## 01480870 EAST BRANCH BRANDYWINE CREEK BELOW DOWNINGTOWN, PA

LOCATION.--Lat $39^{\circ} 58^{\prime} 07^{\prime \prime}$, long $75^{\circ} 40^{\prime} 25^{\prime \prime}$, Chester County, Hydrologic Unit 02040205, on left bank at downstream side of Sugars Bridge (U.S. Highway 322), 2,000 ft upstream from Valley Creek, 1.5 mi north of Marshallton, and 3.3 mi southeast of Downingtown.
DRAINAGE AREA.--89.9 $\mathrm{mi}^{2}$.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February 1972 to current year.
REVISED RECORDS.--WDR PA-75-1: 1972(P), 1973, 1974.
GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 195 ft above sea level, from topographic map. Feb. 1 to Apr. 10, and June 25 to Nov. 17, 1972, nonrecording gage at same site and datum.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Flow regulated since November 1973 by Marsh Creek Reservoir (station 01480684 ) about 7.5 mi upstream. Satellite and landline telemetry at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000 DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 92 | 73 | 148 | 97 | e60 | 193 | 263 | 143 | 97 | 118 | 90 | 62 |
| 2 | 79 | 122 | 142 | 97 | e59 | 161 | 248 | 150 | 92 | 109 | 85 | 59 |
| 3 | 84 | 191 | 142 | 100 | e58 | 151 | 238 | 139 | 87 | 111 | 76 | 64 |
| 4 | 117 | 67 | 142 | 121 | e64 | 138 | 294 | 135 | 83 | 129 | 483 | 88 |
| 5 | e223 | 56 | 139 | 192 | e60 | 118 | 227 | 135 | 97 | 102 | 122 | 58 |
| 6 | e126 | 65 | 271 | 127 | e60 | 113 | 204 | 135 | 174 | 92 | 97 | 52 |
| 7 | e98 | 56 | 207 | 119 | e60 | 110 | 193 | 129 | 133 | 86 | 89 | 48 |
| 8 | e89 | 52 | 159 | 115 | e61 | 110 | 189 | 105 | 111 | 80 | 79 | 49 |
| 9 | 58 | 51 | 150 | 114 | e61 | 109 | 325 | 103 | 104 | 76 | 72 | 48 |
| 10 | 280 | 49 | 178 | 145 | e61 | 105 | 240 | 136 | 98 | 95 | 70 | 47 |
| 11 | 132 | 49 | 192 | 174 | e66 | 135 | 200 | 162 | 92 | 80 | 66 | 49 |
| 12 | 79 | 45 | 156 | 128 | e72 | 222 | 199 | 116 | 94 | 74 | 86 | 49 |
| 13 | 79 | 45 | 148 | 122 | e64 | 166 | 207 | 122 | 182 | 71 | 84 | 144 |
| 14 | 85 | 45 | 396 | 112 | e150 | 156 | 203 | 192 | 125 | 85 | 91 | 71 |
| 15 | 80 | 42 | 271 | 107 | 179 | 146 | 194 | 156 | 116 | 93 | 90 | 212 |
| 16 | 94 | 41 | 201 | e90 | 151 | 142 | 193 | 148 | 115 | 84 | 71 | 82 |
| 17 | 103 | 40 | 178 | e79 | 175 | 291 | 228 | 145 | 107 | 80 | 64 | 67 |
| 18 | 111 | 40 | 168 | e73 | 139 | 165 | 272 | 114 | 166 | 76 | 63 | 60 |
| 19 | 67 | 41 | 160 | e60 | 293 | 121 | 200 | 204 | 845 | 80 | 64 | 129 |
| 20 | 94 | 42 | 174 | e68 | 211 | 115 | 184 | 258 | 215 | 87 | 58 | 149 |
| 21 | 88 | 45 | 197 | e62 | 167 | 552 | 339 | 214 | 175 | 74 | 55 | 84 |
| 22 | 70 | 44 | 141 | e60 | 151 | 2600 | 402 | 221 | 405 | 69 | 52 | 71 |
| 23 | 80 | 45 | e114 | e58 | 173 | 868 | 243 | 320 | 191 | 64 | 50 | 68 |
| 24 | 71 | 50 | 103 | e59 | 218 | 553 | 235 | 325 | 155 | 67 | 55 | 70 |
| 25 | 64 | 47 | 94 | e70 | 251 | 414 | 222 | 226 | 134 | 71 | 51 | 79 |
| 26 | 61 | 112 | 94 | e66 | 250 | 409 | 206 | 199 | 122 | 148 | 47 | 641 |
| 27 | 62 | 572 | 95 | e63 | 195 | 406 | 169 | 187 | 117 | 137 | 48 | 180 |
| 28 | 69 | 208 | 93 | e60 | 359 | 591 | 163 | 185 | 168 | 93 | 67 | 135 |
| 29 | 75 | 172 | 90 | e58 | 231 | 307 | 157 | 159 | 181 | 81 | 53 | 129 |
| 30 | 75 | 158 | 90 | e57 | --- | 269 | 149 | 103 | 161 | 79 | 52 | 113 |
| 31 | 73 | --- | 92 | e66 | --- | 252 | --- | 99 | --- | 88 | 76 | --- |
| TOTAL | 2958 | 2665 | 4925 | 2919 | 4099 | 10188 | 6786 | 5165 | 4942 | 2779 | 2606 | 3157 |
| MEAN | 95.4 | 88.8 | 159 | 94.2 | 141 | 329 | 226 | 167 | 165 | 89.6 | 84.1 | 105 |
| MAX | 280 | 572 | 396 | 192 | 359 | 2600 | 402 | 325 | 845 | 148 | 483 | 641 |
| MIN | 58 | 40 | 90 | 57 | 58 | 105 | 149 | 99 | 83 | 64 | 47 | 47 |
| CFSM | 1.06 | . 99 | 1.77 | 1.05 | 1.57 | 3.66 | 2.52 | 1.85 | 1.83 | 1.00 | . 94 | 1.17 |
| IN. | 1.22 | 1.10 | 2.04 | 1.21 | 1.70 | 4.22 | 2.81 | 2.14 | 2.04 | 1.15 | 1.08 | 1.31 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 2000, BY WATER YEAR (WY)

| MEAN | 92.6 | 113 | 169 | 186 | 177 | 222 | 212 | 170 | 119 | 110 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| MAX | 304 | 242 | 577 | 527 | 409 | 525 | 594 | 410 | 315 | 421 |
| (WY) | 1997 | 1997 | 1997 | 1979 | 1979 | 1994 | 1983 | 1989 | 1982 | 1984 |
| MIN | 41.2 | 43.6 | 40.8 | 30.9 | 74.6 | 61.6 | 53.1 | 75.9 | 45.5 | 33.3 |
| (WY) | 1987 | 1974 | 1981 | 1981 | 1980 | 1985 | 1985 | 1999 | 1999 | 1999 |

e Estimated.

