



Prepared in cooperation with the Virginia Department of Transportation

# Annual Maximum Stages and Discharges of Selected Streams in Virginia through 2007



Open-File Report 2009–1007

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

**Cover:** Laurel Fork approaching bankfull stage in Highland County, Virginia, on Monday, June 25, 2006  
*(photograph taken by Samuel H. Austin, USGS).*



# **Annual Maximum Stages and Discharges of Selected Streams in Virginia through 2007**

By Samuel H. Austin and Ute Wiegand

Prepared in cooperation with the Virginia Department of Transportation

Open-File Report 2009–1007

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

**U.S. Department of the Interior**  
KEN SALAZAR, Secretary

**U.S. Geological Survey**  
Suzette M. Kimball, Acting Director

U.S. Geological Survey, Reston, Virginia 2009

For product and ordering information:  
World Wide Web: <http://www.usgs.gov/pubprod>  
Telephone: 1-888-ASK-USGS

For more information on the USGS—the Federal source for science about the Earth,  
its natural and living resources, natural hazards, and the environment:  
World Wide Web: <http://www.usgs.gov>  
Telephone: 1-888-ASK-USGS

Any use of trade, product, or firm names is for descriptive purposes only and does not imply  
endorsement by the U.S. Government.

Although this report is in the public domain, permission must be secured from the individual  
copyright owners to reproduce any copyrighted material contained within this report.

Suggested citation:  
Austin, S.H., and Wiegand, U., 2009, Annual maximum stages and discharges of selected streams in Virginia  
through 2007: U.S. Geological Survey Open-File Report 2009-1007, 733 p. (available only online at  
<http://pubs.water.usgs.gov/ofr2009-1007>).

## Contents

Abstract .....	1
Introduction .....	1
Purpose and Scope .....	2
Explanation of Data .....	2
Acknowledgments.....	3
References Cited.....	3
Tables of Annual Maximum Stages and Discharges.....	9
Glossary .....	722
Index .....	724

## Figures —

1–4. Maps showing:	
1. Locations of streamflow-gaging stations in the North Atlantic Slope Basin in Virginia.....	5
2. Locations of streamflow-gaging stations in the South Atlantic Slope Basin in Virginia.....	6
3. Locations of streamflow-gaging stations in the Ohio River Basin in Virginia.....	7
4. Locations of streamflow-gaging stations in Fairfax County and vicinity in Virginia.....	8

## Tables — Streamflow-gaging stations for which records are published

### North Atlantic Slope Basin

<b>North Atlantic Slope Basin: Nassawadox Creek Basin.....</b>	<b>9</b>
1. 01484800 Guy Creek near Nassawadox, Va.....	9
<b>North Atlantic Slope Basin: Potomac River Basin.....</b>	<b>10</b>
2. 01613900 Hogue Creek near Hayfield, Va.....	10
3. 01614830 Opequon Creek near Stephens City, Va.....	11
4. 01615000 Opequon Creek near Berryville, Va.....	12
5. 01615500 Abrams Creek at Winchester, Va.....	14
6. 01616000 Abrams Creek near Winchester, Va.....	15
7. 01616100 Dry Marsh Run near Berryville, Va.....	16
8. 01620500 North River near Stokesville, Va.....	17
9. 01620800 Briery Branch tributary near Spring Creek, Va.....	19
10. 01621000 Dry River at Rawley Springs, Va.....	20
11. 01621050 Muddy Creek at Mount Clinton, Va.....	21
12. 01621200 War Branch near Hinton, Va.....	22
13. 01621400 Blacks Run at Harrisonburg, Va.....	23
14. 01621450 Blacks Run tributary number 1 near Harrisonburg, Va.....	24
15. 01621470 Blacks Run at Route 704 near Mount Crawford, Va.....	25
16. 01622000 North River near Burketown, Va.....	26
17. 01622100 North River tributary near Mount Crawford, Va.....	28
18. 01622300 Buffalo Branch tributary number 1 near Augusta Springs, Va.....	29
19. 01622400 Buffalo Branch tributary number 2 near Christians, Va.....	30

20.	01623000	Bell Creek at St. Pauls Chapel near Staunton, Va. ....	31
21.	01623500	Bell Creek near Staunton, Va. ....	32
22.	01624000	Bell Creek at Franks Mill near Staunton, Va. ....	33
23.	01624300	Middle River near Verona, Va. ....	34
24.	01624800	Christians Creek near Fishersville, Va. ....	35
25.	01625000	Middle River near Grottoes, Va. ....	36
26.	01625500	North River at Port Republic, Va. ....	38
27.	01625900	Back Creek at Lyndhurst, Va. ....	39
28.	01626000	South River near Waynesboro, Va. ....	40
29.	01626500	South River at Waynesboro, Va. ....	42
30.	01626850	South River near Dooms, Va. ....	43
31.	01627300	South River tributary near Harriston, Va. ....	44
32.	01627500	South River at Harriston, Va. ....	45
33.	01628000	South River at Port Republic, Va. ....	47
34.	01628060	White Oak Run near Grottoes, Va. ....	48
35.	01628150	Deep Run near Grottoes, Va. ....	49
36.	01628500	South Fork Shenandoah River near Lynnwood, Va. ....	50
37.	01628600	Cub Run tributary at Montevideo, Va. ....	52
38.	01629400	South Fork Shenandoah River tributary near Luray, Va. ....	53
39.	01629500	South Fork Shenandoah River near Luray, Va. ....	54
40.	01629945	Chub Run near Stanley, Va. ....	56
41.	01630700	Gooney Run near Glen Echo, Va. ....	57
42.	01631000	South Fork Shenandoah River at Front Royal, Va. ....	58
43.	01632000	North Fork Shenandoah River at Cootes Store, Va. ....	60
44.	01632082	Linville Creek at Broadway, Va. ....	62
45.	01632300	Long Meadow near Broadway, Va. ....	63
46.	01632900	Smith Creek near New Market, Va. ....	64
47.	01632950	Crooked Run tributary near Conicville, Va. ....	65
48.	01632970	Crooked Run near Mount Jackson, Va. ....	66
49.	01633000	North Fork Shenandoah River at Mount Jackson, Va. ....	67
50.	01633500	Stony Creek at Columbia Furnace, Va. ....	69
51.	01633650	Pughs Run near Woodstock, Va. ....	70
52.	01633700	Pughs Run tributary near Columbia Furnace, Va. ....	71
53.	01634000	North Fork Shenandoah River near Strasburg, Va. ....	72
54.	01634500	Cedar Creek near Winchester, Va. ....	74
55.	01635090	Cedar Creek above Highway 11 near Middletown, Va. ....	76
56.	01635200	North Fork Shenandoah River tributary near Waterlick, Va. ....	77
57.	01635500	Passage Creek near Buckton, Va. ....	78
58.	01636000	North Fork Shenandoah River near Riverton, Va. ....	80
59.	01636200	Shenandoah River at Riverton, Va. ....	81
60.	01636210	Happy Creek at Front Royal, Va. ....	83
61.	01636242	Crooked Run below highway 340 at Riverton, Va. ....	84
62.	0163626650	Manassas Run at Route 645 near Front Royal, Va. ....	85
63.	01636316	Spout Run at Route 621 near Millwood, Va. ....	86
64.	01636690	Piney Run near Lovettsville, Va. ....	87

<b>65.</b>	01638350	South Fork Catoctin Creek at Route 698 near Waterford, Va.....	88
<b>66.</b>	01638420	North Fork Catoctin Creek at Route 681 near Waterford, Va.....	89
<b>67.</b>	01638480	Catoctin Creek at Taylorstown, Va.....	90
<b>68.</b>	01643590	Limestone Branch near Leesburg, Va.....	91
<b>69.</b>	01643700	Goose Creek near Middleburg, Va.....	92
<b>70.</b>	01643805	North Fork Goose Creek at Route 729 near Lincoln, Va.....	93
<b>71.</b>	01643880	Beaverdam Creek at Route 734 near Mountville, Va.....	94
<b>72.</b>	01644000	Goose Creek near Leesburg, Va.....	95
<b>73.</b>	01644100	South Fork Sycolin Creek near Leesburg, Va.....	97
<b>74.</b>	01644200	Lenah Run at Lenah, Va.....	98
<b>75.</b>	01644250	South Fork Broad Run near Arcola, Va.....	99
<b>76.</b>	01644280	Broad Run near Leesburg, Va.....	100
<b>77.</b>	01644290	Stave Run at Reston, Va.....	101
<b>78.</b>	01644291	Stave Run near Reston, Va.....	102
<b>79.</b>	01644295	Smilax Branch at Reston, Va.....	103
<b>80.</b>	01644300	Sugarland Run at Herndon, Va.....	104
<b>81.</b>	01644370	Sugarland Run near Dranesville, Va.....	105
<b>82.</b>	01645700	Difficult Run near Fairfax, Va.....	106
<b>83.</b>	01645750	South Fork Little Difficult Run near Fairfax, Va.....	107
<b>84.</b>	01645784	Snakeden Branch at Reston, Va.....	108
<b>85.</b>	01645800	Piney Branch at Vienna, Va.....	109
<b>86.</b>	01645900	Colvin Run at Reston, Va.....	110
<b>87.</b>	01645950	Piney Run at Reston, Va.....	111
<b>88.</b>	01645975	Rocky Run near Great Falls, Va.....	112
<b>89.</b>	01646000	Difficult Run near Great Falls, Va.....	113
<b>90.</b>	01646200	Scott Run near McLean, Va.....	115
<b>91.</b>	01646300	Dead Run near McLean, Va.....	116
<b>92.</b>	01646600	Pimmit Run near Falls Church, Va.....	117
<b>93.</b>	01646700	Pimmit Run at Arlington, Va.....	118
<b>94.</b>	01646750	Little Pimmit Run tributary at Arlington, Va.....	119
<b>95.</b>	01646755	Little Pimmit Run tributary at Little Falls Road at Arlington, Va.....	120
<b>96.</b>	01646800	Little Pimmit Run at Arlington, Va.....	121
<b>97.</b>	01652400	Long Branch at Arlington, Va.....	122
<b>98.</b>	01652430	Doctors Run at Arlington, Va.....	123
<b>99.</b>	01652470	Lucky Run at Arlington, Va.....	124
<b>100.</b>	01652500	Fourmile Run at Alexandria, Va.....	125
<b>101.</b>	01652600	Holmes Run at Merrifield, Va.....	127
<b>102.</b>	01652610	Holmes Run near Annandale, Va.....	128
<b>103.</b>	01652620	Tripps Run at Falls Church, Va.....	129
<b>104.</b>	01652645	Tripps Run tributary near Falls Church, Va.....	130
<b>105.</b>	01652650	Tripps Run near Falls Church, Va.....	131
<b>106.</b>	01652670	Holmes Run below Lake Barcroft near Alexandria, Va.....	132
<b>107.</b>	01652690	Holmes Run at Alexandria, Va.....	133
<b>108.</b>	01652710	Backlick Run at Springfield, Va.....	134
<b>109.</b>	01652810	Turkeycock Run at Alexandria, Va.....	135

