | 32.49 | 32.18 | 33.34 | 34.06 | 34.52 | 34.81 |
| 16 | 34.09 | 33.69 | 33.48 | 33.40 | 33.60 | 33.63 | 32.40 | 32.23 | 33.37 | 34.08 | 34.49 | 34.82 |
| 17 | 34.09 | 33.69 | 33.45 | 33.42 | 33.62 | 33.61 | 32.29 | 32.29 | 33.40 | 34.09 | 34.47 | 34.84 |
| 18 | 34.08 | 33.69 | 33.43 | 33.43 | 33.61 | 33.61 | 32.20 | 32.33 | 33.43 | 34.11 | 34.47 | 34.84 |
| 19 | 34.07 | 33.66 | 33.40 | 33.44 | 33.62 | 33.61 | 32.11 | 32.38 | 33.46 | 34.12 | 34.47 | 34.81 |
| 20 | 34.07 | 33.64 | 33.38 | 33.46 | 33.64 | 33.60 | 32.04 | 32.44 | 33.49 | 34.14 | 34.47 | 34.79 |
| 21 | 34.04 | 33.65 | 33.37 | 33.48 | 33.64 | 33.57 | 31.99 | 32.49 | 33.51 | 34.17 | 34.48 | 34.77 |
| 22 | 34.04 | 33.65 | 33.35 | 33.48 | 33.66 | 33.56 | 31.94 | 32.53 | 33.54 | 34.19 | 34.48 | 34.77 |
| 23 | 34.05 | 33.64 | 33.33 | 33.49 | 33.68 | 33.55 | 31.91 | 32.58 | 33.57 | 34.21 | 34.48 | 34.78 |
| 24 | 34.07 | 33.63 | 33.32 | 33.51 | 33.68 | 33.53 | 31.88 | 32.64 | 33.59 | 34.23 | 34.49 | 34.79 |
| 25 | 34.08 | 33.63 | 33.30 | 33.53 | 33.69 | 33.50 | 31.87 | 32.68 | 33.62 | 34.24 | 34.51 | 34.81 |
| 26 | 34.07 | 33.63 | 33.30 | 33.55 | 33.71 | 33.47 | 31.85 | 32.73 | 33.64 | 34.26 | 34.52 | 34.83 |
| 27 | 34.05 | 33.63 | 33.29 | 33.55 | 33.71 | 33.44 | 31.83 | 32.77 | 33.67 | 34.28 | 34.53 | 34.85 |
| 28 | 34.03 | 33.61 | 33.29 | 33.55 | 33.72 | 33.42 | 31.83 | 32.81 | 33.69 | 34.30 | 34.54 | 34.85 |
| 29 | 33.99 | 33.61 | 33.27 | 33.57 | 33.73 | 33.40 | 31.83 | 32.85 | 33.72 | 34.32 | 34.55 | 34.81 |
| 30 | 33.93 | 33.63 | 33.26 | 33.57 | -- | 33.38 | 31.83 | 32.88 | 33.74 | 34.34 | 34.56 | 34.73 |
| 31 | 33.86 | -- | 33.27 | 33.59 | -- | 33.36 | -- | 32.91 | -- | 34.36 | 34.58 | -- |
| MEAN | 34.04 | 33.65 | 33.47 | 33.40 | 33.62 | 33.61 | 32.42 | 32.28 | 33.35 | 34.08 | 34.48 | 34.75 |
| LOW | 34.10 | 33.80 | 33.63 | 33.59 | 33.73 | 33.77 | 33.32 | 32.91 | 33.74 | 34.36 | 34.58 | 34.85 |
| HIGH | 33.86 | 33.57 | 33.26 | 33.24 | 33.49 | 33.36 | 31.83 | 31.83 | 32.93 | 33.78 | 34.37 | 34.59 |

GROUND-WATER LEVELS IN RHODE ISLAND

WASHINGTON COUNTY--Continued

412718071415201. Richmond well RIW 785.

LOCATION.--Lat 41°27'18", long 71°41'52", Washington County, Hydrologic Unit 01090005, town of Richmond, about 50 ft west of Narragansett Trail, and 1.2 mi north of Wood River Junction.

Owner: Tuckahoe Turf Farms.

AQUIFER.--Sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 2.0 in, depth 40.06 ft, cased to 34.21 ft, screened from 34.21 ft to 40.06 ft.

INSTRUMENTATION.--Digital recorder (15-minute interval), October 2002 to present; prior to October 2002, monthly measurement with chalked tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land-surface datum is 85 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of outer protective casing, 1.81 ft above land-surface datum; prior to Aug. 24, 2000, top of casing, 0.65 ft above land-surface datum.

REMARKS.--Replacement well for RIW 231 which was destroyed.

PERIOD OF RECORD.--October 1989 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 19.50 ft below land-surface datum, June 30, 1998 lowest, 26.92 ft below land-surface datum, Mar. 20, 2002.