## CHRISTINA RIVER BASIN

01480870 EAST BRANCH BRANDYWINE CREEK BELOW DOWNINGTOWN, PA--Continued

| SUMMARY STATISTICS | FOR 1999 CALENDAR YEAR | FOR 2000 WATER YEAR | WATER YEARS | 1974-2000 |
| :---: | :---: | :---: | :---: | :---: |
| ANNUAL TOTAL | 41677 | 53189 |  |  |
| ANNUAL MEAN | 114 | 145 | 145 |  |
| HIGHEST ANNUAL MEAN |  |  | 257 | 1984 |
| LOWEST ANNUAL MEAN |  |  | 59.7 | 1981 |
| HIGHEST DAILY MEAN | 3080 Sep 16 | 2600 Mar 22 | 3080 | Sep 161999 |
| LOWEST DAILY MEAN | 23 Jul 28a | 40 Nov 17,18 | 23 | Sep 121995 |
| ANNUAL SEVEN-DAY MINIMUM | 24 Aug 2 | 42 Nov 14 | 24 | Aug 21999 |
| INSTANTANEOUS PEAK FLOW |  | b4270 Mar 22 | c8160 | Jun 221972 |
| INSTANTANEOUS PEAK STAGE |  | 10.79 Mar 22 | 14.79 | Sep 161999 |
| ANNUAL RUNOFF (CFSM) | 1.27 | 1.62 | 1.61 |  |
| ANNUAL RUNOFF (INCHES) | 17.25 | 22.01 | 21.91 |  |
| 10 PERCENT EXCEEDS | 189 | 241 | 277 |  |
| 50 PERCENT EXCEEDS | 82 | 110 | 95 |  |
| 90 PERCENT EXCEEDS | 29 | 57 | 42 |  |

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## CHRISTINA RIVER BASIN

## 01480870 EAST BRANCH BRANDYWINE CREEK BELOW DOWNINGTOWN, PA--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1965 to September 1966, October 1970 to current year.
PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: February 1972 to current year.
pH: February 1972 to current year.
WATER TEMPERATURES: February 1972 to current year.
DISSOLVED OXYGEN: February 1972 to current year.
INSTRUMENTATION.--Water-quality monitor since February 1972.
REMARKS.--Specific conductance records rated good. pH records rated good except for period Oct. 1 to Nov. 18, which are fair. Water temperature and dissolved oxygen records rated fair. Data collection discontinued during winter months since 1981 water year. Other interruptions in the record were due to malfunctions of the equipment.

## EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 652 microsiemens, Feb. 6, 1977; minimum, 67 microsiemens, July 1, 1984.
pH : Maximum, 9.9, May 13, June 5, 1973; minimum, 5.4, Oct. 24, 26, 1973.
WATER TEMPERATURE: Maximum, $33.0^{\circ} \mathrm{C}$, July 18,1977 ; minimum, $0.0^{\circ} \mathrm{C}$, many days during winters.
DISSOLVED OXYGEN: Maximum, $19.4 \mathrm{mg} / \mathrm{L}$, Mar. 18, 1989; minimum, $0.8 \mathrm{mg} / \mathrm{L}$, July 23, 1984.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000


## CHRISTINA RIVER BASIN

01480870 EAST BRANCH BRANDYWINE CREEK BELOW DOWNINGTOWN, PA--Continued


## CHRISTINA RIVER BASIN

## 01480870 EAST BRANCH BRANDYWINE CREEK BELOW DOWNINGTOWN, PA--Continued

BIOLOGICAL DATA
BENTHIC MACROINVERTEBRATES
REMARKS.--Samples were collected using a Hess sampler with a mesh size of $500 \mu \mathrm{~m}$. Each sample covered a total area of $3.2 \mathrm{~m}^{2}$.

| Date | 10/22/99 |
| :---: | :---: |
| Benthic Macroinvertebrate | Count |
| Platyhelminthes |  |
| Turbellaria (Flatworms) |  |
| Tricladida |  |
| Planariidae | 1 |
| Nematoda (Nematodes) | 1 |
| Nemertea (Probosas Worms) |  |
| Enopla |  |
| Hoplonemertea |  |
| Tetrastemmatidae |  |
| Prostoma | 1 |
| Mollusca |  |
| Gastropoda (Snails) |  |
| Basommatophora |  |
| Ancylidae |  |
| Ferrissia | 4 |
| Bivalvia (Clams) |  |
| Veneroida |  |
| Sphaeriidae | 2 |
| Annelida (Segmented Worms) |  |
| Oligochaeta | 4 |
| Arthropoda |  |
| Acariformes |  |
| Hydrachnidia (Water Mites) | 3 |
| Crustacea |  |
| Amphipoda (Scuds) |  |
| Crangonyctidae |  |
| Crangonyx | 2 |
| Insecta |  |
| Ephemeroptera (Mayflies) |  |
| Baetidae |  |
| Baetis | 5 |
| Pseudocloeon | 2 |
| Caenidae |  |
| Caenis | 16 |
| Ephemerellidae |  |
| Serratella | 7 |
| Heptageniidae |  |
| Stenonema | 4 |
| Isonychiidae |  |
| Isonychia | 2 |
| Odonata (Dragonflies and Damselflies) |  |
| Gomphidae | 1 |
| Trichoptera (Caddisflies) |  |
| Hydropsychidae |  |
| Cheumatopsyche | 43 |
| Hydropsyche | 17 |
| Leptoceridae |  |
| Mystacides | 1 |
| Philopotamidae |  |
| Chimarra | 1 |

Date

Benthic Macroinvertebrate
Coleoptera (Beetles)
Elmidae (Riffle Beetles) Dubiraphia 2 Optioservus 46
Oulimnius 4
Stenelmis 27

Hydrophilidae Berosus

2
Psephenidae (Water Pennies)
Diptera (True Flies)
Ceratopogonidae 1
Chironomidae (Midges)
Simuliidae (Black Flies) Simulium

8
Tipulidae (Crane Flies) Antocha 2

Total count
753

Total number of taxa

## 01480870 EAST BRANCH BRANDYWINE CREEK BELOW DOWNINGTOWN, PA--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT $25^{\circ}$ CELSIUS, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000


## 01480870 EAST BRANCH BRANDYWINE CREEK BELOW DOWNINGTOWN, PA--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT $25^{\circ}$ CELSIUS, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | JUNE |  |  | JULY |  | AUGUST |  |  | SEPTEMBER |  |  |
| 1 | 312 | 302 | 307 | 268 | 249 | 258 | 310 | 268 | 294 | 315 | 297 | 309 |
| 2 | 318 | 307 | 312 | 269 | 253 | 264 | 312 | 284 | 300 | 334 | 310 | 318 |
| 3 | 321 | 309 | 314 | 268 | 227 | 259 | 314 | 299 | 308 | 338 | 285 | 320 |
| 4 | 324 | 315 | 320 | 280 | 206 | 255 | --- | --- | --- | 301 | 239 | 271 |
| 5 | 321 | 292 | 302 | --- | --- | --- | --- | --- | --- | 336 | 296 | 319 |
| 6 | 308 | 215 | 261 | 305 | 290 | 296 | --- | --- | -- | 348 | 327 | 337 |
| 7 | 274 | 241 | 261 | 313 | 295 | 301 | --- | --- | --- | 354 | 328 | 348 |
| 8 | 290 | 259 | 278 | 321 | 304 | 311 | -- | --- | -- | 361 | 343 | 351 |
| 9 | 296 | 282 | 288 | 328 | 310 | 319 | - | --- | --- | 372 | 333 | 353 |
| 10 | 301 | 286 | 293 | 332 | 271 | 299 | - | --- | - | 381 | 357 | 367 |
| 11 | 308 | 283 | 297 | 320 | 284 | 300 | 330 | 319 | 325 | 381 | 346 | 356 |
| 12 | 308 | 286 | 301 | 322 | 291 | 313 | 327 | 245 | 310 | 372 | 349 | 358 |
| 13 | 289 | 211 | 242 | 331 | 318 | 325 | 314 | 216 | 267 | 372 | 215 | 272 |
| 14 | 264 | 252 | 257 | 332 | 289 | 318 | 317 | 244 | 292 | 313 | 236 | 282 |
| 15 | 282 | 260 | 274 | 314 | 270 | 293 | 301 | 258 | 280 | 307 | 164 | 217 |
| 16 | 281 | 273 | 276 | 315 | 307 | 311 | 312 | 290 | 305 | 285 | 242 | 269 |
| 17 | 292 | 277 | 284 | 320 | 307 | 314 | 330 | 305 | 319 | 319 | 284 | 302 |
| 18 | 293 | 171 | 266 | 325 | 312 | 319 | 336 | 323 | 328 | 322 | 313 | 317 |
| 19 | 194 | 99 | 141 | 338 | 298 | 325 | 334 | 314 | 323 | 321 | 187 | 288 |
| 20 | 238 | 194 | 223 | --- | --- | --- | 348 | 321 | 332 | 274 | 182 | 232 |
| 21 | 249 | 235 | 244 | --- | --- | - | 348 | 332 | 340 | 315 | 274 | 293 |
| 22 | 240 | 172 | 194 | --- | --- | --- | 353 | 342 | 349 | 324 | 307 | 316 |
| 23 | 246 | 216 | 230 | --- | --- | --- | 362 | 349 | 355 | 338 | 320 | 328 |
| 24 | 263 | 243 | 252 | --- | --- | --- | 359 | 344 | 350 | 335 | 323 | 328 |
| 25 | 273 | 259 | 265 | --- | --- | --- | 358 | 347 | 353 | 344 | 244 | 330 |
| 26 | 277 | 255 | 268 | 350 | 218 | 285 | 369 | 351 | 357 | 244 | 142 | 165 |
| 27 | 285 | 256 | 273 | 286 | 242 | 261 | 376 | 352 | 363 | 253 | 192 | 228 |
| 28 | 286 | 182 | 266 | 313 | 277 | 296 | 365 | 294 | 319 | 272 | 249 | 260 |
| 29 | 260 | 183 | 238 | 321 | 299 | 312 | 347 | 305 | 326 | 270 | 247 | 258 |
| 30 | 259 | 219 | 238 | 319 | 308 | 312 | 334 | 309 | 325 | 279 | 259 | 267 |
| 31 | --- | -- | --- | 318 | 261 | 298 | 324 | 291 | 296 | -- | - | -- |
| MONTH | 324 | 99 | 266 | 350 | 206 | 298 | 376 | 216 | 322 | 381 | 142 | 299 |

