

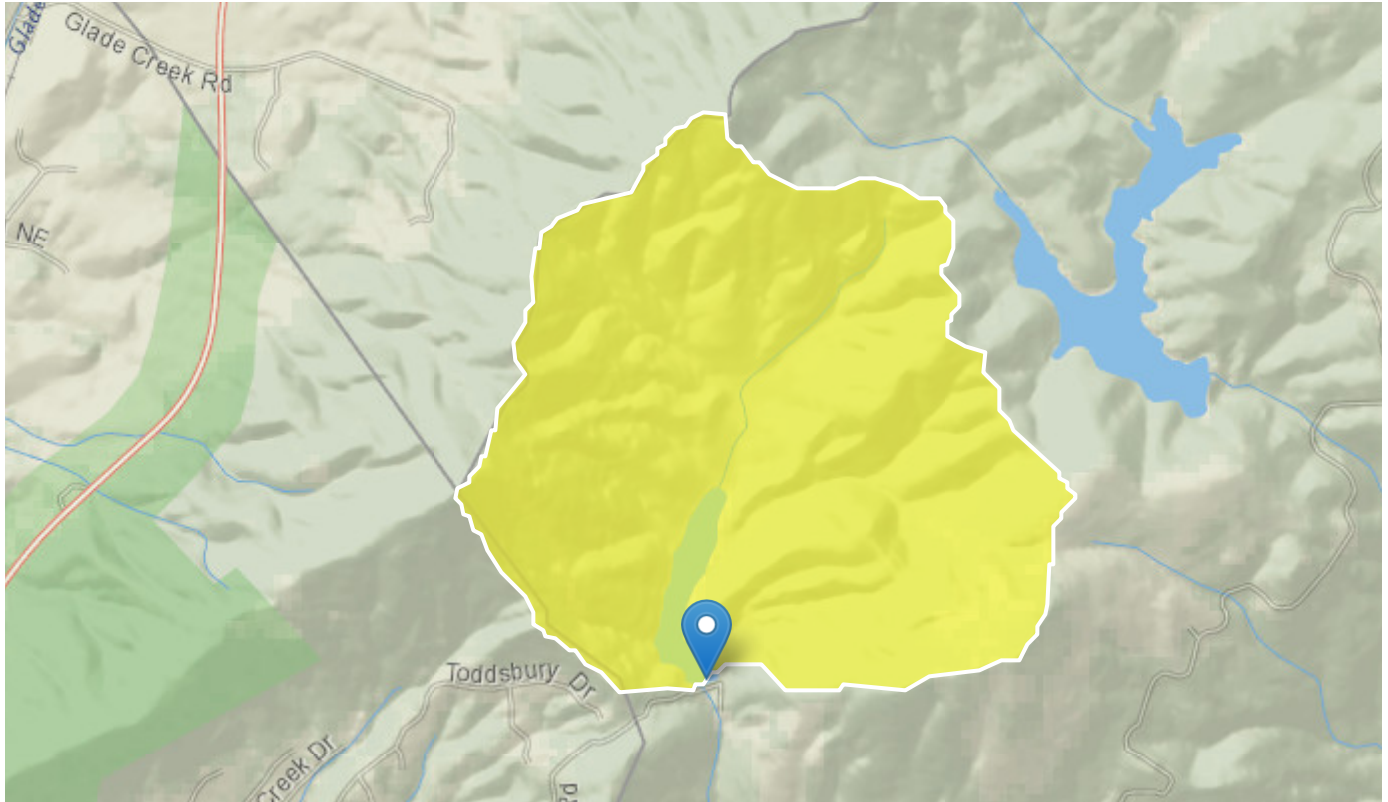
FCR Whole Watershed Report

Region ID: VA

Workspace ID: VA20190124154412070000

Clicked Point (Latitude, Longitude): 37.30280, -79.83700

Time: 2019-01-24 10:44:30 -0500



Basin Characteristics

| Parameter Code | Parameter Description | Value | Unit |
|----------------|--|---------|--------------|
| DRNAREA | Area that drains to a point on a stream | 1.37 | square miles |
| BRMETA | Percent area of metamorphic rocks within the Blue Ridge Physiographic Region | 100 | percent |
| CPSED | Percent area of sedimentary rock within the Coastal Plain Physiographic Region | 0 | percent |
| ELEV | Mean Basin Elevation | 1914.91 | feet |
| ELEVMAX | Maximum basin elevation | 2601.24 | feet |