EXTREMES FOR CURRENT YEAR.--Highest water level, 22.65 ft below land-surface datum, May 9-13, 15; lowest, 25.09 ft below land-surface datum, Sept. 28, 29.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 23.77 | 24.25 | 24.45 | 23.98 | 24.17 | 24.17 | 24.61 | 22.80 | 22.93 | 23.53 | 24.22 | 24.73 |
| 2 | 23.78 | 24.22 | 24.47 | 23.96 | 24.19 | 24.18 | 24.61 | 22.77 | 22.95 | 23.55 | 24.25 | 24.75 |
| 3 | 23.81 | 24.20 | 24.48 | 23.95 | 24.17 | 24.20 | 24.57 | 22.75 | 22.98 | 23.57 | 24.28 | 24.76 |
| 4 | 23.83 | 24.19 | 24.48 | 23.95 | 24.21 | 24.21 | 24.51 | 22.74 | 23.00 | 23.59 | 24.30 | 24.77 |
| 5 | 23.85 | 24.17 | 24.49 | 23.94 | 24.21 | 24.22 | 24.45 | 22.72 | 23.02 | 23.61 | 24.33 | 24.79 |
| 6 | 23.88 | 24.17 | 24.50 | 23.94 | 24.14 | 24.23 | 24.39 | 22.71 | 23.03 | 23.63 | 24.35 | 24.80 |
| 7 | 23.90 | 24.17 | 24.53 | 23.94 | 24.13 | 24.26 | 24.33 | 22.69 | 23.05 | 23.66 | 24.38 | 24.81 |
| 8 | 23.92 | 24.19 | 24.56 | 23.94 | 24.13 | 24.28 | 24.27 | 22.70 | 23.07 | 23.68 | 24.41 | 24.83 |
| 9 | 23.95 | 24.22 | 24.57 | 23.93 | 24.03 | 24.30 | 24.21 | 22.67 | 23.08 | 23.71 | 24.43 | 24.84 |
| 10 | 23.97 | 24.21 | 24.58 | 23.92 | 23.99 | 24.31 | 24.15 | 22.66 | 23.09 | 23.73 | 24.45 | 24.86 |
| 11 | 24.00 | 24.20 | 24.57 | 23.92 | 24.00 | 24.31 | 24.10 | 22.65 | 23.11 | 23.76 | 24.47 | 24.88 |
| 12 | 24.01 | 24.19 | 24.60 | 23.92 | 23.97 | 24.33 | 24.04 | 22.65 | 23.14 | 23.77 | 24.50 | 24.89 |
| 13 | 24.04 | 24.17 | 24.60 | 23.93 | 23.96 | 24.35 | 23.98 | 22.66 | 23.16 | 23.79 | 24.52 | 24.91 |
| 14 | 24.06 | 24.20 | 24.57 | 23.95 | 23.96 | 24.37 | 23.92 | 22.66 | 23.18 | 23.81 | 24.55 | 24.93 |
| 15 | 24.06 | 24.24 | 24.53 | 23.94 | 23.98 | 24.37 | 23.86 | 22.66 | 23.19 | 23.83 | 24.56 | 24.95 |
| 16 | 24.10 | 24.27 | 24.51 | 23.94 | 23.98 | 24.39 | 23.80 | 22.68 | 23.22 | 23.86 | 24.57 | 24.96 |
| 17 | 24.13 | 24.29 | 24.42 | 23.96 | 23.97 | 24.41 | 23.73 | 22.71 | 23.23 | 23.88 | 24.58 | 24.98 |
| 18 | 24.15 | 24.30 | 24.38 | 23.95 | 23.94 | 24.43 | 23.66 | 22.70 | 23.25 | 23.91 | 24.60 | 24.98 |
| 19 | 24.17 | 24.29 | 24.36 | 23.96 | 23.97 | 24.43 | 23.57 | 22.72 | 23.27 | 23.93 | 24.61 | 25.00 |
| 20 | 24.20 | 24.29 | 24.32 | 23.99 | 23.99 | 24.44 | 23.48 | 22.75 | 23.29 | 23.95 | 24.62 | 25.00 |
| 21 | 24.21 | 24.33 | 24.29 | 24.01 | 23.99 | 24.46 | 23.40 | 22.75 | 23.31 | 23.98 | 24.63 | 25.00 |
| 22 | 24.23 | 24.35 | 24.25 | 24.00 | 24.04 | 24.49 | 23.30 | 22.77 | 23.33 | 24.00 | 24.64 | 25.01 |
| 23 | 24.26 | 24.37 | 24.21 | 24.02 | 24.06 | 24.50 | 23.22 | 22.78 | 23.35 | 24.02 | 24.64 | 25.02 |
| 24 | 24.30 | 24.38 | 24.16 | 24.04 | 24.07 | 24.51 | 23.15 | 22.79 | 23.38 | 24.05 | 24.65 | 25.03 |
| 25 | 24.33 | 24.39 | 24.12 | 24.08 | 24.09 | 24.53 | 23.09 | 22.82 | 23.40 | 24.06 | 24.65 | 25.04 |
| 26 | 24.34 | 24.41 | 24.09 | 24.09 | 24.11 | 24.53 | 23.02 | 22.83 | 23.41 | 24.08 | 24.66 | 25.06 |
| 27 | 24.35 | 24.42 | 24.07 | 24.07 | 24.12 | 24.55 | 22.96 | 22.84 | 23.44 | 24.10 | 24.67 | 25.07 |
| 28 | 24.38 | 24.41 | 24.05 | 24.07 | 24.13 | 24.56 | 22.92 | 22.85 | 23.46 | 24.12 | 24.68 | 25.08 |
| 29 | 24.38 | 24.42 | 24.02 | 24.10 | 24.15 | 24.57 | 22.88 | 22.89 | 23.48 | 24.15 | 24.70 | 25.08 |
| 30 | 24.36 | 24.45 | 24.01 | 24.11 | --- | 24.58 | 22.84 | 22.90 | 23.51 | 24.17 | 24.71 | 25.05 |
| 31 | 24.29 | --- | 23.99 | 24.13 | --- | 24.60 | --- | 22.92 | --- | 24.20 | 24.72 | --- |
| MEAN | 24.10 | 24.28 | 24.36 | 23.99 | 24.06 | 24.39 | 23.77 | 22.75 | 23.21 | 23.86 | 24.53 | 24.93 |
| LOW | 24.38 | 24.45 | 24.60 | 24.13 | 24.21 | 24.60 | 24.61 | 22.92 | 23.51 | 24.20 | 24.72 | 25.08 |
| HIGH | 23.77 | 24.17 | 23.99 | 23.92 | 23.94 | 24.17 | 22.84 | 22.65 | 22.93 | 23.53 | 24.22 | 24.73 |