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

| DAY | MAX | MIN | MEDIAN | MAX | MIN | MEDIAN | MAX | MIN | MEDIAN | MAX | MIN | MEDIAN |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | ОСтOBE |  |  | EMB |  |  | CEMB |  |  | JANUAR |  |
| 1 | 7.4 | 7.3 | 7.3 | 7.3 | 7.0 | 7.1 | --- | --- | --- | --- | --- | --- |
| 2 | 7.4 | 7.3 | 7.3 | 7.1 | 6.9 | 7.0 | --- | --- | --- | --- | --- | --- |
| 3 | 7.4 | 7.2 | 7.4 | 7.2 | 6.9 | 7.1 | --- | --- | --- | --- | --- | --- |
| 4 | 7.3 | 7.2 | 7.3 | 7.4 | 7.1 | 7.2 | --- | --- | --- | --- | --- | --- |
| 5 | 7.3 | 7.2 | 7.3 | 7.4 | 7.1 | 7.2 | --- | --- | --- | --- | --- | --- |
| 6 | 7.4 | 7.3 | 7.3 | 7.4 | 7.1 | 7.1 | --- | --- | --- | --- | --- | --- |
| 7 | 7.3 | 7.3 | 7.3 | 7.6 | 7.1 | 7.2 | --- | --- | --- | --- | --- | --- |
| 8 | 7.3 | 7.2 | 7.3 | 7.6 | 7.2 | 7.2 | --- | --- | --- | --- | --- | --- |
| 9 | 7.3 | 7.2 | 7.2 | 7.5 | 7.2 | 7.2 | --- | --- | --- | --- | --- | --- |
| 10 | 7.2 | 7.0 | 7.2 | 7.6 | 7.1 | 7.2 | --- | -- | - | -- | -- | --- |
| 11 | 7.2 | 7.0 | 7.1 | 7.4 | 7.0 | 7.1 | --- | --- | --- | --- | --- | --- |
| 12 | 7.2 | 7.1 | 7.2 | 7.6 | 7.1 | 7.3 | --- | --- | --- | --- | --- | --- |
| 13 | 7.2 | 7.1 | 7.1 | 7.9 | 7.1 | 7.2 | --- | --- | --- | --- | --- | --- |
| 14 | 7.2 | 7.0 | 7.1 | 7.9 | 7.1 | 7.2 | --- | --- | --- | --- | --- | --- |
| 15 | 7.3 | 7.1 | 7.2 | 8.1 | 7.1 | 7.3 | --- | --- | --- | --- | --- | - |
| 16 | 7.3 | 7.1 | 7.2 | 7.9 | 7.2 | 7.3 | --- | --- | --- | --- | --- | --- |
| 17 | 7.2 | 7.1 | 7.2 | 8.1 | 7.2 | 7.4 | --- | --- | --- | --- | --- | --- |
| 18 | 7.2 | 7.1 | 7.2 | 8.0 | 7.3 | 7.4 | --- | --- | --- | --- | --- | --- |
| 19 | 7.3 | 7.1 | 7.2 | 7.9 | 7.2 | 7.3 | --- | --- | --- | --- | --- | --- |
| 20 | 7.2 | 7.2 | 7.2 | 7.7 | 7.1 | 7.2 | --- | --- | --- | --- | --- | --- |
| 21 | 7.3 | 7.2 | 7.2 | 7.5 | 7.0 | 7.1 | --- | --- | --- | --- | --- | --- |
| 22 | 7.3 | 7.1 | 7.2 | 7.2 | 7.0 | 7.1 | --- | --- | --- | --- | --- | --- |
| 23 | 7.2 | 7.1 | 7.1 | 7.1 | 7.0 | 7.0 | --- | --- | --- | --- | --- | --- |
| 24 | 7.1 | 7.0 | 7.1 | 7.1 | 7.0 | 7.0 | --- | --- | --- | --- | --- | --- |
| 25 | 7.1 | 7.0 | 7.0 | 7.1 | 7.0 | 7.1 | --- | --- | --- | --- | --- | --- |
| 26 | 7.1 | 7.0 | 7.0 | 7.2 | 6.9 | 7.1 | --- | --- | --- | --- | --- | --- |
| 27 | 7.4 | 7.0 | 7.2 | 6.9 | 6.8 | 6.8 | --- | --- | --- | --- | --- | --- |
| 28 | 7.3 | 7.1 | 7.2 | 7.1 | 6.9 | 7.0 | --- | --- | --- | --- | --- | --- |
| 29 | 7.4 | 7.1 | 7.2 | 7.1 | 7.0 | 7.1 | --- | --- | --- | --- | --- | --- |
| 30 | 7.4 | 7.1 | 7.2 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 31 | 7.4 | 7.0 | 7.1 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| MAX | 7.4 | 7.3 | 7.4 | 8.1 | 7.3 | 7.4 | --- | --- | --- | --- | --- | --- |
| MIN | 7.1 | 7.0 | 7.0 | 6.9 | 6.8 | 6.8 | --- | --- | --- | --- | --- | --- |