<b>110.</b>	01652910	Backlick Run at Alexandria, Va. ....	136
<b>111.</b>	01653000	Cameron Run at Alexandria, Va. ....	137
<b>112.</b>	01653210	Pike Branch at Alexandria, Va. ....	139
<b>113.</b>	01653447	Penn Daw Outfall at Alexandria, Va. ....	140
<b>114.</b>	01653700	Little Hunting Creek at Gum Springs, Va. ....	141
<b>115.</b>	01653800	Dogue Creek near Accotink, Va. ....	142
<b>116.</b>	01653900	Accotink Creek at Fairfax, Va. ....	143
<b>117.</b>	01653925	Bear Branch near Vienna, Va. ....	144
<b>118.</b>	01653950	Long Branch at Vienna, Va. ....	145
<b>119.</b>	01654000	Accotink Creek near Annandale, Va. ....	146
<b>120.</b>	01654500	Long Branch near Annandale, Va. ....	148
<b>121.</b>	01655000	Accotink Creek near Accotink Station, Va. ....	149
<b>122.</b>	01655160	Long Branch at Newington Road near Accotink, Va. ....	150
<b>123.</b>	01655310	Rabbit Branch near Burke, Va. ....	151
<b>124.</b>	01655330	Sideburn Branch near Fairfax Station, Va. ....	152
<b>125.</b>	01655340	Pohick Creek tributary near Burke, Va. ....	153
<b>126.</b>	01655350	Pohick Creek near Springfield, Va. ....	154
<b>127.</b>	01655370	Middle Run near Lorton, Va. ....	155
<b>128.</b>	01655380	South Run near Lorton, Va. ....	156
<b>129.</b>	01655390	Pohick Creek at Lorton, Va. ....	157
<b>130.</b>	01655500	Cedar Run near Warrenton, Va. ....	158
<b>131.</b>	01656000	Cedar Run near Catlett, Va. ....	159
<b>132.</b>	01656100	Cedar Run near Aden, Va. ....	161
<b>133.</b>	01656120	Cedar Run at Route 646 near Aden, Va. ....	162
<b>134.</b>	01656200	Broad Run near Warrenton, Va. ....	163
<b>135.</b>	01656500	Broad Run at Buckland, Va. ....	164
<b>136.</b>	01656600	Broad Run tributary at Buckland, Va. ....	165
<b>137.</b>	01656650	Broad Run near Bristow, Va. ....	166
<b>138.</b>	01656700	Occoquan River near Manassas, Va. ....	167
<b>139.</b>	01656725	Bull Run near Catharpin, Va. ....	168
<b>140.</b>	01656800	Cub Run near Chantilly, Va. ....	169
<b>141.</b>	01656850	Cain Branch near Chantilly, Va. ....	170
<b>142.</b>	01656940	Cub Run near Centreville, Va. ....	171
<b>143.</b>	01656960	Cub Run near Bull Run, Va. ....	172
<b>144.</b>	01657000	Bull Run near Manassas, Va. ....	173
<b>145.</b>	01657020	Bull Run near Manassas Park, Va. ....	174
<b>146.</b>	01657300	Popes Head Creek near Fairfax, Va. ....	175
<b>147.</b>	01657415	Bull Run near Clifton, Va. ....	176
<b>148.</b>	01657500	Occoquan River near Occoquan, Va. ....	177
<b>149.</b>	01657600	Sandy Run near Fairfax Station, Va. ....	178
<b>150.</b>	01657655	Hooes Run near Occoquan, Va. ....	179
<b>151.</b>	01657800	Giles Run near Woodbridge, Va. ....	180
<b>152.</b>	01658480	Quantico Creek near Dumfries, Va. ....	181
<b>153.</b>	01658500	South Fork Quantico Creek near Independent Hill, Va. ....	182
<b>154.</b>	01658550	South Fork Quantico Creek at Camp 5 near Joplin, Va. ....	184

<b>155.</b>	01658650	South Fork Quantico Creek near Dumfries, Va. ....	185
<b>156.</b>	01659000	North Branch Chopawamsic Creek near Independent Hill, Va. ....	186
<b>157.</b>	01659500	Middle Branch Chopawamsic Creek near Garrisonville, Va. ....	187
<b>158.</b>	01660000	South Branch Chopawamsic Creek near Garrisonville, Va. ....	188
<b>159.</b>	01660100	Chopawamsic Creek at Russell Road near Joplin, Va. ....	189
<b>160.</b>	01660400	Aquia Creek near Garrisonville, Va. ....	190
<b>161.</b>	01660500	Beaverdam Run near Garrisonville, Va. ....	191
<b>North Atlantic Slope Basin: Great Wicomico River Basin</b> .....			192
<b>162.</b>	01661600	Great Wicomico River near Horse Head, Va. ....	192
<b>163.</b>	01661800	Bush Mill Stream near Heathsville, Va. ....	193
<b>North Atlantic Slope Basin: Rappahannock River Basin</b> .....			194
<b>164.</b>	01661900	Carter Run near Marshall, Va. ....	194
<b>165.</b>	01662000	Rappahannock River near Warrenton, Va. ....	195
<b>166.</b>	01662300	Thornton River tributary near Thornton Gap, Va. ....	196
<b>167.</b>	01662500	Rush River at Washington, Va. ....	197
<b>168.</b>	01662600	Rush River tributary near Washington, Va. ....	198
<b>169.</b>	01662800	Battle Run near Laurel Mills, Va. ....	199
<b>170.</b>	01663000	Thornton River near Laurel Mills, Va. ....	200
<b>171.</b>	01663500	Hazel River at Rixeyville, Va. ....	201
<b>172.</b>	01664000	Rappahannock River at Remington, Va. ....	203
<b>173.</b>	01664500	Rappahannock River at Kellys Ford, Va. ....	205
<b>174.</b>	01664700	Browns Run near Bealeton, Va. ....	206
<b>175.</b>	01664800	Harpers Run near Morrisville, Va. ....	207
<b>176.</b>	01665000	Mountain Run near Culpeper, Va. ....	208
<b>177.</b>	01665050	Pony Mountain Branch near Culpeper, Va. ....	209
<b>178.</b>	01665200	Rock Run tributary 2 near Goldvein, Va. ....	210
<b>179.</b>	01665300	Rapidan River near Stanardsville, Va. ....	211
<b>180.</b>	01665400	Conway River near Stanardsville, Va. ....	212
<b>181.</b>	01665450	South River near Stanardsville, Va. ....	213
<b>182.</b>	01665500	Rapidan River near Ruckersville, Va. ....	214
<b>183.</b>	01666500	Robinson River near Locust Dale, Va. ....	216
<b>184.</b>	01667000	Rapidan River at Rapidan, Va. ....	218
<b>185.</b>	01667500	Rapidan River near Culpeper, Va. ....	219
<b>186.</b>	01667600	Cedar Run tributary near Culpeper, Va. ....	221
<b>187.</b>	01667870	Mountain Run near Burr Hill, Va. ....	222
<b>188.</b>	01668000	Rappahannock River near Fredericksburg, Va. ....	223
<b>189.</b>	01668200	Gingoteague Run near Port Royal, Va. ....	225
<b>190.</b>	01668300	Farmers Hall Creek near Champlain, Va. ....	226
<b>191.</b>	01668500	Cat Point Creek near Montross, Va. ....	227
<b>192.</b>	01668800	Hoskins Creek near Tappahannock, Va. ....	229
<b>193.</b>	01669000	Piscataway Creek near Tappahannock, Va. ....	230

<b>North Atlantic Slope Basin: Piankatank River Basin .....</b>	<b>232</b>
<b>194.</b> 01669300 Yorkers Swamp near Center Cross, Va.....	232
<b>195.</b> 01669500 Dragon Swamp near Church View, Va.....	233
<b>196.</b> 01669520 Dragon Swamp at Mascot, Va.....	234
<b>197.</b> 01669800 My Ladys Swamp near Saluda, Va.....	235
<b>North Atlantic Slope Basin: Ware River Basin .....</b>	<b>236</b>
<b>198.</b> 01670000 Beaverdam Swamp near Ark, Va.....	236
<b>North Atlantic Slope Basin: York River Basin.....</b>	<b>237</b>
<b>199.</b> 01670100 Mountain Run tributary near Gordonsville, Va.....	237
<b>200.</b> 01670180 Pamunkey Creek at Lahore, Va.....	238
<b>201.</b> 01670300 Contrary Creek near Mineral, Va.....	239
<b>202.</b> 01670400 North Anna River near Partlow, Va.....	240
<b>203.</b> 01671000 North Anna River near Doswell, Va.....	241
<b>204.</b> 01671020 North Anna River at Hart Corner near Doswell, Va.....	243
<b>205.</b> 01671100 Little River near Doswell, Va.....	244
<b>206.</b> 01671500 Bunch Creek near Boswells Tavern, Va.....	245
<b>207.</b> 01671615 Fosters Creek near Ferncliff, Va.....	246
<b>208.</b> 01671650 Waldrop Creek near Louisa, Va.....	247
<b>209.</b> 01671750 Harris Creek near Trevilians, Va.....	248
<b>210.</b> 01672400 South Anna River tributary number 6 near Ashland, Va.....	249
<b>211.</b> 01672500 South Anna River near Ashland, Va.....	250
<b>212.</b> 01672900 Pamunkey River tributary number 1 near Hanover, Va.....	252
<b>213.</b> 01673000 Pamunkey River near Hanover, Va.....	253
<b>214.</b> 01673500 Totopotomoy Creek near Atlee, Va.....	255
<b>215.</b> 01673550 Totopotomoy Creek near Studley, Va.....	256
<b>216.</b> 01673638 Cohoke Mill Creek near Lester Manor, Va.....	257
<b>217.</b> 01673800 Po River near Spotsylvania, Va.....	258
<b>218.</b> 01674000 Mattaponi River near Bowling Green, Va.....	259
<b>219.</b> 01674100 Motto River tributary near Cedon, Va.....	261
<b>220.</b> 01674200 Reedy Creek near Dawn, Va.....	262
<b>221.</b> 01674500 Mattaponi River near Beulahville, Va.....	263
<b>222.</b> 01674700 Aylett Creek at Aylett, Va.....	265
<b>223.</b> 01677000 Ware Creek near Toano, Va.....	266
<b>South Atlantic Slope Basin: James River Basin .....</b>	<b>267</b>
<b>224.</b> 02009500 Cattail Run near Bolar, Va.....	267
<b>225.</b> 02011400 Jackson River near Bacova, Va.....	268
<b>226.</b> 02011460 Back Creek near Sunrise, Va.....	269
<b>227.</b> 02011470 Back Creek at Sunrise, Va.....	270
<b>228.</b> 02011480 Back Creek on Route 600 near Mountain Grove, Va.....	271
<b>229.</b> 02011490 Little Back Creek near Sunrise, Va.....	272
<b>230.</b> 02011500 Back Creek near Mountain Grove, Va.....	273
<b>231.</b> 02011800 Jackson River below Gathright Dam near Hot Springs, Va.....	275

