# 02442500 LUXAPALLILA CREEK AT MILLPORT, AL

Black Warrior-Tombigbee Basin
Luxapallila Subbasin

LOCATION.--Lat 33°34′30″, long 88°05′00″ referenced to North American Datum of 1927, Lamar County, AL, Hydrologic Unit 03160105, near left bank on downstream side of bridge on State Highway 17, 0.20 mi downstream from Driver Creek, 1.0 mi north of Millport, and at mile 31.6.

DRAINAGE AREA.--247 $mi^2$.

## SURFACE-WATER RECORDS

PERIOD OF RECORD.--August 1954 to September 1959, December 1980 to September 1986. October 1986 to Septermber 2001 (flood hydrograph only). October 2001 to current year.

REVISED RECORDS.-- WDR AL-82-1: 1981. WDR AL-84-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 243.65 ft above NGVD of 1929.

REMARKS.--Estimated daily discharge: October 2 - 11 and May 19 - June 4. Records good except those estimated, which are poor.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,000 $ft^3/s$ and (or) maximum (*):

| Date | Time | Discharge ($ft^3/s$) | Gage height (ft) |
|---|---|---|---|
| Oct 20 | 0230 | 4,040 | 11.70 |
| Nov 7 | 1845 | *5,380 | *12.49 |
| Dec 31 | 1615 | 4,940 | 12.28 |

Minimum discharge, 53 $ft^3/s$, Aug. 24, gage height, 4.08 ft.

**02442500 LUXAPALLILA CREEK AT MILLPORT, AL—Continued**

**DISCHARGE, CUBIC FEET PER SECOND**
**WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**
**DAILY MEAN VALUES**
[e, estimated]

| Day | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 83 | 231 | 207 | 1,740 | 504 | 291 | 168 | 124 | e77 | 65 | 73 | 63 |
| 2 | e83 | 856 | 200 | 694 | 523 | 484 | 167 | 119 | e78 | 63 | 70 | 62 |
| 3 | e83 | 335 | 186 | 505 | 359 | 315 | 148 | 116 | e83 | 62 | 68 | 67 |
| 4 | e82 | 247 | 178 | 474 | 303 | 263 | 178 | 128 | e78 | 64 | 66 | 63 |
| 5 | e82 | 217 | 173 | 2,530 | 275 | 242 | 169 | 127 | 74 | 62 | 67 | 61 |
| 6 | e80 | 404 | 174 | 1,210 | 260 | 225 | 145 | 122 | 71 | 61 | 67 | 58 |
| 7 | e78 | 4,460 | 174 | 875 | 251 | 216 | 138 | 116 | 70 | 117 | 64 | 57 |
| 8 | e77 | 2,290 | 163 | 962 | 231 | 209 | 135 | 110 | 69 | 183 | 63 | 56 |
| 9 | e79 | 777 | 161 | 601 | 225 | 202 | 134 | 107 | 69 | 113 | 62 | 56 |
| 10 | e81 | 511 | 162 | 471 | 220 | 194 | 135 | 105 | 67 | 120 | 60 | 56 |
| 11 | e82 | 423 | 164 | 406 | 211 | 189 | 159 | 102 | 66 | 144 | 59 | 55 |
| 12 | 78 | 381 | 216 | 361 | 205 | 182 | 196 | 101 | 65 | 153 | 58 | 65 |
| 13 | 77 | 315 | 305 | 337 | 314 | 179 | 151 | 107 | 64 | 118 | 57 | 62 |
| 14 | 76 | 283 | 224 | 306 | 512 | 178 | 172 | 100 | 64 | 201 | 57 | 266 |
| 15 | 76 | 682 | 199 | 298 | 316 | 176 | 294 | 98 | 65 | 140 | 56 | 282 |
| 16 | 87 | 1,010 | 184 | 331 | 266 | 204 | 198 | 101 | 84 | 102 | 58 | 102 |
| 17 | 1,980 | 500 | 174 | 285 | 251 | 185 | 167 | 104 | 70 | 91 | 191 | 80 |
| 18 | 451 | 371 | 168 | 270 | 235 | 173 | 155 | 97 | 66 | 87 | 175 | 73 |
| 19 | 812 | 305 | 166 | 262 | 222 | 167 | 146 | e95 | 67 | 84 | 78 | 68 |
| 20 | 2,030 | 268 | 163 | 248 | 218 | 164 | 137 | e95 | 74 | 81 | 65 | 66 |
| 21 | 391 | 245 | 165 | 681 | 232 | 159 | 131 | e94 | 69 | 96 | 60 | 64 |
| 22 | 259 | 234 | 228 | 1,310 | 219 | 152 | 127 | e93 | 64 | 83 | 57 | 64 |
| 23 | 206 | 227 | 236 | 594 | 200 | 152 | 123 | e91 | 60 | 101 | 55 | 65 |
| 24 | 176 | 216 | 198 | 452 | 194 | 148 | 121 | e88 | 59 | 124 | 55 | 67 |
| 25 | 161 | 207 | 389 | 373 | 1,320 | 146 | 123 | e84 | 58 | 90 | 78 | 72 |
| 26 | 160 | 199 | 408 | 322 | 598 | 144 | 296 | e83 | 60 | 82 | 107 | 72 |
| 27 | 928 | 193 | 287 | 304 | 386 | 142 | 206 | e83 | 74 | 77 | 67 | 64 |
| 28 | 923 | 190 | 243 | 306 | 305 | 140 | 157 | e82 | 70 | 74 | 66 | 66 |
| 29 | 350 | 189 | 221 | 275 | --- | 139 | 139 | e80 | 62 | 73 | 65 | 63 |
| 30 | 242 | 191 | 238 | 260 | --- | 136 | 131 | e77 | 64 | 96 | 65 | 61 |
| 31 | 209 | --- | 3,560 | 245 | --- | 134 | --- | e77 | --- | 84 | 67 | --- |
| Total | 10,562 | 16,957 | 9,914 | 18,288 | 9,355 | 6,030 | 4,846 | 3,106 | 2,061 | 3,091 | 2,256 | 2,376 |
| Mean | 341 | 565 | 320 | 590 | 334 | 195 | 162 | 100 | 68.7 | 99.7 | 72.8 | 79.2 |
| Max | 2,030 | 4,460 | 3,560 | 2,530 | 1,320 | 484 | 296 | 128 | 84 | 201 | 191 | 282 |
| Min | 76 | 189 | 161 | 245 | 194 | 134 | 121 | 77 | 58 | 61 | 55 | 55 |
| Cfsm | 1.38 | 2.29 | 1.29 | 2.39 | 1.35 | 0.79 | 0.65 | 0.41 | 0.28 | 0.40 | 0.29 | 0.32 |
| In. | 1.59 | 2.55 | 1.49 | 2.75 | 1.41 | 0.91 | 0.73 | 0.47 | 0.31 | 0.47 | 0.34 | 0.36 |