GROUND-WATER LEVELS IN RHODE ISLAND

WASHINGTON COUNTY--Continued

412918071321001. South Kingstown well SNW 6.

LOCATION.--Lat 41°29'18", long 71°32'10", Washington County, Hydrologic Unit 01090005, town of South Kingstown, in parking lot for Thomas Ryan Center at University of Rhode Island, and 0.9 mi northwest of Kingston.

Owner: University of Rhode Island.

AQUIFER.--Sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water table well, diameter 10 in, depth 34 ft, cased to 34 ft, open end.

INSTRUMENTATION.--Continuous graphic recorder July 1973 to May 1988, digital recorder (60 minute) June 1988 to current year.

DATUM.--Land-surface datum is 111.89 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of hole in base of recorder shelter, 3.07 ft above land-surface datum; prior to Mar. 19, 2002, 0.04 ft above land-surface datum.

RECORD OF PERIOD.--November to December 1947, February 1955 to current year.

REMARKS.--Missing periods of more than one day are not estimated. Original well landscape significantly altered during construction of parking lot during 2002 water year. Land-surface datum changes unknown.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 6.91 ft below land-surface datum, Apr. 25, 26, 1983; lowest, 15.06 ft below land-surface datum, Dec. 29, 1965.

EXTREMES FOR CURRENT YEAR.--Highest water level, 10.15 ft below land-surface datum, Apr. 22; lowest, 13.02 ft below land-surface datum, Sept. 16.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 12.34 | 12.44 | 12.51 | 11.41 | 12.00 | --- | 12.08 | 10.26 | 11.29 | 12.25 | 12.85 | 12.76 |
| 2 | 12.37 | 12.43 | 12.54 | 11.41 | 12.02 | --- | 11.75 | 10.28 | 11.32 | 12.28 | 12.87 | 12.77 |
| 3 | 12.40 | 12.41 | 12.56 | 11.40 | --- | --- | 11.55 | 10.30 | 11.35 | 12.31 | 12.89 | 12.79 |
| 4 | 12.43 | 12.40 | 12.58 | 11.42 | --- | --- | 11.41 | 10.32 | 11.38 | 12.34 | 12.90 | 12.81 |
| 5 | 12.46 | 12.39 | 12.59 | 11.42 | --- | --- | 11.29 | 10.33 | 11.40 | 12.37 | 12.91 | 12.84 |
| 6 | 12.49 | 12.38 | 12.60 | 11.42 | --- | --- | 11.21 | 10.36 | 11.43 | 12.40 | 12.89 | 12.85 |
| 7 | 12.52 | 12.37 | 12.62 | 11.42 | 11.99 | 12.26 | 11.14 | 10.38 | 11.46 | 12.42 | 12.89 | 12.87 |
| 8 | 12.55 | 12.36 | 12.64 | 11.41 | 11.92 | 12.25 | 11.07 | 10.43 | 11.49 | 12.44 | 12.91 | 12.89 |
| 9 | 12.58 | 12.35 | 12.66 | 11.43 | 11.86 | 12.25 | 11.01 | 10.45 | 11.51 | 12.46 | 12.92 | 12.91 |
| 10 | 12.61 | 12.34 | 12.68 | 11.45 | 11.82 | 12.25 | 10.98 | 10.48 | 11.55 | 12.49 | 12.93 | 12.93 |
| 11 | 12.63 | 12.33 | 12.64 | 11.47 | 11.81 | 12.24 | 10.96 | 10.50 | 11.58 | 12.51 | 12.95 | 12.94 |
| 12 | 12.66 | 12.33 | 12.53 | 11.48 | 11.81 | 12.24 | 10.94 | 10.54 | 11.62 | 12.53 | 12.96 | 12.96 |
| 13 | 12.69 | 12.32 | 12.45 | 11.50 | 11.80 | 12.26 | 10.89 | 10.58 | 11.66 | 12.55 | 12.97 | 12.97 |
| 14 | 12.70 | 12.33 | 12.40 | 11.54 | 11.81 | 12.28 | 10.64 | 10.62 | 11.69 | 12.55 | 12.98 | 12.99 |
| 15 | 12.72 | 12.34 | 12.28 | 11.55 | 11.85 | 12.29 | 10.46 | 10.66 | 11.72 | 12.53 | 12.93 | 13.01 |
| 16 | 12.71 | 12.37 | 12.14 | 11.57 | 11.89 | 12.30 | 10.38 | 10.71 | 11.76 | 12.54 | 12.78 | 13.02 |
| 17 | 12.71 | 12.37 | 12.01 | 11.61 | 11.91 | 12.31 | 10.30 | 10.77 | 11.79 | 12.56 | 12.68 | 12.99 |
| 18 | 12.71 | 12.39 | 11.91 | 11.62 | 11.91 | 12.33 | 10.26 | 10.80 | 11.82 | 12.58 | 12.63 | 12.95 |
| 19 | 12.71 | 12.39 | 11.81 | 11.64 | 11.93 | 12.34 | 10.21 | 10.85 | 11.85 | 12.60 | 12.60 | 12.80 |
| 20 | 12.72 | 12.40 | 11.73 | 11.67 | 11.97 | 12.34 | 10.17 | 10.89 | 11.89 | 12.62 | 12.59 | 12.73 |
| 21 | 12.72 | 12.42 | 11.68 | 11.70 | 11.98 | 12.32 | 10.17 | 10.93 | 11.92 | 12.64 | 12.59 | 12.70 |
| 22 | 12.74 | 12.43 | 11.63 | 11.72 | 12.01 | 12.27 | 10.16 | 10.97 | 11.95 | 12.66 | 12.59 | 12.69 |
| 23 | 12.75 | 12.44 | 11.59 | 11.75 | 12.02 | 12.24 | --- | 11.01 | 11.98 | 12.68 | 12.58 | 12.69 |
| 24 | 12.77 | 12.44 | 11.55 | 11.78 | 12.05 | 12.21 | --- | 11.05 | 12.02 | 12.70 | 12.59 | 12.71 |
| 25 | 12.80 | 12.46 | 11.51 | 11.81 | 12.06 | 12.21 | --- | 11.10 | 12.05 | 12.72 | 12.60 | 12.72 |
| 26 | 12.81 | 12.47 | 11.48 | 11.85 | --- | 12.21 | --- | 11.14 | 12.08 | 12.74 | 12.62 | 12.74 |
| 27 | 12.82 | 12.48 | 11.46 | 11.86 | --- | 12.20 | --- | 11.17 | 12.12 | 12.76 | 12.64 | 12.77 |
| 28 | 12.81 | 12.47 | 11.45 | 11.88 | --- | 12.20 | --- | 11.21 | 12.15 | 12.78 | 12.66 | 12.78 |
| 29 | 12.71 | 12.48 | 11.42 | 11.91 | --- | 12.20 | --- | 11.24 | 12.19 | 12.80 | 12.69 | 12.68 |
| 30 | 12.55 | 12.50 | 11.40 | 11.93 | --- | 12.20 | 10.24 | 11.25 | 12.22 | 12.81 | 12.71 | 12.48 |
| 31 | 12.48 | --- | 11.41 | 11.96 | --- | 12.19 | --- | 11.27 | --- | 12.83 | 12.74 | --- |
| MEAN | 12.63 | 12.40 | 12.08 | 11.61 | --- | --- | --- | 10.74 | 11.74 | 12.56 | 12.78 | 12.82 |
| LOW | 12.82 | 12.50 | 12.68 | 11.96 | --- | --- | --- | 11.27 | 12.22 | 12.83 | 12.98 | 13.02 |
| HIGH | 12.34 | 12.32 | 11.40 | 11.40 | --- | --- | --- | 10.26 | 11.29 | 12.25 | 12.58 | 12.48 |