<b>232.</b>	02011950	Johnson Spring near Hot Springs, Va.....	276
<b>233.</b>	02012000	Falling Spring Creek near Falling Spring, Va. ....	277
<b>234.</b>	02012500	Jackson River at Falling Spring, Va. ....	278
<b>235.</b>	02012950	Sweet Springs Creek tributary at Sweet Chalybeate, Va.....	280
<b>236.</b>	02013000	Dunlap Creek near Covington, Va. ....	281
<b>237.</b>	02013100	Jackson River below Dunlap Creek at Covington, Va.....	283
<b>238.</b>	02014000	Potts Creek near Covington, Va. ....	284
<b>239.</b>	02014500	Smith Creek above old dam near Clifton Forge, Va. ....	286
<b>240.</b>	02015600	Cowpasture River near Head Waters, Va. ....	287
<b>241.</b>	02015700	Bullpasture River at Williamsville, Va. ....	289
<b>242.</b>	02015900	Jerry Branch near Clifton Forge, Va.....	290
<b>243.</b>	02016000	Cowpasture River near Clifton Forge, Va. ....	291
<b>244.</b>	02016500	James River at Lick Run, Va.....	293
<b>245.</b>	02017000	Meadow Creek at New Castle, Va. ....	295
<b>246.</b>	02017300	Craig Creek at New Castle, Va. ....	296
<b>247.</b>	02017400	Johns Creek tributary near New Castle, Va. ....	297
<b>248.</b>	02017500	Johns Creek at New Castle, Va.....	298
<b>249.</b>	02017700	Craig Creek tributary near New Castle, Va.....	300
<b>250.</b>	02018000	Craig Creek at Parr, Va. ....	301
<b>251.</b>	02018500	Catawba Creek near Catawba, Va.....	303
<b>252.</b>	02018700	Campbell Branch near Fincastle, Va. ....	305
<b>253.</b>	02018800	North Fork near Fincastle, Va. ....	306
<b>254.</b>	02019000	Catawba Creek near Fincastle, Va. ....	307
<b>255.</b>	02019400	Mill Creek near Buchanan, Va.....	308
<b>256.</b>	02019500	James River at Buchanan, Va.....	309
<b>257.</b>	02020100	Renick Run near Buchanan, Va. ....	311
<b>258.</b>	02020200	Calfpasture River near West Augusta, Va.....	312
<b>259.</b>	02020500	Calfpasture River above Mill Creek at Goshen, Va. ....	313
<b>260.</b>	02021000	Calfpasture River at Goshen, Va. ....	315
<b>261.</b>	02021100	Brattons Run tributary near Goshen, Va. ....	316
<b>262.</b>	02021500	Maury River at Rockbridge Baths, Va. ....	317
<b>263.</b>	02021700	Cedar Grove Branch near Rockbridge Baths, Va. ....	319
<b>264.</b>	02022500	Kerrs Creek near Lexington, Va.....	320
<b>265.</b>	02023000	Maury River near Lexington, Va.....	322
<b>266.</b>	02023300	South River near Steeles Tavern, Va.....	323
<b>267.</b>	02023500	South River near Riverside, Va. ....	324
<b>268.</b>	02024000	Maury River near Buena Vista, Va.....	325
<b>269.</b>	02024300	Buffalo Creek near Glasgow, Va.....	327
<b>270.</b>	02024500	Maury River near Glasgow, Va. ....	328
<b>271.</b>	02024750	James River at Bedford Dam near Major, Va.....	329
<b>272.</b>	02024915	Pedlar River at Forest Road near Buena Vista, Va.....	330
<b>273.</b>	02025000	Pedlar River near Pedlar Mills, Va. ....	331
<b>274.</b>	02025500	James River at Holcomb Rock, Va. ....	332
<b>275.</b>	02025800	Burton Creek tributary at Lynchburg, Va.....	334
<b>276.</b>	02026000	James River at Bent Creek, Va. ....	335

<b>277.</b>	02026500	Tye River at Roseland, Va. ....	337
<b>278.</b>	02027000	Tye River near Lovingston, Va. ....	338
<b>279.</b>	02027500	Piney River at Piney River, Va. ....	340
<b>280.</b>	02027700	Buffalo River tributary near Amherst, Va. ....	342
<b>281.</b>	02027800	Buffalo River near Tye River, Va. ....	343
<b>282.</b>	02028000	Tye (Buffalo) River near Norwood, Va. ....	344
<b>283.</b>	02028500	Rockfish River near Greenfield, Va. ....	345
<b>284.</b>	02028700	Cove Creek near Coveseville, Va. ....	347
<b>285.</b>	02028750	Cove Creek at Faber, Va. ....	348
<b>286.</b>	02028800	Ballinger Creek at Esmont, Va. ....	349
<b>287.</b>	02028900	Miller Creek near Scottsville, Va. ....	350
<b>288.</b>	02029000	James River at Scottsville, Va. ....	351
<b>289.</b>	02029200	North Fork Hardware River at Red Hill, Va. ....	353
<b>290.</b>	02029400	South Branch North Fork Hardware River near North Garden, Va. ....	354
<b>291.</b>	02029410	Sowell Branch near Charlottesville, Va. ....	355
<b>292.</b>	02029430	Harris Creek near Keene, Va. ....	356
<b>293.</b>	02029450	Thomas Creek at Keene, Va. ....	357
<b>294.</b>	02029500	Hardware River near Scottsville, Va. ....	358
<b>295.</b>	02030000	Hardware River below Briery Run near Scottsville, Va. ....	359
<b>296.</b>	02030100	Frisby Branch near Buckingham, Va. ....	361
<b>297.</b>	02030500	Slate River near Arvonias, Va. ....	362
<b>298.</b>	02030800	Stockton Creek near Afton, Va. ....	364
<b>299.</b>	02030900	Powells Creek near Crozet, Va. ....	365
<b>300.</b>	02031000	Mechums River near White Hall, Va. ....	366
<b>301.</b>	02031500	North Fork Moormans River near White Hall, Va. ....	367
<b>302.</b>	02032000	Moormans River near White Hall, Va. ....	368
<b>303.</b>	02032200	Doyles River near White Hall, Va. ....	369
<b>304.</b>	02032250	Moormans River near Free Union, Va. ....	370
<b>305.</b>	02032300	Muddy Run near Stanardsville, Va. ....	371
<b>306.</b>	02032400	Buck Mountain Creek near Free Union, Va. ....	372
<b>307.</b>	02032500	South Fork Rivanna River near Earlysville, Va. ....	373
<b>308.</b>	02032515	South Fork Rivanna River near Charlottesville, Va. ....	374
<b>309.</b>	02032530	Parker Branch near Stanardsville, Va. ....	375
<b>310.</b>	02032540	Haneytown Creek near Stanardsville, Va. ....	376
<b>311.</b>	02032550	Lynch River at Nortonsville, Va. ....	377
<b>312.</b>	02032600	Swift Run tributary near Stanardsville, Va. ....	378
<b>313.</b>	02032640	North Fork Rivanna River near Earlysville, Va. ....	379
<b>314.</b>	02032680	North Fork Rivanna River near Proffit, Va. ....	380
<b>315.</b>	02032700	Schens Branch at Charlottesville, Va. ....	381
<b>316.</b>	02033300	Moore's Creek near Charlottesville, Va. ....	382
<b>317.</b>	02033500	Rivanna River below Moore's Creek near Charlottesville, Va. ....	383
<b>318.</b>	02033700	Henderson Creek near Shadwell, Va. ....	384
<b>319.</b>	02034000	Rivanna River at Palmyra, Va. ....	385
<b>320.</b>	02034050	Hunters Branch near Palmyra, Va. ....	387
<b>321.</b>	02034200	Willis River at Curdsville, Va. ....	388

<b>322.</b>	02034250	Whispering Creek at Sprouses Corner, Va.....	389
<b>323.</b>	02034300	Little Willis River at Curdsville, Va.....	390
<b>324.</b>	02034500	Willis River at Lakeside Village, Va.....	391
<b>325.</b>	02035000	James River at Cartersville, Va.....	393
<b>326.</b>	02035400	Big Lickinghole Creek tributary near Ferncliff, Va. ....	395
<b>327.</b>	02035450	Rocketts Creek tributary near Gum Spring, Va.....	396
<b>328.</b>	02035500	Big Lickinghole Creek near Goochland, Va. ....	397
<b>329.</b>	02036000	Beaverdam Creek at State Farm, Va.....	398
<b>330.</b>	02036500	Fine Creek at Fine Creek Mills, Va. ....	399
<b>331.</b>	0203667510	Tuckahoe Creek tributary 1 at Route 288 near Centerville, Va.....	401
<b>332.</b>	0203667525	Tuckahoe Creek tributary 2 at Route 288 near Centerville, Va. ....	402
<b>333.</b>	0203667530	Tuckahoe Creek tributary to tributary 3 near Centerville, Va.....	403
<b>334.</b>	0203668010	Stony Run tributary to tributary at Short Pump, Va.....	404
<b>335.</b>	02037000	James River and Kanawha Canal near Richmond, Va.....	405
<b>336.</b>	02037500	James River near Richmond, Va. ....	407
<b>337.</b>	02037800	Falling Creek near Midlothian, Va.....	409
<b>338.</b>	02038000	Falling Creek near Chesterfield, Va.....	411
<b>339.</b>	02038500	Falling Creek near Drewrys Bluff, Va. ....	412
<b>340.</b>	0203856510	Reedy Creek Industrial Drainage near Chesterfield, Va. ....	413
<b>341.</b>	02038800	Appomattox River near Appomattox, Va.....	414
<b>342.</b>	02038830	Fishpond Creek near Hixburg, Va.....	415
<b>343.</b>	02038840	Holiday Creek near Toga, Va.....	416
<b>344.</b>	02038845	North Holiday Creek near Toga, Va.....	417
<b>345.</b>	02038850	Holiday Creek near Andersonville, Va. ....	418
<b>346.</b>	02038880	Vaughans Creek near Hixburg, Va. ....	419
<b>347.</b>	02038900	Dry Creek near Farmville, Va. ....	420
<b>348.</b>	02039000	Buffalo Creek near Hampden Sydney, Va. ....	421
<b>349.</b>	02039500	Appomattox River at Farmville, Va. ....	423
<b>350.</b>	02040000	Appomattox River at Mattoax, Va. ....	425
<b>351.</b>	02040500	Flat Creek near Amelia, Va. ....	427
<b>352.</b>	02040600	Nibbs Creek tributary near Amelia, Va.....	428
<b>353.</b>	02041000	Deep Creek near Mannboro, Va. ....	429
<b>354.</b>	02041500	Appomattox River near Petersburg, Va. ....	431
<b>355.</b>	02041650	Appomattox River at Matoaca, Va.....	432
<b>356.</b>	02042000	Swift Creek near Chester, Va.....	433
<b>357.</b>	0204206210	Swift Creek tributary Industrial Drainage near Walthall, Va. ....	434
<b>358.</b>	02042200	Glebe Creek tributary near Charles City, Va. ....	435
<b>359.</b>	02042250	Bailey Branch tributary at Spring Grove, Va.....	436
<b>360.</b>	02042287	Chickahominy River near Atlee, Va.....	437
<b>361.</b>	0204228775	Chickahominy River tributary to tributary at Ellerson, Va.....	438
<b>362.</b>	02042300	Horsepen Branch at Richmond, Va. ....	439
<b>363.</b>	02042400	Jordans Branch at Richmond, Va. ....	440
<b>364.</b>	02042426	Upham Brook near Richmond, Va.....	441
<b>365.</b>	0204243150	Beaverdam Creek tributary at Ellerson, Va. ....	442
<b>366.</b>	02042500	Chickahominy River near Providence Forge, Va. ....	443