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1954 - 2007, BY WATER YEAR (WY)**

| | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mean | 180 | 352 | 543 | 488 | 775 | 569 | 557 | 431 | 251 | 192 | 134 | 125 |
| Max | 412 | 1,030 | 1,737 | 1,022 | 1,554 | 1,324 | 1,323 | 1,408 | 567 | 408 | 371 | 268 |
| (WY) | (2003) | (1958) | (1984) | (1982) | (2003) | (1983) | (1983) | (2003) | (2003) | (1958) | (2003) | (2002) |
| Min | 49.4 | 90.4 | 104 | 104 | 275 | 195 | 156 | 100 | 68.7 | 64.0 | 42.7 | 44.3 |
| (WY) | (1955) | (1955) | (1956) | (1956) | (1981) | (2007) | (1986) | (2007) | (2007) | (1956) | (1954) | (1954) |

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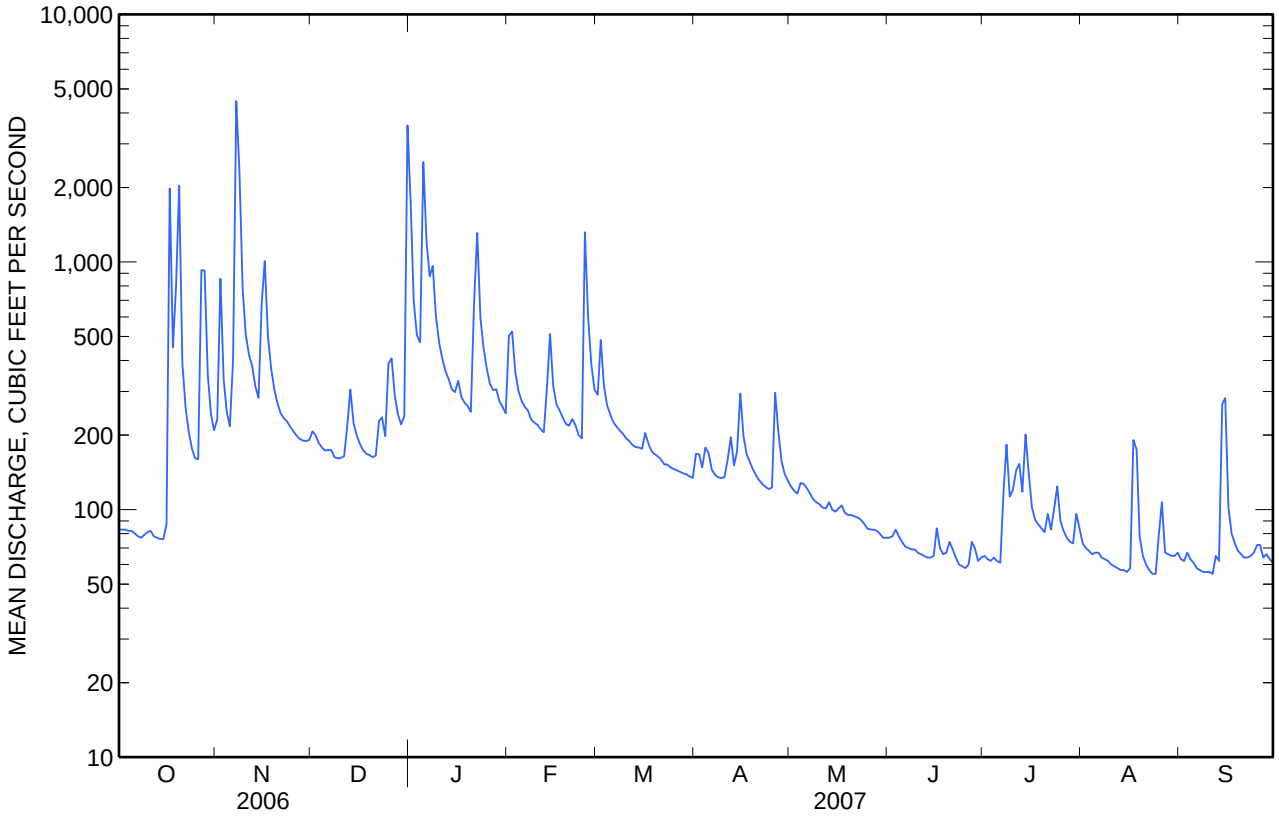
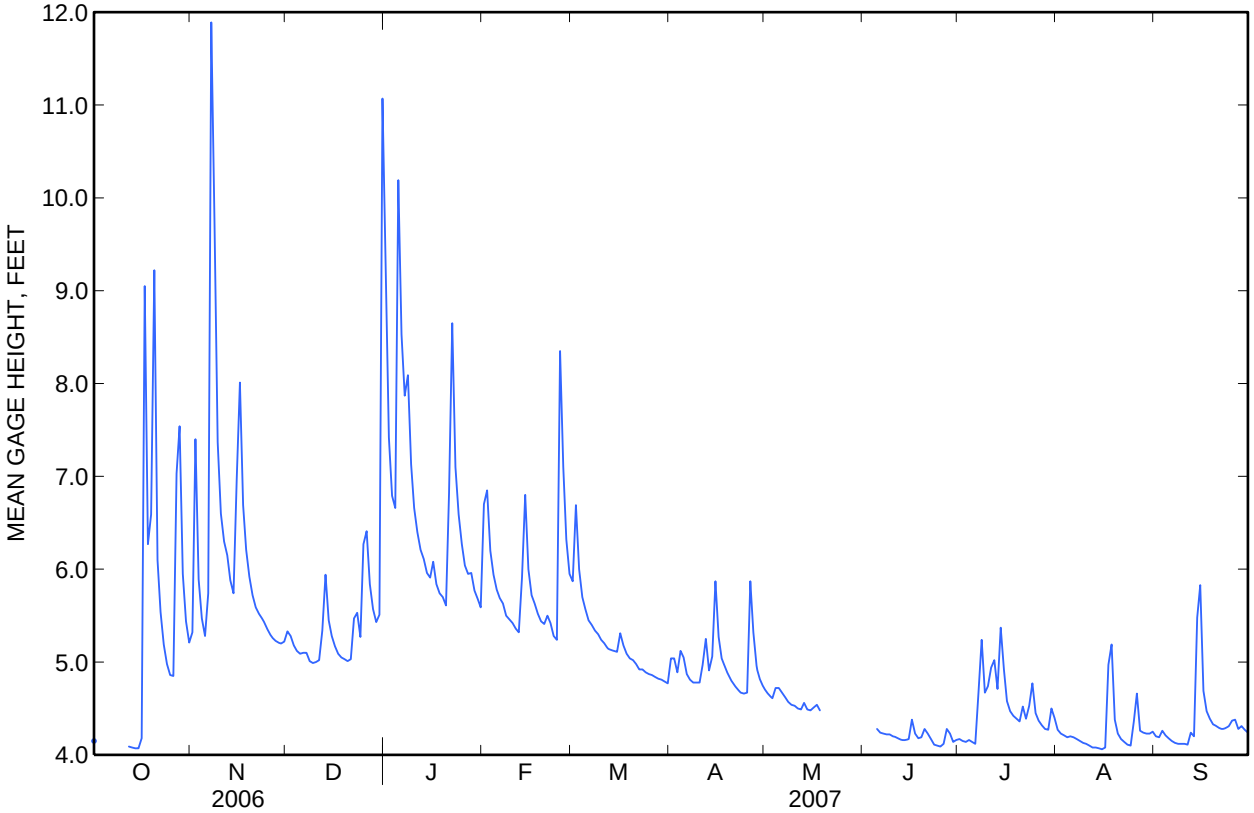
**SUMMARY STATISTICS**