## 01480870 EAST BRANCH BRANDYWINE CREEK BELOW DOWNINGTOWN, PA--Continued

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

| DAY | MAX | MIN | MEDIAN | MAX | MIN | MEDIAN | MAX | MIN | MEDIAN | MAX | MIN | MEDIAN |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | FEBRUARY |  |  | MARCH |  |  | APRIL |  |  | MAY |  |  |
| 1 | - | --- | --- | 7.8 | 7.4 | 7.5 | 7.6 | 7.5 | 7.5 | 8.0 | 7.5 | 7.6 |
| 2 | --- | --- | --- | 7.9 | 7.5 | 7.6 | 7.6 | 7.4 | 7.5 | 8.0 | 7.5 | 7.6 |
| 3 | --- | --- | --- | 8.0 | 7.5 | 7.7 | 7.7 | 7.4 | 7.4 | 8.1 | 7.5 | 7.6 |
| 4 | --- |  |  | 8.0 | 7.5 | 7.6 | 7.5 | 7.4 | 7.4 | 8.2 | 7.5 | 7.7 |
| 5 | --- | --- | --- | 8.0 | 7.5 | 7.6 | 7.8 | 7.4 | 7.6 | 8.4 | 7.5 | 7.6 |
| 6 | --- | --- | --- | 8.1 | 7.5 | 7.7 | 7.9 | 7.5 | 7.6 | 8.4 | 7.4 | 7.6 |
| 7 | --- | --- | --- | 8.3 | 7.5 | 7.7 | 8.0 | 7.5 | 7.6 | 8.3 | 7.4 | 7.6 |
| 8 | --- | --- | --- | 8.5 | 7.5 | 7.6 | 8.1 | 7.5 | 7.6 | 8.4 | 7.4 | 7.6 |
| 9 | --- | --- | --- | 8.5 | 7.4 | 7.7 | 7.9 | 7.5 | 7.6 | 8.3 | 7.4 | 7.6 |
| 10 | --- | --- | --- | 8.7 | 7.5 | 7.7 | 8.1 | 7.5 | 7.6 | --- | -- | . |
| 11 | --- | --- | --- | 7.7 | 7.5 | 7.6 | 8.1 | 7.5 | 7.6 | -- | --- | --- |
| 12 | --- | --- | --- | 7.8 | 7.5 | 7.6 | 8.4 | 7.5 | 7.7 | 8.0 | 7.5 | 7.6 |
| 13 | --- | --- | --- | 8.2 | 7.6 | 7.7 | 8.5 | 7.5 | 7.7 | 8.0 | 7.5 | 7.6 |
| 14 | --- | --- | --- | 8.2 | 7.6 | 7.7 | 8.6 | 7.5 | 7.7 | 7.7 | 7.4 | 7.5 |
| 15 | --- | --- | --- | 8.3 | 7.5 | 7.6 | 8.2 | 7.5 | 7.6 | 7.7 | 7.5 | 7.6 |
| 16 | --- | --- | --- | 8.4 | 7.5 | 7.6 | 8.6 | 7.4 | 7.6 | 7.8 | 7.5 | 7.6 |
| 17 | --- | --- | --- | 7.6 | 7.4 | 7.5 | 7.6 | 7.4 | 7.5 | 7.8 | 7.5 | 7.6 |
| 18 | --- | --- | --- | 8.0 | 7.4 | 7.5 | 7.8 | 7.5 | 7.5 | 7.8 | 7.5 | 7.6 |
| 19 | --- | --- | --- | 8.2 | 7.5 | 7.5 | 8.2 | 7.5 | 7.6 | 7.6 | 7.5 | 7.5 |
| 20 | --- | --- | --- | 8.4 | 7.4 | 7.6 | 8.3 | 7.5 | 7.6 | 7.6 | 7.5 | 7.6 |
| 21 | --- | --- | --- | 7.7 | 7.3 | 7.5 | 7.6 | 7.4 | 7.5 | 7.6 | 7.5 | 7.5 |
| 22 | --- | --- | --- | --- | --- | -- | 7.6 | 7.4 | 7.5 | 7.6 | 7.5 | 7.5 |
| 23 | --- | --- | --- | --- | --- | --- | 7.8 | 7.4 | 7.5 | 7.6 | 7.3 | 7.5 |
| 24 | -- | --- | --- | 7.4 | 7.3 | 7.4 | 7.8 | 7.4 | 7.5 | 7.5 | 7.5 | 7.5 |
| 25 | 7.7 | 7.4 | 7.5 | 7.5 | 7.4 | 7.4 | 7.7 | 7.4 | 7.5 | 7.6 | 7.4 | 7.5 |
| 26 | 7.8 | 7.4 | 7.5 | 7.6 | 7.4 | 7.5 | 7.8 | 7.4 | 7.5 | 7.6 | 7.5 | 7.5 |
| 27 | 7.8 | 7.4 | 7.5 | 7.5 | 7.4 | 7.4 | 7.7 | 7.5 | 7.6 | 7.7 | 7.5 | 7.6 |
| 28 | 7.6 | 7.4 | 7.5 | 7.4 | 7.4 | 7.4 | 7.8 | 7.5 | 7.6 | 7.7 | 7.5 | 7.6 |
| 29 | 7.7 | 7.4 | 7.5 | 7.6 | 7.4 | 7.5 | 7.9 | 7.5 | 7.6 | 7.7 | 7.5 | 7.6 |
| 30 | --- | --- | --- | 7.6 | 7.4 | 7.5 | 8.0 | 7.5 | 7.6 | 7.8 | 7.5 | 7.7 |
| 31 | --- | --- | --- | 7.6 | 7.5 | 7.5 | - | -- | -- | 7.8 | 7.6 | 7.7 |
| MAX | 7.8 | 7.4 | 7.5 | 8.7 | 7.6 | 7.7 | 8.6 | 7.5 | 7.7 | 8.4 | 7.6 | 7.7 |