<b>367.</b>	02042700	Collins Run near Providence Forge, Va.....	445
<b>368.</b>	02042710	Collins Run tributary near Providence Forge, Va.....	446
<b>369.</b>	02042780	West Branch Long Hill Swamp near Lightfoot, Va.....	447
<b>South Atlantic Slope Basin: Dismal Swamp Basin.....</b>			<b>448</b>
<b>370.</b>	02043500	Cypress Swamp at Cypress Chapel, Va.....	448
<b>371.</b>	02043550	Washington Ditch near Cypress Chapel, Va.....	449
<b>372.</b>	02043600	Lake Drummond in Great Dismal Swamp, Va.....	450
<b>South Atlantic Slope Basin: Chowan River Basin.....</b>			<b>451</b>
<b>373.</b>	02044000	Nottoway River near Burkeville, Va.....	451
<b>374.</b>	02044200	Falls Creek tributary near Victoria, Va.....	453
<b>375.</b>	02044400	Hurricane Branch at Blackstone, Va.....	454
<b>376.</b>	02044500	Nottoway River near Rawlings, Va.....	455
<b>377.</b>	02045500	Nottoway River near Stony Creek, Va.....	457
<b>378.</b>	02046000	Stony Creek near Dinwiddie, Va.....	459
<b>379.</b>	02046200	Millrun Branch near McKenney, Va.....	461
<b>380.</b>	02046400	Jones Hole Swamp tributary near Carson, Va.....	462
<b>381.</b>	02046500	Anderson Branch at Sussex, Va.....	463
<b>382.</b>	02046800	Three Creek tributary near Drewryville, Va.....	464
<b>383.</b>	02046900	Musgrave Branch near Drewryville, Va.....	465
<b>384.</b>	02047000	Nottoway River near Sebrell, Va.....	466
<b>385.</b>	02047100	Assamoosick Swamp near Sebrell, Va.....	468
<b>386.</b>	02047500	Blackwater River near Dendron, Va.....	469
<b>387.</b>	02048000	Blackwater River at Zuni, Va.....	471
<b>388.</b>	02048400	Seacock Creek near Ivor, Va.....	472
<b>389.</b>	02048500	Seacock Creek at Unity, Va.....	473
<b>390.</b>	02049000	Blackwater River near Burdette, Va.....	474
<b>391.</b>	02049500	Blackwater River near Franklin, Va.....	475
<b>392.</b>	02049700	Cypress Swamp near Burdette, Va.....	477
<b>393.</b>	02050050	Blackwater River tributary 1 near Holland, Va.....	478
<b>394.</b>	02050400	North Meherrin River near Briery, Va.....	479
<b>395.</b>	02050500	North Meherrin River near Keysville, Va.....	480
<b>396.</b>	02051000	North Meherrin River near Lunenburg, Va.....	481
<b>397.</b>	02051400	Saddletree Creek near Lawrenceville, Va.....	483
<b>398.</b>	02051500	Meherrin River near Lawrenceville, Va.....	484
<b>399.</b>	02051600	Great Creek near Cochran, Va.....	486
<b>400.</b>	02051650	Rocky Run near Dolphin, Va.....	487
<b>401.</b>	02051700	Rocky Run at Lawrenceville, Va.....	488
<b>402.</b>	02052000	Meherrin River at Emporia, Va.....	489
<b>403.</b>	02052500	Fountains Creek near Brink, Va.....	491
<b>404.</b>	02053000	Fontaine Creek near Emporia, Va.....	492

<b>South Atlantic Slope Basin: Roanoke River Basin</b> .....	<b>493</b>
<b>405.</b> 02053800 South Fork Roanoke River near Shawsville, Va.....	<b>493</b>
<b>406.</b> 02054500 Roanoke River at Lafayette, Va.....	<b>495</b>
<b>407.</b> 02054510 Roanoke River near Wabun, Va.....	<b>497</b>
<b>408.</b> 02054530 Roanoke River at Glenvar, Va.....	<b>498</b>
<b>409.</b> 02055000 Roanoke River at Roanoke, Va.....	<b>499</b>
<b>410.</b> 02055100 Tinker Creek near Daleville, Va.....	<b>501</b>
<b>411.</b> 02056000 Roanoke River at Niagara, Va.....	<b>502</b>
<b>412.</b> 02056650 Back Creek near Dundee, Va.....	<b>504</b>
<b>413.</b> 02056900 Blackwater River near Rocky Mount, Va.....	<b>505</b>
<b>414.</b> 02057000 Blackwater River near Union Hall, Va.....	<b>506</b>
<b>415.</b> 02057500 Roanoke (Staunton) River near Toshes, Va.....	<b>507</b>
<b>416.</b> 02057700 Powder Mill Creek at Rocky Mount, Va.....	<b>508</b>
<b>417.</b> 02058000 Snow Creek at Sago, Va.....	<b>509</b>
<b>418.</b> 02058400 Pigg River near Sandy Level, Va.....	<b>510</b>
<b>419.</b> 02058500 Pigg River near Toshes, Va.....	<b>511</b>
<b>420.</b> 02059000 Roanoke River near Gretna, Va.....	<b>512</b>
<b>421.</b> 02059450 South Fork Goose Creek at Montvale, Va.....	<b>513</b>
<b>422.</b> 02059500 Goose Creek near Huddleston, Va.....	<b>514</b>
<b>423.</b> 02060000 Goose Creek at Huddleston, Va.....	<b>516</b>
<b>424.</b> 02060500 Roanoke River at Altavista, Va.....	<b>517</b>
<b>425.</b> 02061000 Big Otter River near Bedford, Va.....	<b>519</b>
<b>426.</b> 02061150 Chestnut Branch near Forest, Va.....	<b>520</b>
<b>427.</b> 02061300 Nininger Creek near Bedford, Va.....	<b>521</b>
<b>428.</b> 02061500 Big Otter River near Evington, Va.....	<b>522</b>
<b>429.</b> 02062000 Big Otter River near Altavista, Va.....	<b>524</b>
<b>430.</b> 02062500 Roanoke (Staunton) River at Brookneal, Va.....	<b>525</b>
<b>431.</b> 02063000 Caldwell's Creek near Appomattox, Va.....	<b>527</b>
<b>432.</b> 02063500 Falling River at Spring Mills, Va.....	<b>528</b>
<b>433.</b> 02063600 Button Creek near Rustburg, Va.....	<b>529</b>
<b>434.</b> 02063700 Button Creek tributary near Rustburg, Va.....	<b>530</b>
<b>435.</b> 02064000 Falling River near Naruna, Va.....	<b>531</b>
<b>436.</b> 02064500 Little Falling River at Hat Creek, Va.....	<b>533</b>
<b>437.</b> 02065000 Falling River near Brookneal, Va.....	<b>534</b>
<b>438.</b> 02065100 Snake Creek near Brookneal, Va.....	<b>535</b>
<b>439.</b> 02065200 Roanoke (Staunton) River at Clarkton, Va.....	<b>536</b>
<b>440.</b> 02065300 Right Hand Fork near Appomattox, Va.....	<b>537</b>
<b>441.</b> 02065500 Cub Creek at Phenix, Va.....	<b>538</b>
<b>442.</b> 02066000 Roanoke (Staunton) River at Randolph, Va.....	<b>540</b>
<b>443.</b> 02066500 Roanoke Creek at Saxe, Va.....	<b>542</b>
<b>444.</b> 02066600 Sandy Creek near Wyllyesburg, Va.....	<b>543</b>
<b>445.</b> 02067000 Roanoke (Staunton) River near Clover, Va.....	<b>544</b>
<b>446.</b> 02067810 Maple Swamp Branch near Meadows of Dan, Va.....	<b>545</b>
<b>447.</b> 02069600 Anglin Branch near Stuart, Va.....	<b>546</b>
<b>448.</b> 02069700 South Mayo River near Nettleridge, Va.....	<b>547</b>

449.	02070000	North Mayo River near Spencer, Va. ....	548
450.	02071530	Smith River at Smith River Church near Woolwine, Va. ....	550
451.	02071800	Nicholas Creek near Ferrum, Va. ....	551
452.	02072000	Smith River near Philpott, Va. ....	552
453.	02072500	Smith River at Bassett, Va. ....	554
454.	02073000	Smith River at Martinsville, Va. ....	556
455.	02073500	Leatherwood Creek near Old Liberty, Va. ....	558
456.	02074500	Sandy River near Danville, Va. ....	559
457.	02075000	Dan River at Danville, Va. ....	561
458.	02075045	Dan River at sewage treatment plant near Danville, Va. ....	563
459.	02075350	Powells Creek near Turbeville, Va. ....	564
460.	02075450	Little Winns Creek near Turbeville, Va. ....	565
461.	02075500	Dan River at Paces, Va. ....	566
462.	02075900	Lawsons Creek at Turbeville, Va. ....	568
463.	02076000	Dan River at South Boston, Va. ....	569
464.	02076200	Bearskin Creek near Chatham, Va. ....	571
465.	02076400	Whitethorn Creek tributary at Gretna, Va. ....	572
466.	02076500	Georges Creek near Gretna, Va. ....	573
467.	02076700	Blacks Creek near Mount Airy, Va. ....	574
468.	02077000	Banister River at Halifax, Va. ....	575
469.	02077500	Hyco River near Denniston, Va. ....	577
470.	02078000	Hyco River near Omega, Va. ....	579
471.	02079000	Roanoke (Staunton) River at Clarksville, Va. ....	580
472.	02079500	Roanoke River at Buggs Island, Va. ....	581
473.	02079640	Allen Creek near Boydton, Va. ....	583
474.	02079660	Jolly Hollow Branch at Boydton, Va. ....	584
475.	02079720	Smith Creek tributary near South Hill, Va. ....	585
<b>Ohio River Basin: Kanawha River Basin.....</b>			<b>586</b>
476.	03162700	Wallen Creek near Trout Dale, Va. ....	586
477.	03162800	Mill Creek near Trout Dale, Va. ....	587
478.	03162810	Saddle Creek tributary near Independence, Va. ....	588
479.	03163000	New River near Baywood, Va. ....	589
480.	03164000	New River near Galax, Va. ....	590
481.	03165000	Chestnut Creek at Galax, Va. ....	592
482.	03165200	Mill Creek tributary at Galax, Va. ....	594
483.	03165500	New River at Ivanhoe, Va. ....	595
484.	03165700	Cripple Creek at Cedar Springs, Va. ....	597
485.	03165800	Sugar Run near Speedwell, Va. ....	598
486.	03166000	Cripple Creek near Ivanhoe, Va. ....	599
487.	03166800	Glade Creek at Grahams Forge, Va. ....	600
488.	03167000	Reed Creek at Grahams Forge, Va. ....	601
489.	03167300	Mira Fork tributary near Dugspur, Va. ....	603
490.	03167500	Big Reed Island Creek near Allisonia, Va. ....	604
491.	03167700	Beaverdam Creek at Route 1009 at Hillsville, Va. ....	606