| | Calendar Year 2006 | | Water Year 2007 | | Water Years 1954 - 2007 | |
|---|---|---|---|---|---|---|
| **Annual total** | 133,228 | | 88,842 | | | |
| **Annual mean** | 365 | | 243 | | 391 | |
| **Highest annual mean** | | | | | 671 | 2003 |
| **Lowest annual mean** | | | | | 205 | 1986 |
| **Highest daily mean** | 4,460 | Nov 7 | 4,460 | Nov 7 | 11,000 | Feb 7, 2004 |
| **Lowest daily mean** | 66 | Aug 8 | 55 | Aug 23,24,Sep 11 | 36 | Sep 14, 1954 |
| **Annual seven-day minimum** | 69 | Aug 4 | 57 | Sep 5 | 37 | Sep 11, 1954 |
| **Maximum peak flow** | | | 5,380 | Nov 7 | 15,500 | Dec 24, 1990 |
| **Maximum peak stage** | | | 12.49 | Nov 7 | 14.07 | Dec 24, 1990 |
| **Annual runoff (cfsm)** | 1.48 | | 0.985 | | 1.58 | |
| **Annual runoff (inches)** | 20.07 | | 13.38 | | 21.50 | |
| **10 percent exceeds** | 774 | | 414 | | 752 | |
| **50 percent exceeds** | 185 | | 146 | | 209 | |
| **90 percent exceeds** | 76 | | 64 | | 77 | |