GROUND-WATER LEVELS IN RHODE ISLAND

WASHINGTON COUNTY--Continued

412918071321001. South Kingstown well SNW 1198.

LOCATION.--Lat 41°29'35", long 71°35'35", Washington County, Hydrologic Unit 01090005, town of South Kingstown, at Laurel Lane Golf Course, , 2.7 mi west of West Kingstown.

Owner: Private owner.

AQUIFER.--Sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water table well, diameter 2 in, depth 20.6 ft, cased 18.6 to 20.6 ft.

INSTRUMENTATION.--Monthly measurement with electric or chalked tape by U.S. Geological Survey personnel.

DATUM.--Land-surface datum is 115 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of well casing, 1.95 ft above land-surface datum.

REMARKS.--Well is located about 1,000 ft from SNW 515 (discontinued after June 2000) and may be used as a surrogate for SNW 515.

RECORD OF PERIOD.--December 1988 to July 1991, May 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 5.36 ft below land-surface datum, Mar. 28, 2001; lowest, 11.24 ft below land-surface datum, Oct. 22, 1997.

WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|------------|-------------|---------|-------------|--------------|-------------|--------|-------------|--------------|-------------|--------|-------------|
| OCT 07 | 9.82 | NOV 24 | 9.15 | JAN 27 | 8.26 | APR 09 | 6.60 | MAY 20 | 7.36 | AUG 25 | 9.71 |
| | 20 | DEC 05 | 9.26 | FEB 25 | 8.43 | | 22 | JUN 23 | 8.79 | SEP 28 | 10.25 |
| NOV 07 | 9.05 | | 30 | MAR 30 | 8.42 | MAY 06 | 6.58 | JUL 28 | 10.04 | | |
| WATER YEAR | 2004 | HIGHEST | 6.15 | APR 22, 2004 | | LOWEST | 10.25 | SEP 28, 2004 | | | |

412154071462901. Westerly well WEW 522.

LOCATION.--Lat 41°21'54", long 71°46'29", Washington County, Hydrologic Unit 01090005, town of Westerly, 350 ft northwest of intersection of Pound and Old Shore Roads and 1.0 mi north of Dunn Corner.

Owner: Private owner.

AQUIFER.--Sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Dug observation water-table well, diameter 30 in, depth 16 ft, lined with stone to 16 ft, shored.

INSTRUMENTATION.--Digital recorder (15-minute interval), November 2002 to present; prior to November 2002, monthly measurement with chalked tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land-surface datum is 45 ft above National Geodetic Vertical Datum of 1929. Measuring point: hole in rock cap, 0.72 ft above land surface datum; prior to July 25, 2003, southwest corner of stone casing, 0.91 ft above land-surface datum.

PERIOD OF RECORD.--January 1969 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 9.23 ft below land-surface datum, Apr. 23, 1983; lowest, 14.99 ft below land-surface datum, Aug. 25, 1999.