| Parameter Code | Parameter Description | Value | Unit |
|----------------|--|-------|---------|
| I24H2Y | Maximum 24-hour precipitation that occurs on average once in 2 years - Equivalent to precipitation intensity index | 3.278 | inches |
| LC01BARE | Percentage of area barren land, NLCD 2001 category 31 | 0 | percent |
| LC01CRPHAY | Percentage of cultivated crops and hay, classes 81 and 82, from NLCD 2001 | 0 | percent |
| LC01DEV | Percentage of land-use from NLCD 2001 classes 21-24 | 0.05 | percent |
| LC01FORSHB | Percentage of forests and shrub lands, classes 41 to 52, from NLCD 2001 | 97.22 | percent |
| LC01HERB | Percentage of herbaceous upland from NLCD 2001 class 71 | 0 | percent |
| LC01IMP | Percent imperviousness of basin area 2001 NLCD | 0.01 | percent |
| LC01WATER | Percentage of open water, class 11, from NLCD 2001 | 2.73 | percent |
| LC01WETLND | Percentage of wetlands, classes 90 and 95, from NLCD 2001 | 0 | percent |
| LC06BARE | Percent of area covered by barren rock using 2006 NLCD | 0 | percent |
| LC06CRPHAY | Percentage of cultivated crops and hay, classes 81 and 82, from NLCD 2006 | 0 | percent |
| LC06DEV | Percentage of land-use from NLCD 2006 classes 21-24 | 0.04 | percent |
| LC06FORSHB | Percentage of forests and shrub lands, classes 41 to 52, from NLCD 2006 | 97.22 | percent |
| LC06GRASS | Percent of area covered by grassland/herbaceous using 2006 NLCD | 0 | percent |
| LC06IMP | Percentage of impervious area determined from NLCD 2006 impervious dataset | 0 | percent |
| LC06WATER | Percent of open water, class 11, from NLCD 2006 | 2.74 | percent |
| LC06WETLND | Percent of area covered by wetland using 2006 NLCD | 0 | percent |
| LC11BARE | Percentage of barren from NLCD 2011 class 31 | 0 | percent |
| LC11CRPHAY | Percentage of cultivated crops and hay, classes 81 and 82, from NLCD 2011 | 0 | percent |

| Parameter Code | Parameter Description | Value | Unit |
|----------------|---|---------|---------------|
| LC11DEV | Percentage of developed (urban) land from NLCD 2011 classes 21-24 | 0.0141 | percent |
| LC11FORSHB | Percentage of forests and shrub lands, classes 41 to 52, from NLCD 2011 | 97.26 | percent |
| LC11GRASS | Percent of area covered by grassland/herbaceous using 2011 NLCD | 0.51 | percent |
| LC11IMP | Average percentage of impervious area determined from NLCD 2011 impervious dataset | 0.00437 | percent |
| LC11WATER | Percent of open water, class 11, from NLCD 2011 | 2.21 | percent |
| LC11WETLND | Percentage of wetlands, classes 90 and 95, from NLCD 2011 | 0 | percent |
| LFREGNO | Low Flow Region Number | 1546 | dimensionless |
| MESZOIC | Percent of area within the Mesozoic Basins | 0 | percent |
| MINBELEV | Minimum basin elevation | 1655.59 | feet |
| PDIGMET | Percent area of igneous and metamorphic within the Piedmont Physiographic Region | 0 | percent |
| PKREGNO | Peak Flow Region Number | 1553 | dimensionless |
| PRECIP | Mean Annual Precipitation | 45.689 | inches |
| RELIEF | Maximum - minimum elevation | 946 | feet |
| STATOM19_8 | Percentage of soils with greater than 7.3 percent and less than or equal to 19.8 percent organic matter from STATSGO | 0 | percent |
| STATOM55_7 | Percentage of soils with greater than 19.8 percent and less than or equal to 55.7 percent organic matter from STATSGO | 0 | percent |
| STATSCLAY10 | Percentage of soils with less than 10 percent clay from STATSGO | 0 | percent |
| STATSCLY20 | Percentage of soils with greater than 10 percent and less than or equal to 20 percent clay from STATSGO | 0 | percent |
| STATSCLY30 | Percentage of soils with greater than 20 percent and less than or equal to 30 percent clay from STATSGO | 100 | percent |
| STATSCLY40 | Percentage of soils with greater than 30 percent and less than or equal to 40 percent clay from STATSGO | 0 | percent |