<b>492.</b>	03168000	New River at Allisonia, Va.....	607
<b>493.</b>	03168500	Peak Creek at Pulaski, Va.....	609
<b>494.</b>	03168600	Peak Creek tributary near Pulaski, Va.....	610
<b>495.</b>	03168750	Thorne Springs Branch near Dublin, Va.....	611
<b>496.</b>	03169200	Dodd Creek tributary near Floyd, Va.....	612
<b>497.</b>	03169350	Brush Creek at Terrys Fork, Va.....	613
<b>498.</b>	03169500	Little River near Copper Valley, Va.....	614
<b>499.</b>	03170000	Little River at Graysontown, Va.....	615
<b>500.</b>	03171000	New River at Radford, Va.....	617
<b>501.</b>	03171150	Crab Creek tributary near Christiansburg, Va.....	619
<b>502.</b>	03171500	New River at Eggleston, Va.....	620
<b>503.</b>	03171600	Little Stony Creek at Pembroke, Va.....	622
<b>504.</b>	03171800	Helveys Mill Creek tributary at Point Pleasant, Va.....	623
<b>505.</b>	03172500	Walker Creek at Staffordsville, Va.....	624
<b>506.</b>	03173000	Walker Creek at Bane, Va.....	625
<b>507.</b>	03175100	Cox Branch above Tazewell Reservoir near Gratton, Va.....	627
<b>508.</b>	03175140	West Fork Cove Creek near Bluefield, Va.....	628
<b>509.</b>	03175500	Wolf Creek near Narrows, Va.....	629
<b>510.</b>	03176500	New River at Glen Lyn, Va.....	631
<b>511.</b>	03177700	Bluestone River at Bluefield, Va.....	633
<b>512.</b>	03177710	Bluestone River at Falls Mills, Va.....	634
<b>Ohio River Basin: Big Sandy River Basin.....</b>			<b>635</b>
<b>513.</b>	03207400	Big Prater Creek at Vansant, Va.....	635
<b>514.</b>	03207500	Levisa Fork near Grundy, Va.....	636
<b>515.</b>	03207800	Levisa Fork at Big Rock, Va.....	637
<b>516.</b>	03208034	Grissom Creek near Council, Va.....	638
<b>517.</b>	03208036	Barton Fork near Council, Va.....	639
<b>518.</b>	03208040	Russell Fork at Council, Va.....	640
<b>519.</b>	03208100	Russell Fork near Birchleaf, Va.....	641
<b>520.</b>	03208500	Russell Fork at Haysi, Va.....	642
<b>521.</b>	03208700	North Fork Pound River at Pound, Va.....	644
<b>522.</b>	03208800	Pound River above Indian Creek at Pound, Va.....	645
<b>523.</b>	03208850	Pound River below Bold Camp Creek, at Pound, Va.....	646
<b>524.</b>	03208900	Pound River near Georges Fork, Va.....	647
<b>525.</b>	03208950	Cranes Nest River near Clintwood, Va.....	648
<b>526.</b>	03209000	Pound River below Flannagan Dam near Haysi, Va.....	649
<b>527.</b>	03209200	Russell Fork at Bartlick, Va.....	651
<b>528.</b>	03213577	Kershaw Branch near Hurley, Va.....	652
<b>529.</b>	03213590	Knox Creek at Kelsa, Va.....	653
<b>Ohio River Basin: Tennessee River Basin.....</b>			<b>654</b>
<b>530.</b>	03470900	Slemp Creek tributary near Sugar Grove, Va.....	654
<b>531.</b>	03471100	Dickey Creek at Sugar Grove, Va.....	655
<b>532.</b>	03471200	South Fork Holston River at Teas, Va.....	656

<b>533.</b>	03471500	South Fork Holston River at Riverside near Chilhowie, Va.....	657
<b>534.</b>	03472000	South Fork Holston River near Chilhowie, Va.....	659
<b>535.</b>	03472500	Beaverdam Creek at Damascus, Va.....	660
<b>536.</b>	03473000	South Fork Holston River near Damascus, Va.....	661
<b>537.</b>	03473500	Middle Fork Holston River at Groseclose, Va. ....	663
<b>538.</b>	03473600	Middle Fork Holston River near Groseclose, Va.....	664
<b>539.</b>	03473800	Staley Creek near Marion, Va. ....	665
<b>540.</b>	03474000	Middle Fork Holston River at Seven Mile Ford, Va. ....	666
<b>541.</b>	03474500	Middle Fork Holston River at Chilhowie, Va.....	668
<b>542.</b>	03474700	Hutton Creek near Chilhowie, Va. ....	669
<b>543.</b>	03474800	Hall Creek near Glade Spring, Va.....	670
<b>544.</b>	03475000	Middle Fork Holston River near Meadowview, Va. ....	671
<b>545.</b>	03475600	Cedar Creek near Meadowview, Va. ....	673
<b>546.</b>	03475700	Spring Creek near Abingdon, Va. ....	674
<b>547.</b>	03477500	Beaver Creek near Wallace, Va. ....	675
<b>548.</b>	03478400	Beaver Creek at Bristol, Va. ....	676
<b>549.</b>	03487800	Lick Creek near Chatham Hill, Va.....	677
<b>550.</b>	03487850	Possum Jaw Creek near Chatham Hill, Va.....	678
<b>551.</b>	03487900	Sprouts Creek near Chatham Hill, Va. ....	679
<b>552.</b>	03488000	North Fork Holston River near Saltville, Va. ....	680
<b>553.</b>	03488445	Brumley Creek near Hansonville, Va.....	682
<b>554.</b>	03488450	Brumley Creek at Brumley Gap, Va.....	683
<b>555.</b>	03488500	North Fork Holston River at Holston, Va.....	684
<b>556.</b>	03489500	North Fork Holston River at Mendota, Va.....	685
<b>557.</b>	03489700	Fleenor Branch near Bristol, Va. ....	686
<b>558.</b>	03489800	Cove Creek near Shelleys, Va.....	687
<b>559.</b>	03489850	Cove Creek near Hilton, Va. ....	689
<b>560.</b>	03489870	Big Moccasin Creek at Collinwood near Hansonville, Va. ....	690
<b>561.</b>	03489900	Big Moccasin Creek near Gate City, Va.....	691
<b>562.</b>	03490000	North Fork Holston River near Gate City, Va. ....	692
<b>563.</b>	03521000	Clinch River at Cedar Bluff, Va. ....	694
<b>564.</b>	03521500	Clinch River at Richlands, Va.....	695
<b>565.</b>	03522000	Little River at Wardell, Va. ....	697
<b>566.</b>	03523000	Big Cedar Creek near Lebanon, Va. ....	698
<b>567.</b>	03523500	Thompson Creek near Coulwood, Va. ....	699
<b>568.</b>	03524000	Clinch River at Cleveland, Va. ....	700
<b>569.</b>	03524500	Guest River at Coeburn, Va.....	702
<b>570.</b>	03524550	Guest River near Miller Yard, Va. ....	704
<b>571.</b>	03524900	Stony Creek at Ka, Va. ....	705
<b>572.</b>	03525000	Stony Creek at Fort Blackmore, Va. ....	706
<b>573.</b>	03525500	Clinch River at Clinchport, Va. ....	707
<b>574.</b>	03525800	Copper Creek tributary 1 near Dickensonville, Va.....	708
<b>575.</b>	03526000	Copper Creek near Gate City, Va.....	709
<b>576.</b>	03527000	Clinch River at Speers Ferry, Va.....	711
<b>577.</b>	03527500	North Fork Clinch River at Duffield, Va. ....	713

<b>578.</b>	03529500	Powell River at Big Stone Gap, Va.....	714
<b>579.</b>	03530000	South Fork Powell River at Big Stone Gap, Va.....	716
<b>580.</b>	03530500	North Fork Powell River at Pennington Gap, Va. ....	717
<b>581.</b>	03531000	Powell River near Pennington Gap, Va. ....	719
<b>582.</b>	03531500	Powell River near Jonesville, Va.....	720

# Conversion Factors

## Inch/Pound to SI

Multiply	By	To obtain
<b>Length</b>		
foot (ft)	0.3048	meter (m)
mile (mi)	1.609	kilometer (km)
mile, nautical (nmi)	1.852	kilometer (km)
<b>Area</b>		
acre	4,047	square meter (m <sup>2</sup> )
acre	0.4047	hectare (ha)
acre	0.4047	square hectometer (hm <sup>2</sup> )
acre	0.004047	square kilometer (km <sup>2</sup> )
section (640 acres or 1 square mile)	259.0	square hectometer (hm <sup>2</sup> )
square mile (mi <sup>2</sup> )	259.0	hectare (ha)
square mile (mi <sup>2</sup> )	2.590	square kilometer (km <sup>2</sup> )
<b>Volume</b>		
gallon (gal)	3.785	liter (L)
gallon (gal)	0.003785	cubic meter (m <sup>3</sup> )
million gallons (Mgal)	3,785	cubic meter (m <sup>3</sup> )
cubic foot (ft <sup>3</sup> )	0.02832	cubic meter (m <sup>3</sup> )
acre-foot (acre-ft)	1,233	cubic meter (m <sup>3</sup> )
<b>Flow rate</b>		
acre-foot per day (acre-ft/d)	0.01427	cubic meter per second (m <sup>3</sup> /s)
acre-foot per year (acre-ft/yr)	1,233	cubic meter per year (m <sup>3</sup> /yr)
foot per second (ft/s)	0.3048	meter per second (m/s)
cubic foot per second (ft <sup>3</sup> /s)	0.02832	cubic meter per second (m <sup>3</sup> /s)

Altitude, as used in this report, refers to distance above the vertical datum.