EXTREMES FOR CURRENT YEAR.--Highest water level, 10.53 ft below land-surface datum, Apr. 16; lowest, 13.62 ft below land-surface datum, Aug. 13.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 13.30 | 12.47 | 12.65 | 11.93 | 12.69 | 12.67 | 12.16 | 11.20 | 12.24 | 13.08 | 13.54 | 13.23 |
| 2 | 13.31 | 12.47 | 12.68 | 11.96 | 12.71 | 12.67 | 11.61 | 11.26 | 12.25 | 13.11 | 13.56 | 13.26 |
| 3 | 13.34 | 12.47 | 12.71 | 11.97 | 12.72 | 12.68 | 11.36 | 11.29 | 12.27 | 13.14 | 13.57 | 13.28 |
| 4 | 13.35 | 12.49 | 12.73 | 12.00 | 12.57 | 12.69 | 11.25 | 11.22 | 12.31 | 13.18 | 13.60 | 13.31 |
| 5 | 13.37 | 12.49 | 12.75 | 11.95 | 12.48 | 12.67 | 11.21 | 11.24 | 12.34 | 13.21 | 13.57 | 13.34 |
| 6 | 13.40 | 12.44 | 12.75 | 11.86 | 12.48 | 12.59 | 11.21 | 11.31 | 12.38 | 13.19 | 13.48 | 13.35 |
| 7 | 13.42 | 12.37 | 12.76 | 11.87 | 12.35 | 12.49 | 11.24 | 11.35 | 12.40 | 13.20 | 13.45 | 13.37 |
| 8 | 13.44 | 12.35 | 12.78 | 11.91 | 12.24 | 12.44 | 11.29 | 11.42 | 12.43 | 13.22 | 13.46 | 13.39 |
| 9 | 13.46 | 12.37 | 12.80 | 11.96 | 12.23 | 12.43 | 11.34 | 11.47 | 12.46 | 13.24 | 13.48 | 13.40 |
| 10 | 13.48 | 12.37 | 12.80 | 12.00 | 12.25 | 12.43 | 11.40 | 11.51 | 12.49 | 13.27 | 13.52 | 13.40 |
| 11 | 13.50 | 12.38 | 12.67 | 12.04 | 12.27 | 12.42 | 11.45 | 11.55 | 12.53 | 13.30 | 13.56 | 13.42 |
| 12 | 13.51 | 12.37 | 12.53 | 12.07 | 12.30 | 12.43 | 11.50 | 11.60 | 12.58 | 13.33 | 13.59 | 13.45 |
| 13 | 13.51 | 12.34 | 12.50 | 12.10 | 12.31 | 12.47 | 11.41 | 11.66 | 12.62 | 13.32 | 13.61 | 13.47 |
| 14 | 13.53 | 12.36 | 12.49 | 12.14 | 12.33 | 12.50 | 10.81 | 11.71 | 12.65 | 13.20 | 13.60 | 13.50 |
| 15 | 13.48 | 12.40 | 12.28 | 12.16 | 12.36 | 12.50 | 10.57 | 11.76 | 12.67 | 13.14 | 13.50 | 13.53 |
| 16 | 13.42 | 12.44 | 12.07 | 12.20 | 12.40 | 12.52 | 10.54 | 11.81 | 12.70 | 13.13 | 13.31 | 13.53 |
| 17 | 13.40 | 12.46 | 11.98 | 12.24 | 12.44 | 12.53 | 10.57 | 11.86 | 12.74 | 13.16 | 13.18 | 13.48 |
| 18 | 13.39 | 12.49 | 11.87 | 12.26 | 12.45 | 12.56 | 10.65 | 11.90 | 12.77 | 13.19 | 13.10 | 13.44 |
| 19 | 13.36 | 12.48 | 11.79 | 12.30 | 12.47 | 12.58 | 10.70 | 11.94 | 12.77 | 13.22 | 13.08 | 13.28 |
| 20 | 13.35 | 12.48 | 11.77 | 12.33 | 12.50 | 12.58 | 10.77 | 11.98 | 12.77 | 13.26 | 13.08 | 13.19 |
| 21 | 13.33 | 12.48 | 11.78 | 12.36 | 12.51 | 12.46 | 10.86 | 12.02 | 12.79 | 13.30 | 13.08 | 13.15 |
| 22 | 13.34 | 12.50 | 11.78 | 12.38 | 12.54 | 12.36 | 10.92 | 12.05 | 12.82 | 13.33 | 13.05 | 13.14 |
| 23 | 13.34 | 12.52 | 11.80 | 12.41 | 12.56 | 12.32 | 10.99 | 12.09 | 12.84 | 13.36 | 13.01 | 13.16 |
| 24 | 13.37 | 12.54 | 11.81 | 12.44 | 12.58 | 12.32 | 11.01 | 12.12 | 12.87 | 13.39 | 13.02 | 13.19 |
| 25 | 13.39 | 12.56 | 11.75 | 12.49 | 12.59 | 12.33 | 11.06 | 12.15 | 12.90 | 13.41 | 13.05 | 13.21 |
| 26 | 13.40 | 12.58 | 11.74 | 12.53 | 12.61 | 12.34 | 11.06 | 12.18 | 12.92 | 13.44 | 13.08 | 13.24 |
| 27 | 13.38 | 12.60 | 11.77 | 12.55 | 12.63 | 12.34 | 10.95 | 12.20 | 12.95 | 13.46 | 13.10 | 13.27 |
| 28 | 13.29 | 12.60 | 11.82 | 12.58 | 12.64 | 12.35 | 11.01 | 12.19 | 12.98 | 13.49 | 13.13 | 13.28 |
| 29 | 13.08 | 12.61 | 11.84 | 12.61 | 12.66 | 12.37 | 11.10 | 12.15 | 13.02 | 13.50 | 13.16 | 12.97 |
| 30 | 12.66 | 12.64 | 11.85 | 12.63 | --- | 12.38 | 11.15 | 12.17 | 13.05 | 13.51 | 13.19 | 12.44 |
| 31 | 12.51 | --- | 11.90 | 12.66 | --- | 12.37 | --- | 12.21 | --- | 13.52 | 13.22 | --- |
| MEAN | 13.34 | 12.47 | 12.23 | 12.22 | 12.48 | 12.48 | 11.11 | 11.76 | 12.65 | 13.28 | 13.32 | 13.29 |
| LOW | 13.53 | 12.64 | 12.80 | 12.66 | 12.72 | 12.69 | 12.16 | 12.21 | 13.05 | 13.52 | 13.61 | 13.53 |
| HIGH | 12.51 | 12.34 | 11.74 | 11.86 | 12.23 | 12.32 | 10.54 | 11.20 | 12.24 | 13.08 | 13.01 | 12.44 |