| Parameter Code | Parameter Description | Value | Unit |
|----------------|---|-------|-----------------|
| STATSCLY50 | Percentage of soils with greater than 40 percent and less than or equal to 50 percent clay from STATSGO | 0 | percent |
| STATSCLY60 | Percentage of soils with greater than 50 percent and less than or equal to 60 percent clay from STATSGO | 0 | percent |
| STATSGODEP | Area-weighted average soil depth from NRCS STATSGO database | 59 | inches |
| STATSOM0_5 | Percentage of soils with less than 0.5 percent organic matter from STATSGO | 0 | percent |
| STATSOM2_6 | Percentage of soils with greater than 0.50 percent and less than or equal to 2.60 percent organic matter from STATSGO | 100 | percent |
| STATSOM7_3 | Percentage of soils with greater than 2.6 percent and less than or equal to 7.3 percent organic matter from STATSGO | 0 | percent |
| STATSPERM | Area-weighted average soil permeability from NRCS STATSGO database | 3.08 | inches per hour |
| STATSWATCP | Available water capacity of the top 60 inches of soil - determined from STATSGO data | 0.15 | inch per inch |
| VRCARB | Percent of area of carbonate rocks within the Valley and Ridge Physiographic Region | 0 | percent |
| VRPLSLC | Percent of area of siliciclastic rocks within the Valley and Ridge or Appalachian Plateau Physiographic Regions | 0 | percent |

Peak-Flow Statistics Parameters [Blue Ridge 2011 5144]

| Parameter Code | Parameter Name | Value | Units | Min Limit | Max Limit |
|----------------|----------------|-------|--------------|-----------|-----------|
| DRNAREA | Drainage Area | 1.37 | square miles | 0.06 | 7866 |

Peak-Flow Statistics Flow Report [Blue Ridge 2011 5144]

PII: Prediction Interval-Lower, Plu: Prediction Interval-Upper, SEp: Standard Error of Prediction, SE: Standard Error (other -- see report)

| Statistic | Value | Unit | SEp |
|-----------|-------|------|-----|
|-----------|-------|------|-----|

| Statistic | Value | Unit | SEp |
|----------------------|-------|--------------------|-----|
| 2 Year Peak Flood | 167 | ft ³ /s | 17 |
| 2 33 Year Peak Flood | 199 | ft ³ /s | 18 |
| 5 Year Peak Flood | 381 | ft ³ /s | 20 |
| 10 Year Peak Flood | 599 | ft ³ /s | 24 |
| 25 Year Peak Flood | 953 | ft ³ /s | 29 |
| 50 Year Peak Flood | 1300 | ft ³ /s | 32 |
| 100 Year Peak Flood | 1840 | ft ³ /s | 30 |
| 200 Year Peak Flood | 2330 | ft ³ /s | 33 |

Peak-Flow Statistics Citations

Austin, S.H., Krstolic, J.L., and Wiegand, Ute, 2011, Peak-flow characteristics of Virginia streams: U.S. Geological Survey Scientific Investigations Report 2011–5144, 106 p. + 3 tables and 2 appendixes on CD. (<http://pubs.usgs.gov/sir/2011/5144/>)

Low-Flow Statistics Parameters [Blue Ridge 2011 5143]

| Parameter Code | Parameter Name | Value | Units | Min Limit | Max Limit |
|----------------|----------------|-------|--------------|-----------|-----------|
| DRNAREA | Drainage Area | 1.37 | square miles | 0.09 | 7393 |

Low-Flow Statistics Flow Report [Blue Ridge 2011 5143]