### Acronyms used in this report:

NAD27	North American Datum of 1927
NAD83	North American Datum of 1983
NAVD	North American Vertical Datum
NGVD	National Geodetic Vertical Datum
USGS	U.S. Geological Survey
VDEQ	Virginia Department of Environmental Quality

Latitude and longitude are listed in degree, minute, second format. For example, the latitude and longitude of streamflow-gaging station 01484800 Guy Creek near Nassawadox, Va., is shown as latitude 37°30'13", longitude 075°52'22".

# Annual Maximum Stages and Discharges of Selected Streams in Virginia through 2007

By Samuel H. Austin and Ute Wiegand<sup>1</sup>

## Abstract

Annual maximum stages and discharges for continuous-record and partial-record streamflow-gaging stations in Virginia are summarized through the 2007 water year. Data are included for over 500 active and discontinued streamflow-gaging stations operated by the U.S. Geological Survey, the Virginia Department of Environmental Quality, and other agencies for which 2 or more years of record are available. Additional information is provided for each station, including a brief description of gage location, drainage area, type of gage, vertical datum if known, method of development of the stage-discharge relation, bankfull stage if known, degree of regulation upstream from each gage, and pertinent remarks about historical data or local conditions that may affect peak flows.

## Introduction

The U.S. Geological Survey began collecting streamflow records in Virginia in 1895, and by the end of 1896, streamflow-gaging stations were operating in the Shenandoah, James, and Roanoke River basins. Gaging-station installation continued through the years as Federal, State, and local interest in surface water increased and funds became available to install and operate additional gaging stations. Cooperative agreements between the USGS and Federal, State, and local agencies have provided funds to operate systematic streamflow-gaging programs. This report was prepared in cooperation with the Virginia Department of Transportation, who provide continuing assistance in the collection and compilation of the annual peak stages and discharges associated with Virginia streams.

Over time, many stations have been discontinued while other stations have been added to the streamflow-gaging network in Virginia. Streamflow records span a period of more than 109 years at some streamflow-gaging stations. A partial-record peak-discharge network was started in 1949, and by 1967, peak-discharge gages were operating at approximately 180 sites. In addition to U.S. Geological Survey (USGS) and Virginia Department of Environmental Quality (VDEQ) streamflow-gaging programs, other agencies have collected streamflow records in Virginia.<sup>2</sup> Together these sources provide flood-peak data with periods of record of 2 years or longer for more than 580 continuous-record and partial-record streamflow-gaging stations. Such records of

---

<sup>1</sup> U.S. Geological Survey volunteer from September through December 2005. U.S. Geological Survey contractor from January 2006 through December 2008.

<sup>2</sup> Other agencies that have collected streamflow records in Virginia streams include the U.S. Department of Agriculture Natural Resources Conservation Service, the U.S. Army Corps of Engineers, and the U.S. Department of Commerce National Weather Service. Data not explicitly noted as being collected by a particular agency were collected by the USGS.

flooding on streams are necessary to provide data for engineering projects, scientific studies, and environmental management.

## **Purpose and Scope**

This report provides a list of annual maximum stages and discharges at streamflow-gaging stations in Virginia operated by the USGS, the VDEQ (and its predecessors), and other agencies. This information is needed by hydrologists, engineers, and environmental managers for designing hydraulic structures, defining flood-prone areas, and studying floods and potential flooding along streams in the Commonwealth. This report contains records of continuous-record and partial-record streamflow-gaging stations with 2 or more years of record as of October 1, 2007, and supersedes USGS Open-File Report 90-587, "Annual Maximum Stages and Discharges of Selected Streams in Virginia Through 1990" (Prugh and others, 1991). The report by Prugh and others (1991) contains records for 538 gaging stations with 2 or more years of record from rural and urban environments and on regulated and unregulated streams.

This report includes data from stations in rural and urban environments and on regulated and unregulated streams. For each station, annual maximum values of stage and discharge are listed by water year. Data describing floods that occurred prior to the establishment of the streamflow-gaging station and data characterizing local conditions, such as regulation, that may affect the magnitude of the flood peak also are presented. Previous USGS studies have found that a usable watershed storage volume of approximately 100 acre-feet per square mile is enough to reduce peak discharges by 10 percent, an amount considered to substantially regulate streamflow (Benson 1962, 1964). In addition, close proximity of a streamflow-gaging station to a dam or other in-stream structure that impedes water flow may substantially regulate streamflow measured at the station. Streamflow-gaging stations are listed as regulated if usable watershed storage volumes meet or exceed the 100 acre-feet per square mile threshold or if nearby in-stream structures, such as dams, have been determined to substantially regulate streamflow. A list of gaging stations is included to assist the reader in quickly locating data for a specific site or stream.

## **Explanation of Data**

The USGS has assigned permanent, downstream-order station identification numbers to each streamflow-gaging station listed in this report. The numbers appear to the left of the station name in the table of contents and adjacent to the station location in figures 1 – 4. Each identification number consists of 8 to 10 digits. The lowest identification number represents the most upstream station within a given basin. The first two digits of the identification number refer to the major drainage basin in which the station is located: 01 represents the North Atlantic drainage basin, 02 represents the South Atlantic drainage basin, and 03 represents the Ohio River drainage basin. The remaining 6 to 8 digits of the station identification number are assigned in downstream order, numerically increasing from the headwaters toward the mouth of the stream and ensuring that each station identification number is unique.

The information provided for each site includes a brief station description and a table of annual maximum stages and discharges. The station description includes the gage location, drainage area, type of gage, vertical datum if known, the method by which the stage-discharge relation was determined, bankfull stage, degree of regulation upstream from each gage, remarks on historical flood peaks, and remarks on conditions that might affect stages and discharges and require qualification for their interpretation. Data for each station are listed sequentially by water year. Each entry contains the date of the peak, the instantaneous peak gage height, and the instantaneous peak discharge. If data are not available, an entry may be left blank or an

explanation may be provided. The annual maximum gage height and annual maximum discharge may occur at different times because of changes in the stage-discharge relation. The summary tables for each station list the annual instantaneous maximum discharge and the corresponding gage height unless otherwise noted. Further explanation of terms used in the station description is provided in the glossary.

In some cases, the annual maximum stage at continuous-record stations is not recorded because of mechanical failure of the recorder, the timing of observer readings, or the loss of record from high-water conditions or vandalism. In these situations, the mean daily discharge for the day of the peak, which is estimated by correlation with other nearby stations, has been substituted. This value is always less than the peak discharge, and this is footnoted. The annual maximum stage and discharge also may occur at the beginning or end of the water year as a result of a rising or falling stage associated with a peak that occurred just prior to the beginning or subsequent to the end of the water year. By definition, this is the maximum stage or discharge for the water year. The maximum independent peak occurring during the water year, however, is also footnoted.

At partial-record streamflow-gaging stations, the date of the maximum stage is not always certain but is usually determined by comparison with nearby continuous-record streamflow-gaging stations, weather records, or local inquiry. Historical peaks, as well as peaks observed during the period of record, are listed in the tables. The sources and reliability of historical peaks are footnoted. Some maximum stages also are footnoted to alert the user to a change in datum or other factors that could cause stages and corresponding discharges to deviate substantially from the current stage-discharge relation.

At some streamflow-gaging stations, sufficient field data are not currently available to define the stage-discharge relation. At these streamflow-gaging stations, only peak stages are listed. These data will allow interim interpretation of flood characteristics of the site until sufficient data are collected to compute peak discharges.

Selected data contained in this report are also available online in computer readable form from the USGS National Water Information System (NWIS) at <http://waterdata.usgs.gov/va/nwis/>. Additional information about the NWIS and instructions for using the online system are available at <http://nwis.waterdata.usgs.gov/tutorial/>.

## **Acknowledgments**

The authors extend their thanks to the Virginia Department of Transportation, whose collaboration and continuing assistance in the collection and compilation of annual peak stages and discharges at Virginia streams helped make this report possible.

The authors extend special thanks to Mr. Don Hayes, USGS Virginia Surface Water Specialist, for his energy, assistance, advice, hard work, and guidance as information was compiled and this report was prepared. Thank you, Don.

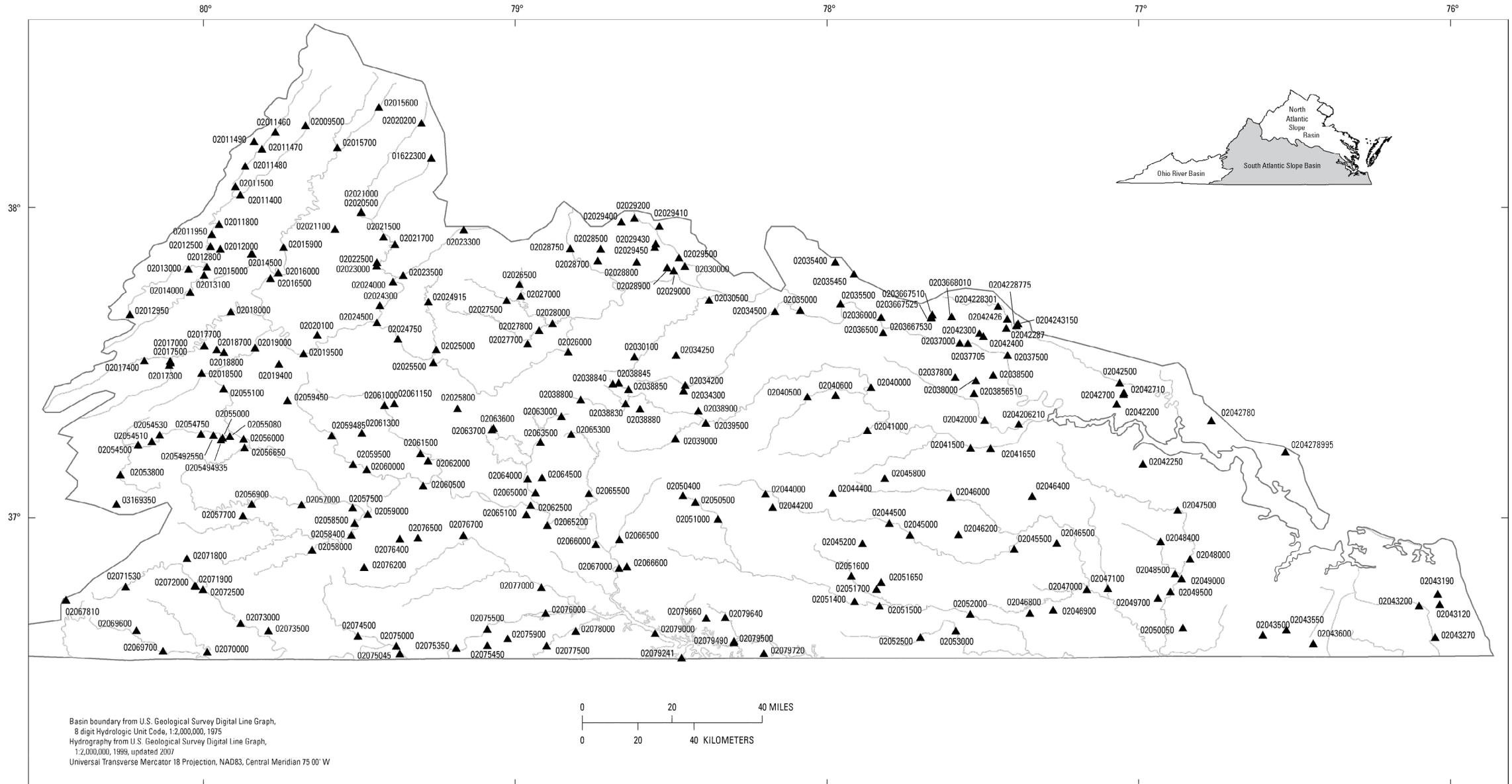
## **References Cited**

- Benson, M.A., 1962, Factors influencing the occurrence of floods in a humid region of diverse terrain: U.S. Geological Survey Water-Supply Paper 1580-B, 64 p.
- Benson, M.A., 1964, Factors affecting the occurrence of floods in the southwest: U.S. Geological Survey Water-Supply Paper 1580-D, 72 p.
- Langbein, W.B., and Iseri, K.T., 1960, Manual of hydrology: Part 1 general surface-water techniques: U.S. Geological Survey Water-Supply Paper 1541-A, 29 p.