**02442500 LUXAPALLILA CREEK AT MILLPORT, AL—Continued**

**GAGE HEIGHT, FEET**
**WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**
**DAILY MEAN VALUES**

| Day | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 4.15 | 5.32 | 5.33 | 9.25 | 6.70 | 5.87 | 5.04 | 4.69 | --- | 4.17 | 4.27 | 4.20 |
| 2 | --- | 7.40 | 5.28 | 7.42 | 6.85 | 6.69 | 5.04 | 4.64 | --- | 4.15 | 4.23 | 4.19 |
| 3 | --- | 5.89 | 5.18 | 6.79 | 6.20 | 6.00 | 4.89 | 4.61 | --- | 4.14 | 4.21 | 4.26 |
| 4 | --- | 5.47 | 5.12 | 6.66 | 5.94 | 5.70 | 5.12 | 4.72 | --- | 4.16 | 4.19 | 4.21 |
| 5 | --- | 5.28 | 5.09 | 10.19 | 5.78 | 5.57 | 5.05 | 4.72 | 4.28 | 4.14 | 4.20 | 4.18 |
| 6 | --- | 5.74 | 5.10 | 8.53 | 5.69 | 5.45 | 4.87 | 4.67 | 4.24 | 4.12 | 4.19 | 4.15 |
| 7 | --- | 11.89 | 5.10 | 7.87 | 5.63 | 5.40 | 4.81 | 4.62 | 4.23 | 4.67 | 4.17 | 4.13 |
| 8 | --- | 9.75 | 5.01 | 8.09 | 5.50 | 5.34 | 4.78 | 4.57 | 4.22 | 5.24 | 4.15 | 4.12 |
| 9 | --- | 7.37 | 4.99 | 7.13 | 5.46 | 5.30 | 4.78 | 4.54 | 4.22 | 4.67 | 4.13 | 4.12 |
| 10 | --- | 6.60 | 5.00 | 6.66 | 5.42 | 5.24 | 4.78 | 4.53 | 4.20 | 4.74 | 4.12 | 4.12 |
| 11 | --- | 6.30 | 5.02 | 6.40 | 5.36 | 5.20 | 4.97 | 4.50 | 4.19 | 4.94 | 4.10 | 4.11 |
| 12 | 4.09 | 6.15 | 5.34 | 6.21 | 5.32 | 5.15 | 5.25 | 4.49 | 4.17 | 5.02 | 4.08 | 4.24 |
| 13 | 4.08 | 5.88 | 5.94 | 6.11 | 5.91 | 5.13 | 4.91 | 4.56 | 4.16 | 4.71 | 4.08 | 4.20 |
| 14 | 4.07 | 5.74 | 5.45 | 5.96 | 6.80 | 5.12 | 5.06 | 4.49 | 4.16 | 5.37 | 4.07 | 5.48 |
| 15 | 4.07 | 6.97 | 5.28 | 5.91 | 6.00 | 5.11 | 5.87 | 4.48 | 4.17 | 4.92 | 4.06 | 5.83 |
| 16 | 4.18 | 8.01 | 5.17 | 6.08 | 5.72 | 5.31 | 5.27 | 4.51 | 4.38 | 4.58 | 4.08 | 4.69 |
| 17 | 9.05 | 6.69 | 5.09 | 5.84 | 5.63 | 5.18 | 5.04 | 4.54 | 4.23 | 4.47 | 4.97 | 4.47 |
| 18 | 6.27 | 6.21 | 5.05 | 5.74 | 5.52 | 5.09 | 4.95 | 4.48 | 4.18 | 4.42 | 5.19 | 4.39 |
| 19 | 6.59 | 5.92 | 5.03 | 5.70 | 5.44 | 5.04 | 4.87 | --- | 4.19 | 4.39 | 4.38 | 4.33 |
| 20 | 9.22 | 5.72 | 5.01 | 5.61 | 5.41 | 5.02 | 4.80 | --- | 4.28 | 4.36 | 4.23 | 4.31 |
| 21 | 6.10 | 5.59 | 5.03 | 6.82 | 5.50 | 4.98 | 4.75 | --- | 4.23 | 4.52 | 4.17 | 4.29 |
| 22 | 5.54 | 5.52 | 5.47 | 8.65 | 5.42 | 4.92 | 4.71 | --- | 4.17 | 4.39 | 4.14 | 4.28 |
| 23 | 5.19 | 5.47 | 5.53 | 7.10 | 5.28 | 4.92 | 4.67 | --- | 4.11 | 4.53 | 4.11 | 4.29 |
| 24 | 4.98 | 5.40 | 5.27 | 6.59 | 5.24 | 4.89 | 4.66 | --- | 4.10 | 4.77 | 4.10 | 4.31 |
| 25 | 4.86 | 5.34 | 6.27 | 6.27 | 8.35 | 4.87 | 4.67 | --- | 4.09 | 4.45 | 4.36 | 4.37 |
| 26 | 4.85 | 5.27 | 6.41 | 6.04 | 7.10 | 4.86 | 5.87 | --- | 4.12 | 4.37 | 4.66 | 4.38 |
| 27 | 7.03 | 5.24 | 5.84 | 5.95 | 6.32 | 4.84 | 5.32 | --- | 4.28 | 4.32 | 4.26 | 4.28 |
| 28 | 7.54 | 5.21 | 5.57 | 5.96 | 5.95 | 4.82 | 4.96 | --- | 4.23 | 4.28 | 4.24 | 4.31 |
| 29 | 5.95 | 5.20 | 5.43 | 5.77 | --- | 4.81 | 4.82 | --- | 4.14 | 4.27 | 4.23 | 4.27 |
| 30 | 5.44 | 5.22 | 5.51 | 5.68 | --- | 4.79 | 4.74 | --- | 4.16 | 4.50 | 4.23 | 4.24 |
| 31 | 5.21 | --- | 11.07 | 5.59 | --- | 4.77 | --- | --- | --- | 4.40 | 4.25 | --- |
| Mean | --- | 6.26 | 5.52 | 6.73 | 5.91 | 5.21 | 4.98 | --- | --- | 4.52 | 4.25 | 4.36 |
| Max | --- | 11.89 | 11.07 | 10.19 | 8.35 | 6.69 | 5.87 | --- | --- | 5.37 | 5.19 | 5.83 |
| Min | --- | 5.20 | 4.99 | 5.59 | 5.24 | 4.77 | 4.66 | --- | --- | 4.12 | 4.06 | 4.11 |

**02442500 LUXAPALLILA CREEK AT MILLPORT, AL—Continued**