| | Page | | Page |
|---|---------|---|---------|
| East Providence, RI, Ten Mile River | | I | |
| at Pawtucket Avenue at | 97 | Identifying estimated daily discharge, explanation of | 19 |
| East Weymouth, MA, Whitmans Pond Combined | | Indian Head River at Hanover, MA | 89 |
| By-Pass and Fish Ladder Flow at | 88 | Indian Orchard, MA, Chicopee River at | 231 |
| Whitmans Pond Fish Ladder at | 87 | Introduction | 1 |
| Whitmans Pond, Whitmans Pond Dam at | 85 | Ipswich River at South Middleton, MA | 58 |
| Whitmans Pond, Flood By-Pass at | 86 | near Ipswich, MA | 59 |
| Erving, MA, Millers River at | 206 | Ipswich River Basin, gaging-station records in | 58,59 |
| Essex County, MA, ground-water levels in | 260-263 | | |
| Exeter, RI, Climatological Station near | 163-167 | J | |
| Queen River, 1,400 feet upstream of | | Jones River at Kingston, MA | 90 |
| William Reynolds Road at | 161,162 | | |
| Explanation of ground-water-level records, explanation of | 27 | K | |
| Explanation of precipitation records, explanation of | 20 | Kent County, RI, ground-water levels in | 289,290 |
| Explanation of stage- and water-discharge records, | | Kenyon, RI, Pawcatuck River at | 174,175 |
| explanation of | 16 | Kettle Brook at Rockland St. near Auburn, MA | 98 |
| Explanation of water-quality records, explanation of | 21 | Kingston, MA, Jones River at | 90 |
| | | King Tom Pond Inlet Basin, discharge measurements | |
| F | | at miscellaneous sites in | 247 |
| Farmington River, West Branch, near New Boston, MA | 235 | Knightville, MA, Westfield River at | 232 |
| Fiskdale, MA, Quinebaug River below East Brimfield | | | |
| Dam at | 199 | L | |
| Fitchburg, MA, North Nashua River at | 33 | Laboratory measurements, explanation of | 23,29 |
| Floods, summary of | 11 | Leominster, MA, North Nashua River near | 34 |
| Floods and droughts, summary of | 11 | Liberty, RI, Queen River at Liberty Road at | 168 |
| Forestdale, RI, Branch River at | 106 | Little Creek Basin, discharge measurements | |
| Franklin County, MA, ground-water levels in | 264,265 | at miscellaneous sites in | 242 |
| Franklin, MA, Miscoe Brook near | 65 | Lowell, MA, Concord River below River Meadow | |
| | | Brook at | 51 |
| | | Merrimack River below Concord River at | 52,53 |
| G | | M | |
| Gazzaville, RI, Chepachet River west of Gazza Rd. at | 105 | Maynard, MA, Assabet River at | 48 |
| Gibbs Crossing, MA, Ware River at | 225 | Meadow Brook near Carolina, RI | 180,181 |
| Great Barrington, MA, Housatonic River near | 237 | Medway, MA, Charles River at | 66 |
| Green River at Williamstown, MA | 240 | Merrimack River below Concord River | |
| near Colrain, MA | 215-217 | at Lowell, MA | 52,53 |
| Ground-water levels in Massachusetts | 250-288 | Merrimack River Basin, gaging-station records in | 33-56 |
| Ground-water levels in Rhode Island | 289-306 | Middlesex County, MA, ground-water levels in | 272-276 |
| Ground-water levels, summary of | 11 | Mill River at Harris Pd. Outlet at Woonsocket, RI, | 107 |
| Ground-water-quality data, explanation of | 29 | at Northampton, MA | 219-221 |
| | | Millbury, MA, Blackstone River, W. Main St., at | 99 |
| H | | Millers River at Erving, MA | 206 |
| Hampden County, MA, ground-water levels in | 266-268 | near Winchendon, MA | 201 |
| Hampshire County, MA, ground-water levels in | 269-271 | Milton Village, MA, Neponset River at | 79 |
| Hanover, MA, Indian Head River at | 89 | Miscoe Brook near Franklin, MA | 65 |
| Hardwick, MA, East Branch Swift River near | 226 | Montague City, MA, Connecticut River at | 218 |
| Harrisville, RI, Nipmuc River near | 104 | Moshassuck River at Providence, RI | 113 |
| Hemlock Brook at King Road near Clayville, RI | 141-144 | Moswansicut Stream near North Scituate, RI | 124-127 |
| Holden, MA, Quinapoxet River at Canada Mills near | 41-45 | Mother Brook at Dedham, MA | 68 |
| Hoosic River at Adams, MA | 238 | Muddy River at Brookline, MA | 73-75 |
| near Williamstown, MA | 239 | Mumford River at Uxbridge, MA | 103 |
| Holyoke, MA, Connecticut River at I-391 Bridge at | 222 | | |
| Hope Valley, RI, Wood River at | 187-191 | N | |
| Housatonic River, East Branch, at Coltsville, MA | 236 | Nantucket County, MA, ground-water levels in | 277 |
| near Great Barrington, MA | 237 | Nashoba Brook near Acton, MA | 49 |
| Housatonic River Basin, gaging-station records in | 236,237 | Nashua River at East Pepperell, MA | 47 |
| Hudson River Basin, gaging-station records in | 238-240 | Neponset River at Greenlodge Street near Canton, MA | 78 |
| Hunt River near East Greenwich, RI | 159 | at Milton Village, MA | 79 |
| Huntinghouse Brook at Elmdale Road at North | | at Norwood, MA | 76 |
| Scituate, RI | 120-123 | East Branch, at Canton, MA | 77 |
| Huntington, MA, West Branch Westfield River at | 233 | | |
| Hydrographs, explanation of | 29 | | |

