

ROANOKE RIVER BASIN

02068500 DAN RIVER NEAR FRANCISCO, NC

LOCATION.--Lat 36°30'54", long 80°18'11", Stokes County, Hydrologic Unit 03010103, on left bank 200 ft upstream from bridge on State Highway 704, 700 ft downstream of remains of Georges Mill, 0.2 mi downstream of Elk Creek, 3 mi east of Francisco, and 7.9 mi downstream of Little Dan River.

DRAINAGE AREA.--129 mi².

PERIOD OF RECORD.--August 1924 to September 1987, December 1991 to current year. Monthly discharge only for some periods, published in WSP 1303.

REVISED RECORDS.--WSP 1303: 1938-50 (monthly runoff). WSP 1433: 1925-26, 1928-29, 1931, 1942, 1948. WDR NC-80-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 831.99 ft above NGVD of 1929. Prior to Nov. 15, 1929, nonrecording gage at same site and datum. Satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Since 1938, considerable diurnal fluctuation and regulation by Talbott and Townes Reservoirs (stations 02067800 and 02067820, respectively) and Pinnacles Hydroelectric Plant in Virginia, 28 mi upstream. Minimum discharge for current water year also occurred Sept. 15, 30.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of 1916 reached a stage of about 15 ft, from information by local residents, discharge, 16,000 ft³/s.

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 | 449 | 205 | 330 | 220 | 230 | 231 | 314 | 243 | 169 | 131 | 210 | 111 |
| 2 | 384 | 205 | 298 | 217 | 221 | 222 | 524 | 226 | 202 | 191 | 158 | 123 |
| 3 | 338 | 205 | 271 | 214 | 254 | 216 | 497 | 216 | 208 | 153 | 150 | 128 |
| 4 | 313 | 227 | 255 | 212 | 261 | 190 | 375 | 206 | 186 | 212 | 181 | 127 |
| 5 | 280 | 223 | 247 | 208 | 241 | 191 | 324 | 203 | 158 | 186 | 192 | 91 |
| 6 | 256 | 207 | 247 | 207 | 234 | 218 | 304 | 204 | 161 | 156 | 190 | 88 |
| 7 | 245 | 205 | 249 | 203 | 228 | 215 | 312 | 202 | 158 | 446 | 155 | 87 |
| 8 | 233 | 202 | 242 | 193 | 226 | 288 | 325 | 200 | 311 | 490 | 127 | 88 |
| 9 | 226 | 198 | 313 | 189 | 227 | 316 | 306 | 192 | 242 | 203 | 151 | 86 |
| 10 | 220 | 196 | 572 | 189 | 226 | 272 | 294 | 163 | 299 | 194 | 148 | 88 |
| 11 | 214 | 196 | 379 | 185 | 215 | 251 | 288 | e262 | 275 | 173 | 128 | 128 |
| 12 | 211 | 344 | 316 | 184 | 209 | 246 | 286 | e204 | 209 | 165 | 161 | 87 |
| 13 | 558 | 339 | 291 | 185 | 205 | 213 | 263 | e201 | 203 | 239 | 170 | 82 |
| 14 | 474 | 251 | 265 | 1,770 | 222 | 208 | 255 | 185 | 231 | 275 | 150 | 83 |
| 15 | 304 | 233 | 241 | 497 | 218 | 209 | 234 | 196 | 180 | 332 | 129 | 81 |
| 16 | 256 | 226 | 233 | 353 | 214 | 212 | 228 | 189 | 211 | 240 | 185 | 138 |
| 17 | 236 | 216 | 229 | 301 | 205 | 230 | 226 | 178 | 174 | 234 | 179 | 124 |
| 18 | 229 | 213 | 224 | 263 | 198 | 220 | 226 | 179 | 160 | 220 | 130 | 93 |
| 19 | 235 | 210 | 222 | 260 | 194 | 215 | 228 | 181 | 133 | 211 | 120 | 82 |
| 20 | 233 | 209 | 205 | 253 | 193 | 212 | 227 | 330 | 146 | 288 | 124 | 128 |
| 21 | 220 | 206 | 231 | 247 | 202 | 208 | 228 | 298 | 131 | 238 | 147 | 135 |
| 22 | 217 | 205 | 216 | 240 | 197 | 208 | 256 | 201 | 126 | 174 | 107 | 85 |
| 23 | 215 | 239 | 492 | 238 | 190 | 374 | 333 | 189 | 128 | 190 | 107 | 87 |
| 24 | 223 | 451 | 435 | 235 | 197 | 288 | 246 | 188 | 119 | 157 | 108 | 113 |
| 25 | 218 | 623 | 301 | 238 | 191 | 286 | 241 | 195 | 118 | 132 | 112 | 82 |
| 26 | 212 | 344 | 267 | 230 | 185 | 275 | 234 | 166 | 117 | 199 | 110 | 88 |
| 27 | 212 | 297 | 249 | 231 | 184 | 273 | 240 | 142 | 117 | 186 | 119 | 94 |
| 28 | 215 | 309 | 239 | 217 | 229 | 892 | 229 | 151 | 171 | 176 | 150 | 83 |
| 29 | 213 | 268 | 236 | 215 | --- | 678 | 250 | 171 | 153 | 143 | 118 | 83 |
| 30 | 212 | 254 | 231 | 246 | --- | 427 | 256 | 172 | 155 | 195 | 115 | 81 |
| 31 | 208 | --- | 224 | 246 | --- | 347 | --- | 169 | --- | 608 | 134 | --- |
| TOTAL | 8,259 | 7,706 | 8,750 | 8,886 | 5,996 | 8,831 | 8,549 | 6,202 | 5,351 | 7,137 | 4,465 | 2,974 |
| MEAN | 266 | 257 | 282 | 287 | 214 | 285 | 285 | 200 | 178 | 230 | 144 | 99.1 |
| MAX | 558 | 623 | 572 | 1,770 | 261 | 892 | 524 | 330 | 311 | 608 | 210 | 138 |
| MIN | 208 | 196 | 205 | 184 | 184 | 190 | 226 | 142 | 117 | 131 | 107 | 81 |
| † | -7 | -11 | 0 | +16 | 0 | +1 | -6 | 0 | -5 | -7 | -3 | -20 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 2005,*[®] BY WATER YEAR (WY)