PII: Prediction Interval-Lower, PIu: Prediction Interval-Upper, SEp: Standard Error of Prediction, SE: Standard Error (other -- see report)

| Statistic | Value | Unit | SEp |
|--------------------------|---------|--------------------|------|
| 1 Day 1.11 Year Low Flow | 0.279 | ft ³ /s | 44 |
| 1 Day 1.25 Year Low Flow | 0.188 | ft ³ /s | 54.2 |
| 1 Day 1.43 Year Low Flow | 0.136 | ft ³ /s | 63.1 |
| 1 Day 1.67 Year Low Flow | 0.1 | ft ³ /s | 71.7 |
| 1 Day 2 Year Low Flow | 0.0726 | ft ³ /s | 81.1 |
| 1 Day 2.5 Year Low Flow | 0.0511 | ft ³ /s | 91.9 |
| 1 Day 3.33 Year Low Flow | 0.0335 | ft ³ /s | 106 |
| 1 Day 5 Year Low Flow | 0.0195 | ft ³ /s | 126 |
| 1 Day 10 Year Low Flow | 0.00799 | ft ³ /s | 167 |

| Statistic | Value | Unit | SEp |
|---------------------------|---------|--------------------|------|
| 4 Day 1.11 Year Low Flow | 0.291 | ft ³ /s | 44.7 |
| 4 Day 1.25 Year Low Flow | 0.199 | ft ³ /s | 54.7 |
| 4 Day 1.43 Year Low Flow | 0.145 | ft ³ /s | 63.8 |
| 4 Day 1.67 Year Low Flow | 0.107 | ft ³ /s | 73 |
| 4 Day 2 Year Low Flow | 0.0783 | ft ³ /s | 82.8 |
| 4 Day 2.5 Year Low Flow | 0.0556 | ft ³ /s | 93.9 |
| 4 Day 3.33 Year Low Flow | 0.0369 | ft ³ /s | 108 |
| 4 Day 5 Year Low Flow | 0.0214 | ft ³ /s | 129 |
| 4 Day 10 Year Low Flow | 0.00886 | ft ³ /s | 169 |
| 4 Day 20 Year Low Flow | 0.00339 | ft ³ /s | 228 |
| 7 Day 1.11 Year Low Flow | 0.313 | ft ³ /s | 44.1 |
| 7 Day 1.25 Year Low Flow | 0.212 | ft ³ /s | 54.2 |
| 7 Day 1.43 Year Low Flow | 0.155 | ft ³ /s | 63.3 |
| 7 Day 1.67 Year Low Flow | 0.114 | ft ³ /s | 72.5 |
| 7 Day 2 Year Low Flow | 0.0836 | ft ³ /s | 82.2 |
| 7 Day 2.5 Year Low Flow | 0.0593 | ft ³ /s | 93.3 |
| 7 Day 3.33 Year Low Flow | 0.0395 | ft ³ /s | 107 |
| 7 Day 5 Year Low Flow | 0.0232 | ft ³ /s | 127 |
| 7 Day 10 Year Low Flow | 0.00995 | ft ³ /s | 165 |
| 7 Day 20 Year Low Flow | 0.00418 | ft ³ /s | 217 |
| 30 Day 1.11 Year Low Flow | 0.458 | ft ³ /s | 34.8 |
| 30 Day 1.25 Year Low Flow | 0.311 | ft ³ /s | 43.3 |
| 30 Day 1.43 Year Low Flow | 0.229 | ft ³ /s | 50.9 |
| 30 Day 1.67 Year Low Flow | 0.172 | ft ³ /s | 58.2 |
| 30 Day 2 Year Low Flow | 0.13 | ft ³ /s | 65.9 |
| 30 Day 2.5 Year Low Flow | 0.0963 | ft ³ /s | 74.6 |
| 30 Day 3.33 Year Low Flow | 0.0679 | ft ³ /s | 85.3 |
| 30 Day 5 Year Low Flow | 0.0441 | ft ³ /s | 99.8 |
| 30 Day 10 Year Low Flow | 0.0228 | ft ³ /s | 126 |
| 30 Day 20 Year Low Flow | 0.0121 | ft ³ /s | 156 |

| Statistic | Value | Unit | SEp |
|--------------------------|---------|--------------------|-----|
| 30 Day 50 Year Low Flow | 0.00555 | ft ³ /s | 206 |
| 30 Day 100 Year Low Flow | 0.00324 | ft ³ /s | 252 |
| 30 Day 200 Year Low Flow | 0.0023 | ft ³ /s | 295 |

Low-Flow Statistics Citations

Austin, S.H., Krstolic, J.L., and Wiegand, Ute, 2011, Low-flow characteristics of Virginia streams: U.S. Geological Survey Scientific Investigations Report 2011–5143, 122 p. + 9 tables on CD. (<http://pubs.usgs.gov/sir/2011/5143/>)

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Application Version: 4.3.0