| MIN | 7.6 | 7.4 | 7.5 | 7.4 | 7.3 | 7.4 | 7.5 | 7.4 | 7.4 | 7.5 | 7.3 | 7.5 |
| DAY | MAX | MIN | MEDIAN | MAX | MIN | MEDIAN | MAX | MIN | MEDIAN | MAX | MIN | MEDIAN |
|  | JUNE |  |  | JULY |  |  | AUGUST |  |  | SEPTEMBER |  |  |
| 1 | 7.9 | 7.5 | 7.6 | 7.9 | 7.4 | 7.5 | 7.9 | 7.4 | 7.5 | 8.1 | 7.4 | 7.5 |
| 2 | 7.9 | 7.5 | 7.6 | 7.9 | 7.5 | 7.6 | 7.9 | 7.4 | 7.5 | 8.1 | 7.5 | 7.6 |
| 3 | 7.9 | 7.5 | 7.6 | 8.0 | 7.4 | 7.6 | 7.9 | 7.5 | 7.5 | 8.2 | 7.5 | 7.6 |
| 4 | 8.0 | 7.6 | 7.7 | 7.8 | 7.3 | 7.5 | 7.5 | 7.0 | 7.4 | 7.9 | 7.4 | 7.6 |
| 5 | 8.1 | 7.6 | 7.7 | --- | --- | --- | 7.7 | 7.4 | 7.5 | 8.1 | 7.5 | 7.7 |
| 6 | 7.6 | 7.5 | 7.6 | 8.1 | 7.5 | 7.7 | 7.7 | 7.5 | 7.6 | 8.2 | 7.6 | 7.7 |
| 7 | 7.8 | 7.6 | 7.6 | 8.1 | 7.5 | 7.7 | 7.8 | 7.5 | 7.6 | 8.2 | 7.6 | 7.7 |
| 8 | 8.0 | 7.5 | 7.6 | 8.2 | 7.6 | 7.7 | 7.8 | 7.5 | 7.6 | 8.3 | 7.6 | 7.8 |
| 9 | 7.9 | 7.4 | 7.6 | 8.3 | 7.6 | 7.7 | 7.9 | 7.5 | 7.6 | 8.4 | 7.6 | 7.7 |
| 10 | 7.9 | 7.4 | 7.5 | 8.2 | 7.5 | 7.6 | 8.1 | 7.5 | 7.7 | 8.3 | 7.6 | 7.7 |
| 11 | 7.9 | 7.4 | 7.5 | 8.2 | 7.4 | 7.7 | 8.2 | 7.6 | 7.7 | 8.4 | 7.6 | 7.7 |
| 12 | 7.7 | 7.4 | 7.4 | 8.3 | 7.5 | 7.6 | 8.2 | 7.6 | 7.7 | 8.4 | 7.6 | 7.7 |
| 13 | 7.4 | 7.3 | 7.4 | 8.2 | 7.5 | 7.7 | 7.8 | 7.4 | 7.6 | 7.6 | 7.3 | 7.3 |
| 14 | 7.5 | 7.4 | 7.4 | 7.8 | 7.5 | 7.6 | 7.8 | 7.6 | 7.6 | 7.8 | 7.3 | 7.4 |
| 15 | 7.7 | 7.4 | 7.5 | 7.8 | 7.4 | 7.6 | 7.9 | 7.6 | 7.6 | 7.5 | 7.3 | 7.5 |
| 16 | 7.8 | 7.4 | 7.5 | 7.9 | 7.5 | 7.6 | 8.1 | 7.5 | 7.7 | 7.8 | 7.5 | 7.5 |
| 17 | 7.8 | 7.4 | 7.5 | 8.0 | 7.5 | 7.6 | 8.1 | 7.6 | 7.7 | 7.8 | 7.5 | 7.6 |
| 18 | 7.8 | 7.3 | 7.4 | 8.1 | 7.5 | 7.6 | 7.8 | 7.6 | 7.7 | 7.9 | 7.5 | 7.6 |
| 19 | 7.3 | 7.0 | 7.1 | 7.7 | 7.5 | 7.6 | 8.1 | 7.6 | 7.7 | 7.6 | 7.4 | 7.6 |
| 20 | 7.4 | 7.2 | 7.4 | 8.0 | 7.6 | 7.6 | 8.1 | 7.6 | 7.7 | 7.7 | 7.3 | 7.5 |
| 21 | 7.5 | 7.4 | 7.4 | 8.1 | 7.5 | 7.6 | 8.2 | 7.6 | 7.7 | 7.8 | 7.5 | 7.6 |
| 22 | 7.4 | 7.2 | 7.3 | 8.1 | 7.5 | 7.7 | 8.3 | 7.6 | 7.8 | 7.8 | 7.5 | 7.6 |
| 23 | 7.6 | 7.3 | 7.4 | 8.3 | 7.6 | 7.7 | 8.1 | 7.6 | 7.7 | 7.7 | 7.5 | 7.6 |
| 24 | 7.7 | 7.4 | 7.5 | 7.9 | 7.5 | 7.6 | 8.3 | 7.6 | 7.7 | 7.8 | 7.5 | 7.6 |
| 25 | 7.7 | 7.4 | 7.5 | 8.1 | 7.5 | 7.7 | 8.2 | 7.6 | 7.7 | 7.8 | 7.5 | 7.6 |
| 26 | 7.8 | 7.4 | 7.5 | 7.7 | 7.5 | 7.5 | 8.2 | 7.6 | 7.7 | 7.5 | 7.3 | 7.3 |
| 27 | 7.9 | 7.4 | 7.6 | 7.7 | 7.4 | 7.5 | 8.4 | 7.6 | 7.7 | 7.6 | 7.4 | 7.5 |
| 28 | 7.8 | 7.3 | 7.5 | 7.9 | 7.5 | 7.6 | 8.0 | 7.5 | 7.6 | 7.7 | 7.5 | 7.5 |
| 29 | 7.8 | 7.3 | 7.5 | 7.9 | 7.5 | 7.6 | 7.9 | 7.4 | 7.6 | 7.7 | 7.5 | 7.5 |
| 30 | 7.8 | 7.4 | 7.5 | 8.0 | 7.5 | 7.6 | 8.2 | 7.5 | 7.6 | 7.7 | 7.5 | 7.5 |
| 31 | --- | --- | --- | 8.1 | 7.4 | 7.5 | 7.9 | 7.5 | 7.5 | --- | --- | --- |
| MAX | 8.1 | 7.6 | 7.7 | 8.3 | 7.6 | 7.7 | 8.4 | 7.6 | 7.8 | 8.4 | 7.6 | 7.8 |
| MIN | 7.3 | 7.0 | 7.1 | 7.7 | 7.3 | 7.5 | 7.5 | 7.0 | 7.4 | 7.5 | 7.3 | 7.3 |