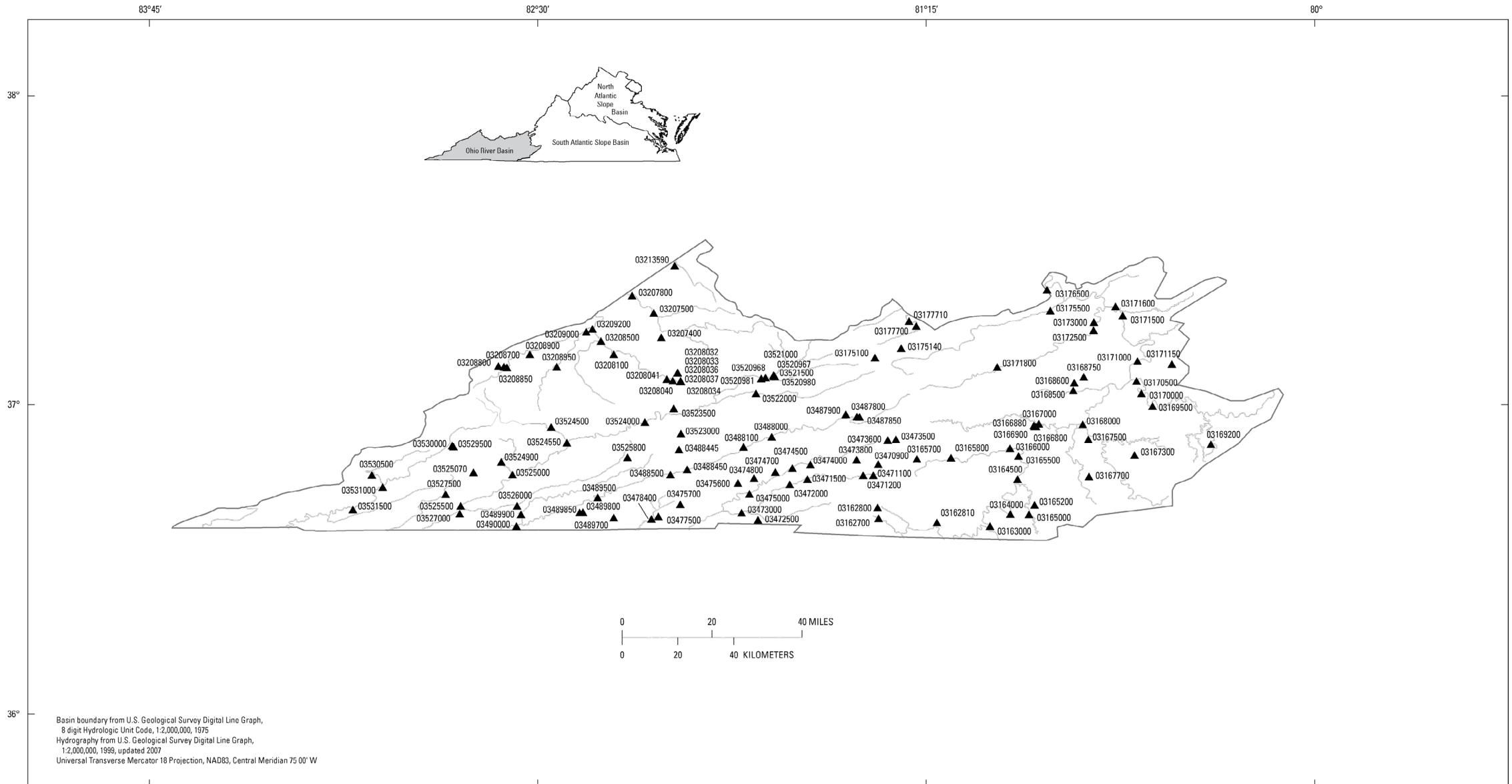
Prugh, B.J., Jr., Nuckels, E.H., and Humphreys, C.G., 1991, Annual maximum stages and discharges of selected streams in Virginia through 1990: U.S. Geological Survey, Open-File Report 90-587, 442 p.

U.S. Geological Survey, 2007, Water Resources of the United States – Annual Data Report – Definition of Terms, accessed August 11, 2008, at <http://wdr.water.usgs.gov/current/termDefs.html>

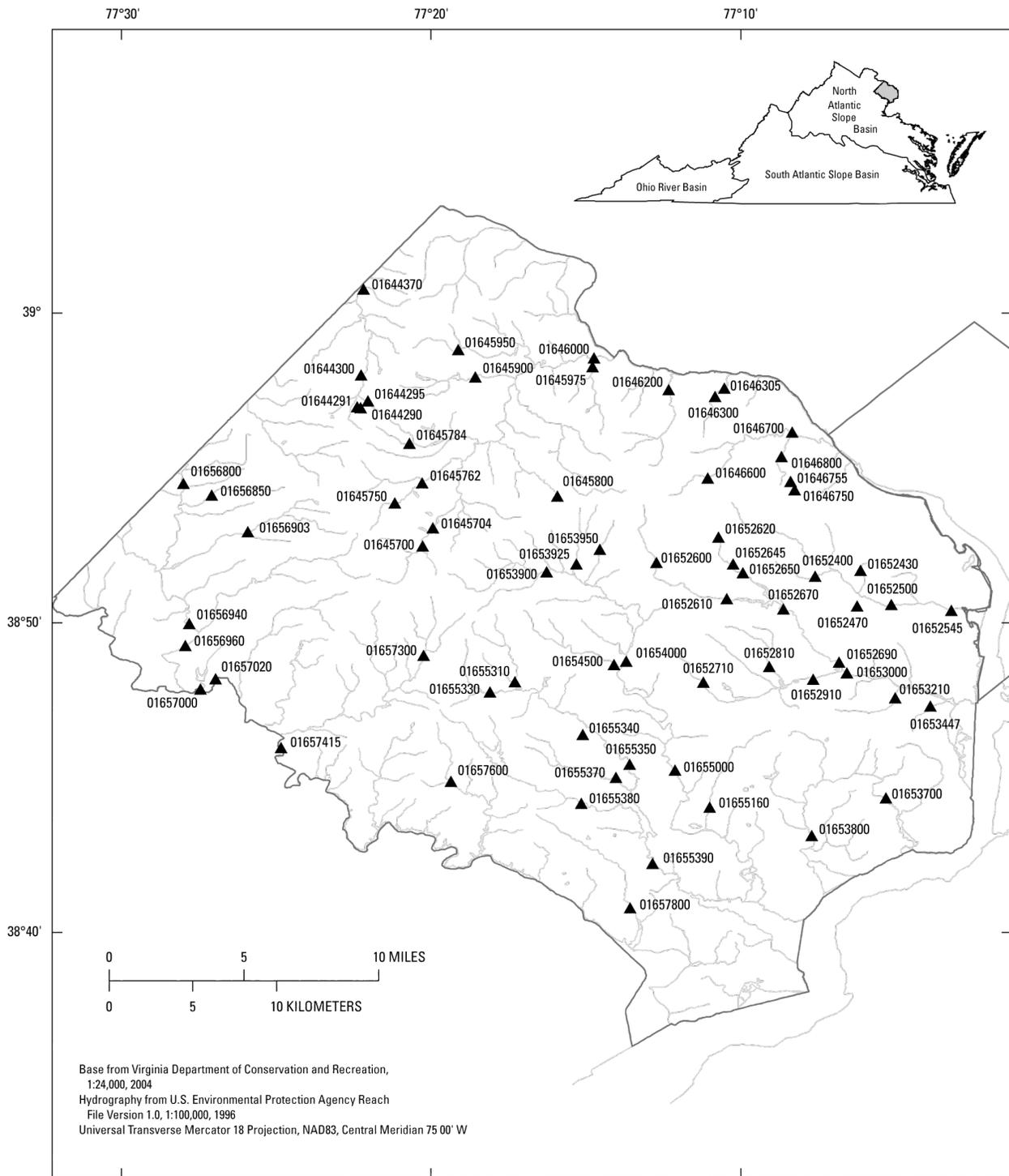




**Figure 2.** Locations of streamflow-gaging stations in the South Atlantic Slope Basin in Virginia.



**Figure 3.** Locations of streamflow-gaging stations in the Ohio River Basin in Virginia.



**Figure 4.** Locations of streamflow-gaging stations in Fairfax County and vicinity in Virginia.

## Annual Maximum Stages and Discharges

### North Atlantic Slope Basin: Nassawadox Creek Basin

**Table 1.** 01484800 Guy Creek near Nassawadox, Va.

LOCATION.--Latitude 37°30'13", Longitude 075°52'22", NAD27 Northampton County, Hydrologic Unit 02080109, on left bank 25 ft upstream from bridge on State highway 606, 1.9 mi northwest of Nassawadox, and 2.1 mi upstream from mouth.