| | 149 | 157 | 179 | 199 | 220 | 258 | 267 | 217 | 202 | 169 | 167 | 152 |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 149 | 157 | 179 | 199 | 220 | 258 | 267 | 217 | 202 | 169 | 167 | 152 |
| MAX | 543 | 327 | 479 | 424 | 463 | 571 | 677 | 405 | 719 | 425 | 514 | 630 |
| (WY) | (1938) | (1980) | (1997) | (1978) | (1960) | (1993) | (1980) | (1949) | (2003) | (2003) | (1940) | (1979) |
| MIN | 49.7 | 61.3 | 77.5 | 76.2 | 94.9 | 94.2 | 119 | 95.3 | 77.9 | 54.8 | 52.5 | 50.4 |
| (WY) | (1964) | (1954) | (1998) | (1956) | (1956) | (1981) | (2002) | (2000) | (2002) | (1986) | (1981) | (1968) |

02068500 DAN RIVER NEAR FRANCISCO, NC—Continued

| SUMMARY STATISTICS | FOR 2004 CALENDAR YEAR | | FOR 2005 WATER YEAR | | WATER YEARS 1938 - 2005* [@] | |
|--------------------------|------------------------|--------|---------------------|--------|---------------------------------------|--------------|
| ANNUAL TOTAL | 83,680 | | 83,106 | | (UNADJUSTED) | |
| ANNUAL MEAN | 229 | | 228 | | 195 | |
| HIGHEST ANNUAL MEAN | | | ‡224 | | 314 | |
| LOWEST ANNUAL MEAN | | | | | 93.6 | |
| HIGHEST DAILY MEAN | 5,990 | Sep 28 | 1,770 | Jan 14 | 6,830 | Sep 22, 1979 |
| LOWEST DAILY MEAN | 90 | Sep 6 | 81 | Sep 15 | 21 | Sep 4, 1999 |
| ANNUAL SEVEN-DAY MINIMUM | 95 | Aug 31 | 89 | Sep 24 | 28 | Aug 24, 1981 |
| MAXIMUM PEAK FLOW | | | 4,800 | Jan 14 | 21,200 | Aug 17, 1985 |
| MAXIMUM PEAK STAGE | | | 7.31 | Jan 14 | 19.50 | Aug 17, 1985 |
| INSTANTANEOUS LOW FLOW | | | 80* | Sep 13 | 7.1 | Sep 8, 1932 |
| 10 PERCENT EXCEEDS | 314 | | 315 | | 320 | |
| 50 PERCENT EXCEEDS | 195 | | 213 | | 156 | |
| 90 PERCENT EXCEEDS | 118 | | 124 | | 81 | |

† Change in contents, equivalent in cubic feet per second, in Talbott and Townes Reservoirs provided by city of Danville, Virginia.

* Regulated period only (1982-2005). See REMARKS.

[@] See PERIOD OF RECORD.

‡ Adjusted for change in contents.

e Estimated.