## 01480870 EAST BRANCH BRANDYWINE CREEK BELOW DOWNINGTOWN, PA--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | OCTOBER |  |  | NOVEMBER |  |  | DECEMBER |  |  | JANUARY |  |  |
| 1 | 17.0 | 13.5 | 15.5 | 15.5 | 13.0 | 14.0 | --- | --- | --- | --- | --- | --- |
| 2 | 17.0 | 14.0 | 15.5 | 15.5 | 13.5 | 14.0 | --- | --- | --- | --- | --- | --- |
| 3 | 17.5 | 15.0 | 16.5 | 15.5 | 10.5 | 12.5 | --- | --- | --- | --- | --- |  |
| 4 | 17.0 | 16.0 | 16.5 | 10.5 | 8.5 | 9.5 | --- | --- | --- | --- | --- | --- |
| 5 | 16.0 | 13.5 | 14.5 | 11.0 | 7.5 | 9.0 | --- | --- | --- | --- | --- | --- |
| 6 | 14.5 | 12.0 | 13.5 | 13.0 | 9.5 | 11.0 | --- | --- | --- | --- | --- | --- |
| 7 | 14.0 | 12.0 | 13.0 | 11.5 | 9.5 | 10.5 | --- | --- | --- | --- | --- | --- |
| 8 | 14.0 | 11.0 | 12.5 | 10.5 | 8.0 | 9.0 | --- | --- | --- | --- | --- | --- |
| 9 | 15.5 | 13.5 | 14.5 | 11.5 | 7.5 | 9.5 | --- | --- | --- | --- | --- | --- |
| 10 | 16.0 | 15.0 | 15.5 | 13.0 | 10.0 | 11.5 | --- | --- | --- | --- | --- | --- |
| 11 | 17.0 | 15.5 | 16.0 | 13.0 | 10.0 | 12.0 | --- | --- | --- | --- | --- | --- |
| 12 | 15.5 | 13.5 | 14.5 | 11.0 | 8.5 | 9.5 | --- | --- | --- | --- | --- | --- |
| 13 | 15.5 | 12.5 | 14.0 | 12.5 | 10.0 | 11.0 | --- | --- | --- | --- | --- | --- |
| 14 | 16.0 | 13.5 | 15.0 | 11.5 | 9.0 | 10.5 | --- | --- | --- | --- | --- | --- |
| 15 | 14.0 | 11.5 | 13.0 | 10.0 | 9.0 | 9.5 | --- | --- | --- | --- | --- | --- |
| 16 | 15.0 | 12.0 | 13.5 | 9.0 | 7.0 | 8.0 | --- | --- | --- | --- | --- | --- |
| 17 | 16.0 | 14.5 | 15.0 | 7.5 | 5.5 | 6.5 | --- | --- | --- | --- | --- | --- |
| 18 | 16.0 | 13.5 | 15.0 | 8.0 | 5.0 | 6.5 | --- | --- | --- | --- | --- | --- |
| 19 | 13.5 | 11.5 | 12.5 | 9.0 | 6.0 | 7.5 | --- | --- | --- | --- | --- | --- |
| 20 | 13.0 | 12.5 | 12.5 | 10.5 | 7.0 | 8.5 | --- | --- | --- | --- | --- | --- |
| 21 | 13.0 | 11.0 | 12.0 | 12.5 | 10.0 | 11.0 | --- | --- | --- | --- | --- | --- |
| 22 | 13.0 | 10.5 | 12.0 | 12.5 | 11.0 | 12.0 | --- | --- | --- | --- | --- | --- |
| 23 | 12.5 | 11.0 | 12.0 | 14.0 | 12.5 | 13.0 | --- | --- | --- | --- | --- | --- |
| 24 | 12.0 | 10.0 | 11.0 | 14.5 | 13.5 | 14.0 | --- | --- | --- | --- | --- | --- |
| 25 | 12.0 | 9.5 | 11.0 | 14.0 | 12.5 | 13.5 | --- | --- | --- | --- | --- | --- |
| 26 | 12.5 | 9.5 | 11.0 | 14.0 | 12.0 | 13.0 | --- | --- | --- | --- | --- | --- |
| 27 | 12.5 | 10.5 | 11.5 | 14.0 | 11.0 | 12.5 | --- | --- | --- | --- | --- | --- |
| 28 | 12.5 | 10.0 | 11.0 | 11.0 | 9.0 | 10.0 | --- | --- | --- | --- | --- | --- |
| 29 | 12.5 | 9.5 | 11.0 | 9.0 | 8.0 | 8.5 | --- | --- | --- | --- | --- | --- |
| 30 | 13.5 | 10.5 | 12.0 | - | --- | --- | --- | --- | --- | --- | --- | --- |
| 31 | 14.5 | 12.0 | 13.0 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| MONTH | 17.5 | 9.5 | 13.4 | 15.5 | 5.0 | 10.6 | --- | --- | --- | --- | --- | --- |
| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|  | FEBRUARY |  |  | MARCH |  |  | APRIL |  |  | MAY |  |  |
| 1 | --- | --- | --- | 7.0 | 4.5 | 6.0 | 12.5 | 8.0 | 10.0 | 15.0 | 11.0 | 13.5 |
| 2 | --- | --- | --- | 7.5 | 6.0 | 7.0 | 12.0 | 9.5 | 10.5 | 16.5 | 13.5 | 15.0 |
| 3 | --- | --- | --- | 8.0 | 5.0 | 6.5 | 13.5 | 11.0 | 12.0 | 17.0 | 12.5 | 15.0 |
| 4 | --- | --- | --- | 8.0 | 4.5 | 6.5 | 13.5 | 12.0 | 13.0 | 18.0 | 13.0 | 16.0 |
| 5 | --- | --- | --- | 9.5 | 5.5 | 7.5 | 12.0 | 9.0 | 10.5 | 19.5 | 15.5 | 17.5 |
| 6 | --- | --- | --- | 9.5 | 6.0 | 8.0 | 13.0 | 8.5 | 10.5 | 20.5 | 16.5 | 18.5 |
| 7 | --- | --- | --- | 10.0 | 6.0 | 8.5 | 13.5 | 10.0 | 12.0 | 22.0 | 17.5 | 19.5 |
| 8 | --- | --- | --- | 12.5 | 8.5 | 10.5 | 15.5 | 10.5 | 13.0 | 23.0 | 18.5 | 20.5 |
| 9 | --- | --- | --- | 12.5 | 10.0 | 11.5 | 13.5 | 8.5 | 10.5 | 23.0 | 19.0 | 21.0 |
| 10 | --- | --- | - | 13.0 | 10.5 | 12.0 | 12.5 | 8.5 | 10.5 | --- | --- | --- |
| 11 | --- | --- | --- | 11.5 | 8.5 | 10.0 | 11.0 | 9.5 | 10.5 | --- | --- |  |
| 12 | --- | --- | --- | 8.5 | 6.5 | 8.0 | 13.0 | 10.0 | 11.0 | 20.0 | 16.5 | 18.5 |
| 13 | --- | --- | --- | 8.5 | 5.0 | 7.0 | 12.0 | 8.5 | 10.5 | 21.0 | 17.0 | 19.0 |
| 14 | --- | --- | --- | 9.5 | 6.0 | 8.0 | 12.5 | 8.5 | 10.5 | 19.5 | 17.0 | 18.5 |
| 15 | --- | --- | - | 10.5 | 6.5 | 8.5 | 12.5 | 10.5 | 11.5 | 17.5 | 14.0 | 16.0 |
| 16 | --- | --- | - | 10.5 | 8.0 | 9.5 | 16.5 | 12.0 | 14.0 | 16.5 | 12.5 | 15.0 |
| 17 | --- | --- | --- | 10.5 | 6.5 | 9.0 | 16.0 | 10.5 | 13.0 | 17.5 | 14.0 | 16.0 |
| 18 | --- | --- | --- | 8.0 | 4.5 | 6.5 | 10.5 | 9.5 | 10.0 | 19.0 | 16.0 | 17.0 |
| 19 | --- | --- | - | 9.0 | 5.5 | 7.5 | 13.0 | 9.5 | 11.0 | 18.0 | 15.5 | 17.0 |
| 20 | -- | --- | --- | 9.5 | 7.0 | 8.5 | 15.5 | 12.0 | 13.5 | 15.5 | 13.0 | 14.0 |
| 21 | --- | --- | --- | --- | --- | -- | 14.5 | 11.5 | 12.5 | 14.0 | 13.0 | 13.5 |
| 22 | --- | --- | --- | --- | --- | --- | 11.5 | 10.5 | 11.0 | 14.0 | 13.5 | 13.5 |
| 23 | --- | --- | --- | --- | --- | --- | 12.0 | 10.5 | 11.5 | 14.5 | 13.0 | 14.0 |
| 24 | --- | --- | --- | 11.5 | 7.5 | 9.5 | 14.5 | 10.0 | 12.5 | 17.5 | 14.0 | 15.5 |
| 25 | 7.5 | 5.0 | 6.5 | 11.5 | 8.5 | 10.0 | 13.5 | 11.5 | 12.0 | 17.0 | 15.0 | 16.0 |
| 26 | 7.0 | 6.0 | 6.5 | 12.5 | 9.0 | 10.5 | 13.0 | 9.5 | 11.5 | 18.0 | 14.0 | 16.0 |
| 27 | 8.0 | 6.5 | 7.0 | 10.5 | 7.5 | 9.5 | 12.0 | 10.5 | 11.0 | 16.5 | 14.5 | 15.0 |
| 28 | 8.5 | 7.0 | 8.0 | 12.0 | 10.0 | 11.0 | 13.5 | 10.0 | 11.5 | 15.5 | 14.0 | 14.5 |
| 29 | 8.0 | 5.0 | 6.5 | 10.5 | 9.0 | 10.0 | 15.5 | 10.5 | 13.0 | 16.5 | 14.0 | 15.0 |
| 30 | --- | --- | - | 11.5 | 7.5 | 9.5 | 16.0 | 12.0 | 14.0 | 16.0 | 14.0 | 15.0 |
| 31 | - | - | -- | 12.0 | 8.0 | 10.0 |  | --- | --- | 18.0 | 13.5 | 15.5 |
| MONTH | 8.5 | 5.0 | 6.9 | 13.0 | 4.5 | 8.8 | 16.5 | 8.0 | 11.6 | 23.0 | 11.0 | 16.2 |