| | Page | | Page |
|---|---------|---|---------|
| Neponset River Basin, gaging-station records in..... | 76-79 | Queen River at Liberty Road at Liberty, RI | 168 |
| New Boston, MA, West Branch Farmington River near | 235 | 1,400 feet upstream of William Reynolds Road, | |
| Newport County, RI, ground-water levels in..... | 291 | at Exeter, RI..... | 161,162 |
| Nipmuc River near Harrisville, RI..... | 104 | Quinapoxet River at Canada Mills near Holden, MA | 41-45 |
| Norfolk County, MA, ground-water levels in..... | 277-280 | Quincy, MA, Town Brook at..... | 83 |
| North Dighton, MA, Threemile River at | 95 | Town Brook at Diversion Tunnel at..... | 80-82 |
| North Grafton, MA, Quinsigamond River at..... | 100 | Quinebaug River below East Brimfield Dam | |
| North Nashua River at Fitchburg, MA | 33 | at Fiskdale, MA | 199 |
| near Leominster | 34 | below Westville Dam near Southbridge, MA | 200 |
| North River at Shattuckville, MA..... | 208-210 | Quinsigamond River at North Grafton, MA..... | 100 |
| North Scituate, RI, Huntinghouse Brook at Elmdale | | Quonapaug Brook at Rt. 116, North Scituate, RI..... | 128-131 |
| Road at..... | 120-123 | | |
| Moswansicut Stream near..... | 124-127 | R | |
| Peepetoad Brook at Elmdale Road near | 115-119 | Red Brook Basin, discharge measurements | |
| Quonapaug Brook at Rt. 116, | 128-131 | at miscellaneous sites in | 241 |
| North Stonington, CT, Shunock River near..... | 196,197 | Reference samples, explanation of | 27 |
| Northampton, MA, Mill River at..... | 219-221 | Remark codes, explanation of..... | 26,31 |
| Northbridge, MA, Blackstone River at..... | 101,102 | Replicate samples, explanation of | 27 |
| Norton, MA, Wading River near | 94 | Reservoir storage, summary of | 8 |
| Norwood, MA, Neponset River at | 76 | Retrieval of hydrographs and historical data from the | |
| Numbering system for wells and miscellaneous sites, | | USGS database | 29 |
| explanation of | 14 | | |
| O | | S | |
| Old Harbor Creek Basin, discharge measurements | | Saugatucket River Basin, discharge measurements | |
| at miscellaneous sites in..... | 241 | at miscellaneous sites in | 246 |
| Old Swamp River near South Weymouth, MA | 84 | Saugus River at Saugus Ironworks at Saugus, MA | 60 |
| On-site measurements and sample collection, | | Saxonville, MA, Sudbury River at..... | 50 |
| explanation of | 22 | Scorton Creek Basin, discharge measurements | |
| Other data records available, explanation of..... | 20 | at miscellaneous sites in | 241 |
| Otter River at Otter River, MA | 203-205 | Sediment, explanation of | 22 |
| P | | Segreganset River near Dighton, MA..... | 96 |
| Parker River at Byfield, MA..... | 57 | Sevenmile River near Spencer, MA | 229 |
| Paskamanset River near South Dartmouth, MA..... | 92 | Shannock, RI, Beaver River, Shannock Hill Road, near | 177,178 |
| Pawcatuck River at Burdickville, RI | 192,193 | Shattuckville, MA, North River at..... | 208-210 |
| at Kenyon, RI..... | 174,175 | Shawsheen River at Hanscom Field near Bedford, MA | 54,55 |
| at Westerly, RI..... | 198 | near Wilmington, MA..... | 56 |
| at Wood River Junction, RI | 179 | Shunock River near North Stonington, CT..... | 196,197 |
| Pawcatuck River Basin, discharge measurements | | Shutesbury, MA, West Branch Swift River near | 227 |
| at miscellaneous sites in..... | 247-249 | Silver Creek Basin, discharge measurements | |
| gaging-station records in..... | 160-198 | at miscellaneous sites in | 243 |
| Pawtucket, RI, Blackstone River at Roosevelt Ave..... | 112 | Site identification numbers, explanation of..... | 27 |
| Pawtuxet River at Cranston, RI | 158 | South Dartmouth, MA, Paskamanset River near | 92 |
| South Branch, at Washington, RI | 157 | South Foster, RI, Dolly Cole Brook at Old Danielson | |
| Pawtuxet River Basin, discharge measurements | | Park at..... | 137-140 |
| at miscellaneous sites in..... | 243-245 | Ponaganset River near | 132-136 |
| gaging-station records in..... | 115-158 | South Middleton, MA, Ipswich River at..... | 58 |
| Peepetoad Brook at Elmdale Road near North Scituate, RI | 115-119 | South River near Conway, MA..... | 211-213 |
| Peters River at Rt. 114 Bridge at Woonsocket, RI | 108 | South Weymouth, MA, Old Swamp River near | 84 |
| Plymouth County, MA, ground-water levels in..... | 281-284 | Southbridge, MA, Quinebaug River below Westville Dam near | 200 |
| Pocasset River Basin, discharge measurements | | Special networks and programs, explanation of | 15 |
| at miscellaneous sites in..... | 241 | Spencer, MA, Sevenmile River near | 229 |
| Ponaganset River near South Foster, RI | 132-136 | Spike samples, explanation of | 27 |
| Priest Brook near Winchendon, MA..... | 202 | Squannacook River near West Groton, MA | 46 |
| Providence County, RI, ground-water levels in..... | 292-296 | Squeteague Brook Basin, discharge measurements | |
| Providence, RI, Moshassuck River at | 113 | at miscellaneous sites in | 241 |
| Q | | Station manuscript, explanation of | 17 |
| Quabbin Reservoir, contents of | 228 | Statistics of monthly mean data, explanation of..... | 18 |
| Quaboag River at West Brimfield, MA | 230 | Stillwater River near Sterling, MA | 35-40 |
| Quashnet River at Waquoit Village, MA..... | 91 | Streamflow, summary of..... | 8 |
| | | Sudbury River at Saxonville, MA..... | 50 |
| | | Summary of hydrologic conditions..... | 8 |