## 01480870 EAST BRANCH BRANDYWINE CREEK BELOW DOWNINGTOWN, PA--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000


OXYGEN, DISSOLVED (MG/L), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | OCTOBER |  |  | NOVEMBER |  |  | DECEMBER |  |  | JANUARY |  |
| 1 | --- | --- | --- | 9.6 | 6.3 | 7.5 | --- | --- | --- | --- | --- | --- |
| 2 | --- | -- | --- | 7.3 | 5.9 | 6.6 | --- | --- | - | --- | --- | - |
| 3 | --- | --- | --- | 8.6 | 6.1 | 7.7 | --- | -- | --- | --- | --- | --- |
| 4 | --- | --- | --- | 10.1 | 8.1 | 9.0 | --- | --- | -- | --- | --- | - |
| 5 | --- | --- | --- | 10.4 | 8.3 | 9.2 | --- | --- | -- | -- | -- | - |
| 6 | --- | -- | --- | 10.1 | 7.5 | 8.7 | --- | --- | --- | -- | --- | - |
| 7 | --- | --- | --- | 10.5 | 7.5 | 8.8 | --- | --- | - | --- | --- | - |
| 8 | --- | --- | --- | 11.1 | 8.2 | 9.4 | --- | --- | --- | -- | --- | - |
| 9 | --- | --- | --- | 11.3 | 8.1 | 9.5 | --- | --- | - | --- | --- | - |
| 10 | --- | --- | --- | 11.3 | 7.2 | 8.9 | --- | --- | --- | --- | --- | - |
| 11 | --- | --- | --- | 10.5 | 6.7 | 7.9 | --- | --- | --- | --- | --- | - |
| 12 | --- | --- | --- | 11.8 | 7.5 | 9.2 | --- | --- | --- | - | --- | - |
| 13 | --- | --- | -- | 12.4 | 7.7 | 9.3 | --- | --- | --- | --- | -- | -- |
| 14 | --- | --- | --- | 12.1 | 7.4 | 9.0 | --- | --- | --- | --- | --- | -- |
| 15 | --- | -- | -- | 12.1 | 7.4 | 9.2 | --- | - | --- | - | --- | -- |
| 16 | --- | -- | -- | 12.5 | 7.6 | 9.5 | --- | --- | --- | --- | --- | - |
| 17 | --- | --- | --- | 13.0 | 8.3 | 10.2 | --- | --- | -- | --- | --- | -- |
| 18 | --- | --- | --- | 13.1 | 8.9 | 10.4 | --- | --- | --- | --- | --- | -- |
| 19 | --- | --- | --- | 13.0 | 8.9 | 10.3 | --- | --- | -- | --- | --- | --- |
| 20 | --- | --- | --- | 12.0 | 8.3 | 9.7 | --- | --- | - | --- | --- | -- |
| 21 | --- | - | - | 11.2 | 7.9 | 9.0 | --- | -- | --- | --- | --- | - |
| 22 | --- | -- | -- | 9.8 | 7.5 | 8.3 | --- | - | --- | - | --- | - |
| 23 | --- | -- | - | 9.2 | 7.2 | 7.9 | --- | --- | --- | --- | --- | -- |
| 24 | --- | --- | --- | 8.7 | 7.0 | 7.6 | - | --- | --- | - | -- | - |
| 25 | --- | --- | --- | 8.7 | 7.1 | 7.8 | --- | --- | --- | --- | --- | - |
| 26 | --- | --- | --- | 9.3 | 7.9 | 8.4 | - | --- | --- | - | - | - |
| 27 | --- | --- | --- | 8.8 | 7.8 | 8.3 | --- | --- | --- | --- | --- | --- |
| 28 | 9.6 | 7.1 | 8.2 | 10.2 | 8.8 | 9.6 | --- | --- | --- | --- | - | - |
| 29 | 10.0 | 7.5 | 8.5 | 10.7 | 9.7 | 10.2 | - | --- | --- | --- | --- | --- |
| 30 | 10.1 | 7.2 | 8.3 | --- | --- | --- | --- | --- | --- | --- | --- | -- |
| 31 | 10.0 | 6.5 | 7.9 | --- | --- | --- | --- | - | - | --- | --- | - |
| MONTH | 10.1 | 6.5 | 8.2 | 13.1 | 5.9 | 8.9 | --- | --- | --- | --- | --- | - |