| | Page | | Page |
|--|---------|---|---------|
| Summary statistics, explanation of | 18 | Water temperature, explanation of..... | 22 |
| Surface-water quality records, explanation of | 21 | Watertown, MA, Charles River above Watertown Dam at | 71,72 |
| Swift River at West Ware, MA..... | 228 | Wellesley, MA, Charles River at | 69 |
| East Branch, near Hardwick, MA..... | 226 | West Brimfield, MA, Quaboag River at | 230 |
| West Branch, near Shutesbury, MA | 227 | West Deerfield, MA, Deerfield River near..... | 214 |
| | | West Groton, MA, Squannacook River near | 46 |
| T | | West Kingston, RI, Chickasheen Brook at | 172,173 |
| Taunton River near Bridgewater, MA | 93 | Chipuxet River at..... | 160 |
| Taunton River Basin, gaging-station records in | 93-96 | Westport Basin, West Branch, discharge measurements | |
| Ten Mile River at Pawtucket Avenue | | at miscellaneous sites in | 242 |
| at East Providence, RI..... | 97 | West Ware, MA, Swift River at..... | 228 |
| Thames River Basin, gaging-station records in | 199,200 | Westerly, RI, Pawcatuck River at | 198 |
| Threemile River at North Dighton, MA | 95 | Westfield River at Knightville, MA | 232 |
| Town Brook at Diversion Tunnel at Quincy, MA | 80-82 | near Westfield, MA | 234 |
| at Quincy, MA | 83 | West Branch, at Huntington, MA | 233 |
| | | Weymouth Back River Basin, gaging-station records in..... | 84-88 |
| U | | Weymouth Fore River Basin, gaging-station records in..... | 80-83 |
| Usquepaug River at Rt. 138, at Usquepaug, RI..... | 169,170 | Whitmans Pond Combined By-Pass and Fish Ladder | |
| near Usquepaug, RI | 171 | Flow at East Weymouth, MA | 88 |
| Usquepaug, RI, Beaver River near | 176 | Whitmans Pond Dam at East Weymouth, MA..... | 85 |
| Uxbridge, MA, Mumford River at..... | 103 | Fish Ladder at East Weymouth, MA | 87 |
| | | Flood By-Pass at East Weymouth, MA..... | 86 |
| V | | Wilbur Hollow Brook at Old Plainfield Pike near | |
| Valley Falls, RI, Abbott Run at | 111 | Clayville, RI..... | 153-156 |
| | | Williamstown, MA, Green River at..... | 240 |
| W | | Hoosic River near | 239 |
| Wading River near Norton, MA | 94 | Wilmington, MA, Shawsheen River near..... | 56 |
| Waltham, MA, Charles River at | 70 | Winchendon, MA, Millers River near | 201 |
| Waquoit Village, MA, Quashnet River at..... | 91 | Priest Brook near | 202 |
| Ware River at Gibbs Crossing, MA..... | 225 | Winchester, MA, Aberjona River at | 61-64 |
| at intake works near Barre, MA..... | 224 | Wood River at Hope Valley, RI..... | 187-191 |
| near Barre, MA | 223 | near Arcadia, RI..... | 182 |
| Washington County, RI, ground-water levels in | 296-306 | Wood River Junction, RI, Pawcatuck River at | 179 |
| Washington, RI, South Branch Pawtuxet River at..... | 157 | Woonasquatucket River at Centerdale, RI..... | 114 |
| Water analysis, explanation of..... | 21 | Woonsocket, RI, Blackstone River at..... | 109 |
| Water-level tables, explanation of | 28 | Mill River at Harris Pd. Outlet at | 107 |
| Water quality, summary of | 11 | Peters River at Rt. 114 Bridge at | 108 |
| Water-quality control data, explanation of | 26 | Worcester County, MA, ground-water levels in..... | 285-288 |