OXYGEN, DISSOLVED (MG/L), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | FEBRUARY |  |  | MARCH |  |  | APRIL |  |  | MAY |  |  |
| 1 | --- | --- | --- | 13.1 | 10.9 | 12.0 | 12.2 | 10.3 | 11.2 | 11.0 | 8.6 | 9.6 |
| 2 | --- | --- | --- | 13.1 | 10.8 | 11.8 | 11.6 | 10.1 | 10.8 | 10.4 | 8.5 | 9.3 |
| 3 | --- | --- | --- | 12.7 | 10.2 | 11.5 | 11.1 | 9.3 | 10.2 | 11.0 | 8.2 | 9.4 |
| 4 | --- | --- | --- | 12.8 | 10.1 | 11.3 | 9.8 | 8.7 | 9.3 | 10.8 | 7.9 | 9.2 |
| 5 | --- | --- | --- | 13.0 | 9.8 | 11.1 | 11.8 | 9.3 | 10.5 | 10.7 | 7.4 | 8.9 |
| 6 | --- | --- | --- | 13.1 | 9.8 | 11.1 | 11.6 | 9.5 | 10.6 | 10.7 | 7.1 | 8.7 |
| 7 | --- | --- | --- | 13.3 | 9.2 | 10.9 | 11.7 | 9.5 | 10.5 | 10.6 | 6.7 | 8.4 |
| 8 | --- | --- | --- | 12.8 | 8.2 | 10.1 | 11.5 | 9.0 | 10.2 | 10.6 | 6.6 | 8.1 |
| 9 | -- | --- | --- | 12.3 | 8.0 | 9.5 | 11.8 | 9.1 | 10.5 | 10.0 | 6.4 | 7.8 |
| 10 | --- | --- | --- | 12.3 | 6.8 | 9.1 | 12.3 | 10.2 | 11.1 | --- | -- | --- |
| 11 | -- | --- | --- | 10.5 | 6.9 | 9.3 | 12.4 | 10.1 | 11.2 | --- | --- | --- |
| 12 | --- | --- | --- | 11.9 | 10.2 | 11.1 | 12.6 | 9.1 | 10.8 | 10.3 | 7.6 | 8.7 |
| 13 | --- | --- | --- | 13.2 | 9.6 | 11.4 | 11.8 | 8.8 | 10.2 | 10.1 | 7.4 | 8.5 |
| 14 | --- | --- | --- | 12.4 | 9.4 | 10.6 | 11.4 | 8.5 | 9.8 | 9.5 | 7.2 | 8.4 |
| 15 | --- | --- | --- | 12.3 | 8.9 | 10.4 | 10.7 | 8.4 | 9.5 | 10.3 | 8.2 | 9.3 |
| 16 | --- | --- | --- | 12.2 | 9.0 | 10.2 | 11.4 | 7.9 | 9.4 | 10.6 | 8.9 | 9.7 |
| 17 | --- | --- | --- | 11.6 | 9.2 | 10.5 | 9.8 | 7.9 | 9.1 | 10.2 | 8.5 | 9.4 |
| 18 | --- | --- | --- | 13.8 | 10.9 | 12.2 | 11.2 | 9.6 | 10.4 | 9.9 | 8.0 | 8.9 |
| 19 | --- | --- | --- | 14.1 | 10.2 | 11.9 | 11.9 | 9.0 | 10.7 | 8.7 | 8.0 | 8.3 |
| 20 | --- | --- | --- | 13.9 | 9.3 | 11.2 | 11.0 | 8.3 | 9.6 | 9.7 | 8.7 | 9.3 |
| 21 | --- | --- | --- | 12.4 | 9.3 | 10.9 | 9.8 | 8.4 | 9.1 | 9.8 | 9.2 | 9.5 |
| 22 | --- | --- | --- | --- | --- | --- | 10.0 | 9.3 | 9.6 | 9.6 | 9.2 | 9.3 |
| 23 | --- | --- | --- | --- | --- | --- | 10.5 | 9.3 | 9.8 | 9.6 | 9.0 | 9.3 |
| 24 | --- | --- |  | 11.7 | 10.8 | 11.2 | 10.6 | 9.0 | 9.7 | 9.2 | 8.4 | 8.9 |
| 25 | 13.2 | 11.4 | 12.3 | 11.9 | 10.8 | 11.3 | 10.5 | 8.9 | 9.7 | 9.4 | 8.4 | 8.9 |
| 26 | 13.3 | 11.5 | 12.3 | 11.7 | 11.0 | 11.2 | 10.4 | 9.1 | 9.6 | 9.5 | 8.5 | 9.1 |
| 27 | 12.9 | 11.1 | 12.0 | 12.0 | 10.5 | 11.5 | 10.3 | 9.1 | 9.7 | 9.6 | 8.5 | 9.1 |
| 28 | 12.0 | 11.2 | 11.6 | 11.1 | 10.4 | 10.7 | 10.5 | 9.0 | 9.8 | 9.9 | 8.9 | 9.3 |
| 29 | 13.0 | 11.3 | 12.2 | 11.8 | 10.6 | 11.3 | 10.4 | 8.6 | 9.5 | 9.9 | 8.7 | 9.3 |
| 30 | --- | - | --- | 12.3 | 10.7 | 11.5 | 10.5 | 8.6 | 9.4 | 10.1 | 8.7 | 9.4 |
| 31 | --- | --- | --- | 12.2 | 10.6 | 11.3 | --- | --- | --- | 10.2 | 8.6 | 9.3 |
| MONTH | 13.3 | 11.1 | 12.1 | 14.1 | 6.8 | 11.0 | 12.6 | 7.9 | 10.1 | 11.0 | 6.4 | 9.0 |
| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|  | JUNE |  |  | JULY |  |  | AUGUST |  |  | SEPTEMBER |  |  |
| 1 | 9.9 | 7.5 | 8.9 | 9.5 | 7.6 | 8.4 | 9.0 | 6.7 | 7.6 | 9.3 | 6.8 | 7.7 |
| 2 | 9.1 | 6.6 | 7.9 | 9.7 | 7.6 | 8.4 | 9.1 | 6.7 | 7.7 | 9.1 | 6.5 | 7.6 |
| 3 | 8.4 | 6.4 | 7.1 | 9.9 | 7.1 | 8.4 | 9.0 | 6.7 | 7.7 | 9.3 | 6.8 | 7.7 |
| 4 | 8.4 | 6.4 | 7.2 | 9.4 | 7.1 | 8.1 | 8.1 | 7.2 | 7.7 | 8.8 | 7.0 | 7.6 |
| 5 | 8.2 | 6.5 | 7.1 |  | - | -- | 8.6 | 7.7 | 8.1 | 9.7 | 7.0 | 8.1 |
| 6 | 6.9 | 6.3 | 6.6 | 10.1 | 7.4 | 8.5 | 8.9 | 7.7 | 8.4 | 10.2 | 7.7 | 8.7 |
| 7 | 7.6 | 6.1 | 6.9 | 10.0 | 7.6 | 8.6 | 8.9 | 7.5 | 8.2 | 10.3 | 7.8 | 8.7 |
| 8 | --- | --- | --- | 10.7 | 7.9 | 9.0 | 8.9 | 7.3 | 8.0 | 10.5 | 7.7 | 8.8 |
| 9 | --- | --- | --- | 11.0 | 7.6 | 9.0 | 9.1 | 7.1 | 7.9 | 10.2 | 7.2 | 8.4 |
| 10 | 9.7 | 7.0 | 8.2 | 10.1 | 7.0 | 8.1 | 9.2 | 7.1 | 7.9 | 10.5 | 7.0 | 8.3 |
| 11 | 9.6 | 6.6 | 8.0 | 10.2 | 6.8 | 8.2 | 9.6 | 7.1 | 8.1 | 10.3 | 6.9 | 8.2 |
| 12 | 9.4 | 6.6 | 7.8 | 9.7 | 7.0 | 8.1 | 9.7 | 7.1 | 8.2 | 10.3 | 6.8 | 8.1 |
| 13 | 8.7 | 7.2 | 8.2 | 9.7 | 7.0 | 8.0 | 9.0 | 7.8 | 8.3 | 7.7 | 6.6 | 7.2 |
| 14 | 9.6 | 8.4 | 8.9 | 8.7 | 7.1 | 7.7 | 8.7 | 7.8 | 8.2 | 9.2 | 7.4 | 8.2 |
| 15 | 9.9 | 8.4 | 9.1 | 8.6 | 7.0 | 7.7 | 9.3 | 7.3 | 8.4 | 8.5 | 7.6 | 8.0 |
| 16 | 9.9 | 7.9 | 8.8 | 9.0 | 7.2 | 7.8 | 9.0 | 7.0 | 7.7 | 9.4 | 7.9 | 8.6 |
| 17 | 9.7 | 7.4 | 8.5 | 9.1 | 7.2 | 8.0 | 8.9 | 6.8 | 7.7 | 9.7 | 8.2 | 8.8 |
| 18 | 9.4 | 7.1 | 7.9 | 9.2 | 7.1 | 7.9 | 7.9 | 6.8 | 7.3 | 10.1 | 8.1 | 8.9 |
| 19 | 8.3 | 7.3 | 8.0 | 8.4 | 7.0 | 7.7 | 9.3 | 7.3 | 8.1 | 8.7 | 8.0 | 8.3 |
| 20 | 9.1 | 7.8 | 8.5 | 9.3 | 7.6 | 8.5 | 9.7 | 7.4 | 8.3 | 9.2 | 7.9 | 8.5 |
| 21 | 8.9 | 7.8 | 8.3 | 9.6 | 7.4 | 8.4 | 9.9 | 7.8 | 8.6 | 9.2 | 7.8 | 8.3 |
| 22 | 8.2 | 7.4 | 7.8 | 9.4 | 7.3 | 8.2 | 10.3 | 7.9 | 8.8 | 9.7 | 7.9 | 8.7 |
| 23 | 8.3 | 7.4 | 7.8 | 10.0 | 7.3 | 8.5 | 10.0 | 7.7 | 8.6 | 9.1 | 8.2 | 8.5 |
| 24 | 8.3 | 7.1 | 7.7 | 9.4 | 7.5 | 8.4 | 10.2 | 7.1 | 8.6 | 9.6 | 7.9 | 8.5 |
| 25 | 8.3 | 6.9 | 7.6 | 10.4 | 7.8 | 9.0 | 9.9 | 6.8 | 7.9 | 9.6 | 7.9 | 8.6 |
| 26 | 8.5 | 6.9 | 7.6 | 8.5 | 7.6 | 8.1 | 9.9 | 6.8 | 7.9 | 9.4 | 8.9 | 9.3 |
| 27 | 8.8 | 6.9 | 7.8 | 9.1 | 8.0 | 8.5 | 9.8 | 6.7 | 7.9 | 9.6 | 8.7 | 9.3 |
| 28 | 8.9 | 7.2 | 7.9 | 9.3 | 7.4 | 8.3 | 9.5 | 6.6 | 7.6 | 9.9 | 8.8 | 9.2 |
| 29 | 9.1 | 7.4 | 8.1 | 9.2 | 7.3 | 8.1 | 9.1 | 6.6 | 7.6 | 10.0 | 9.0 | 9.4 |
| 30 | 9.3 | 7.7 | 8.3 | 9.4 | 7.1 | 8.1 | 9.5 | 6.9 | 7.9 | 10.1 | 9.0 | 9.5 |
| 31 | 9. | --- | --- | 9.1 | 6.7 | 7.7 | 8.8 | 6.9 | 7.6 | 10.1 | 9.0 | 9.5 |
| MONTH | 9.9 | 6.1 | 7.9 | 11.0 | 6.7 | 8.2 | 10.3 | 6.6 | 8.0 | 10.5 | 6.5 | 8.5 |

## CHRISTINA RIVER BASIN

01480870 EAST BRANCH BRANDYWINE CREEK BELOW DOWNINGTOWN, PA--Continued

CROSS-SECTION ANALYSES, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

|  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  | PH |  |  | SAMPLE |


[^0]:    a Also Aug. 4, 6, 12, 13.
    b From rating curve extended above $3,600 \mathrm{ft}^{3} / \mathrm{s}$ on basis of runoff comparison with nearby station.
    c From rating curve extended above $3,600 \mathrm{ft}^{3} / \mathrm{s}$ on basis of slope-area measurement of peak flow at gage height 13.40 ft .