DRAINAGE AREA.--1.90 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 11.67 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 20 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--3 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Records were provided by the Virginia Department of Environmental Quality - Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1965	July 10, 1965	3.67	32.0	1981	June 19, 1981	5.12	71.0
1966	February 13, 1966	2.78	15.0	1982	August 11, 1982	4.19	42.0
1967	June 19, 1967	3.60	31.0	1983	April 24, 1983	3.50	28.0
1968	January 14, 1968	3.63	32.0	1984	February 15, 1984	4.22	43.0
1969	August 20, 1969	3.30	25.0	1985	September 27, 1985	2.82	13.0
1970	July 10, 1970	4.81	60.0	1986	November 30, 1985	2.09	3.70
1971	August 27, 1971	3.17	20.0	1987	January 19, 1987	3.29	22.0
1972	June 14, 1972	3.85	29.0	1988	April 7, 1988	2.07	6.70
1973	February 2, 1973	4.47	50.0	1989	August 18, 1989	4.55	52.0
1974	March 17, 1974	3.17	19.0	1990	August 22, 1990	6.84	171
1975	March 19, 1975	4.35	46.0	1991	January 12, 1991	2.71	13.0
1976	February 2, 1976	3.33	23.0	1992	September 25, 1992	2.86	15.0
1977	February 27, 1977	2.74	13.0	1993	March 13, 1993	4.12	40.0
1978	March 10, 1978	3.63	31.0	1994	March 2, 1994	4.67	56.0
1979	July 31, 1979	5.28	78.0	1995	January 20, 1995	1.95	6.40
1980	November 12, 1979	3.64	31.0	1996	August 1, 1996	4.01	38.0

## North Atlantic Slope Basin: Potomac River Basin

**Table 2.** 01613900 Hogue Creek near Hayfield, Va.

LOCATION.--Latitude 39°12'52", Longitude 078°17'18", NAD27, Frederick County, Hydrologic Unit 02070004, on right bank 153 ft upstream from bridge on State Highway 614, 0.8 mi upstream from Gap Run, and 1.3 mi southeast of Hayfield.

DRAINAGE AREA.--15.9 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 668.60 ft NGVD of 1929. January 1987 to October 1992, nonrecording gage (crest-stage gage) at present site and datum. Prior to January 1987, water-stage recorder at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 870 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--5 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Prior to Jan. 1, 1987, and after October 1, 1992, records were provided by the Virginia Department of Environmental Quality - Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1961	April 13, 1961	4.34	502	1985	November 28, 1984	5.76	1,010
1962	March 21, 1962	5.01	780	1986	November 4, 1985	4.88	709
1963	March 19, 1963	5.27	720	1987	April 17, 1987	5.43	896
1964	November 7, 1963	4.18	392	1988	May 6, 1988	5.79	1,020
1965	March 5, 1965	5.32	737	1989	March 6, 1989	3.67	378
1966	September 21, 1966	5.87	984	1990	July 13, 1990	2.57	172
1967	March 7, 1967	6.14	1,110	1991	October 23, 1990	6.27	1,210
1968	March 17, 1968	4.67	512	1992	July 25, 1992	5.03	756
1969	July 27, 1969	1.96	41.0	1993	March 4, 1993	7.27	2,320
1970	July 9, 1970	7.43	1,950	1994	November 28, 1993	5.24	1,170
1971	November 13, 1970	7.18	1,810	1995	June 27, 1995	4.28	748
1972	June 22, 1972	8.85	2,760	1996	September 6, 1996	9.71	4,090
1973	December 8, 1972	3.83	386	1997	December 2, 1996	3.48	461
1974	December 26, 1973	3.97	412	1998	November 7, 1997	4.96	1,040
1975	March 19, 1975	6.06	1,070	1999	March 17, 1999	2.25	161
1976	January 1, 1976	6.16	1,110	2000	August 6, 2000	5.04	1,080
1977	October 9, 1976	7.67	1,880	2001	June 22, 2001	8.16	2910
1978	August 6, 1978	8.55	2,680	2002	May 2, 2002	2.37	182
1979	February 25, 1979	5.24	1,060	2003	January 1, 2003	4.37	784
1980	October 2, 1979	5.28	1,100	2004	September 28, 2004	7.39	2,390
1981	April 13, 1981	2.05	128	2005	March 28, 2005	3.36	424
1982	June 13, 1982	6.03	1,380	2006	November 29, 2005	4.66	906
1983	April 24, 1983	4.40	780	2007	April 15, 2007	4.12	686
1984	February 14, 1984	7.62	1,810				

**Table 3. 01614830 Opequon Creek near Stephens City, Va.**

LOCATION.--Latitude 39°06'32", Longitude 078°12'19", NAD27, Frederick County, Hydrologic Unit Code 02070004, on right bank, 5 ft upstream from U.S. Highway 11, 1.5 mi north of Stephens City.

DRAINAGE AREA.--15.2 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 705 ft NGVD of 1929, from topographic map.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
2002	May 27, 2002	3.91	35	2005	December 10, 2004	4.49	74
2003	September 19, 2003	6.15	320	2006	November 29, 2005	5.72	239
2004	September 28, 2004	7.67	691	2007	April 15, 2007	4.31	59

**Table 4. 01615000 Opequon Creek near Berryville, Va.**

LOCATION.--Latitude 39°10'29", Longitude 078°04'42", NAD83, Frederick County, Hydrologic Unit 02070004, on left bank, 1,200 ft upstream of bridge on State Highway 7, 0.4 mi upstream from Abrams Creek, and 5.0 mi west of Berryville.

DRAINAGE AREA.--58.2 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 503.24 ft NGVD of 1929. Prior to July 26, 1949, nonrecording gage at site 1,200 ft downstream, July 26, 1949 to September 30, 1997, water-stage recorder at present site and present datum, and October 15, 2002 to current year, water-stage recorder at present site and present datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 4,990 ft<sup>3</sup>/s and extended above by logarithmic plotting.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Subsequent to Sept. 30, 1974, records were provided by the Virginia Department of Environmental Quality - Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1943	October 1942	18.40 <sup>1</sup>		1973	December 9, 1972	7.91 <sup>1</sup>	2,190
1944	May 7, 1944	5.58 <sup>1</sup>	995	1974	December 26, 1973	8.08 <sup>1</sup>	2,310
1945	September 18, 1945	10.00 <sup>1</sup>	3,630	1975	July 21, 1975	10.64 <sup>1</sup>	5,270
1946	August 2, 1946	7.47 <sup>1</sup>	1,890	1976	January 1, 1976	9.04 <sup>1</sup>	3,140
1947	July 22, 1947	3.43 <sup>1</sup>	330	1977	October 9, 1976	10.88 <sup>1</sup>	5,690
1948	August 12, 1948	5.53 <sup>1</sup>	958	1978	August 7, 1978	9.17 <sup>1</sup>	3,300
1949	December 30, 1948	7.87 <sup>1</sup>	2,250	1979	January 24, 1979	8.72 <sup>1</sup>	2,830
1950	May 18, 1950	9.67 <sup>1</sup>	3,470	1980	May 21, 1980	8.27 <sup>1</sup>	2,490
1951	December 4, 1950	10.03 <sup>1</sup>	3,710	1981	June 3, 1981	5.42 <sup>1</sup>	973
1952	April 27, 1952	8.48 <sup>1</sup>	2,610	1982	June 13, 1982	8.35 <sup>1</sup>	2,530
1953	November 21, 1952	9.36 <sup>1</sup>	3,230	1983	April 10, 1983	6.74 <sup>1</sup>	1,540
1954	March 1, 1954	7.87 <sup>1</sup>	2,250	1984	February 14, 1984	10.56 <sup>1</sup>	5,150
1955	August 18, 1955	8.61 <sup>1</sup>	2,670	1985	February 12, 1985	9.51 <sup>1</sup>	3,610
1956	March 14, 1956	5.75 <sup>1</sup>	1,140	1986	March 15, 1986	7.27 <sup>1</sup>	1,800
1957	April 6, 1957	7.98 <sup>1</sup>	2,310	1987	April 17, 1987	7.82 <sup>1</sup>	2,120
1958	December 26, 1957	6.06 <sup>1</sup>	1,280	1988	May 18, 1988	13.49 <sup>1</sup>	12,600
1959	June 2, 1959	7.47 <sup>1</sup>	2,010	1989	May 16, 1989	5.71 <sup>1</sup>	1,090
1960	June 3, 1960	8.52 <sup>1</sup>	2,610	1990	July 15, 1990	4.45 <sup>1</sup>	627
1961	February 19, 1961	6.50 <sup>1</sup>	1,480	1991	October 13, 1990	10.68 <sup>1</sup>	5,340
1962	March 12, 1962	6.44 <sup>1</sup>	1,430	1992	April 21, 1992	12.00 <sup>1</sup>	8,100
1963	March 20, 1963	7.99 <sup>1</sup>	2,310	1993	March 4, 1993	11.07 <sup>1</sup>	5,990
1964	March 3, 1964	6.57 <sup>1</sup>	1,530	1994	November 28, 1993	8.80 <sup>1</sup>	2,920
1965	March 5, 1965	7.62 <sup>1</sup>	2,070	1995	January 15, 1995	7.05 <sup>1</sup>	1,820
1966	February 13, 1966	7.03 <sup>1</sup>	1,830	1996	January 19, 1996	13.30 <sup>1</sup>	11,900
1967	March 7, 1967	8.97 <sup>1</sup>	3,010	1997	November 8, 1996	8.91 <sup>1</sup>	2,950
1968	December 11, 1967	6.62 <sup>1</sup>	1,600	2003	September 19, 2003	11.71	2,770
1969	November 18, 1968	4.05 <sup>1</sup>	544	2004	September 29, 2004	13.57	3,680

1970	July 9, 1970	5.76 <sup>1</sup>	1,040	2005	March 28, 2005	9.91	1,940
1971	November 13, 1970	12.82 <sup>1</sup>	10,600	2006	June 27, 2006	12.09	2,930
1972	June 22, 1972	12.59 <sup>1</sup>	9,870	2007	November 12, 2006	8.52	1,370

---

<sup>1</sup>Gage height at different site and (or) datum.

**Table 5. 01615500 Abrams Creek at Winchester, Va.**

LOCATION.--Latitude 39°09'50", Longitude 078°10'15", NAD27, Frederick County, Hydrologic Unit 02070004, at culvert under railroad siding, 400 ft downstream from Loudoun Street, 0.5 mi south of Winchester, and 6.3 mi upstream from mouth.

DRAINAGE AREA.--5.89 mi<sup>2</sup>.

GAGE.--Nonrecording gage (staff gage). Datum of gage is not determined.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurement below 11 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

<b>Water year</b>	<b>Date</b>	<b>Gage height (ft)</b>	<b>Discharge (ft<sup>3</sup>/s)</b>	<b>Water year</b>	<b>Date</b>	<b>Gage height (ft)</b>	<b>Discharge (ft<sup>3</sup>/s)</b>
Annual maximum stages and discharges							
1946	October 25, 1945	1.10	9.4	1948	April 28, 1948	0.940	5.8
1947	November 23, 1946	1.16	5.2	1949	May 10, 1949	1.50	25

**Table 6. 01616000 Abrams Creek near Winchester, Va.**

LOCATION.--Latitude 39°10'40", Longitude 078°05'10", NAD27, Frederick County, Hydrologic Unit 02070004, on right bank 1,000 ft upstream from bridge on State Highway 659, 0.9 mi upstream from mouth, and 4.4 mi east of Winchester.

DRAINAGE AREA.--17.0 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 526.46 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 894 ft<sup>3</sup>/s and extended above by logarithmic plotting.

BANKFULL STAGE.--4 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Subsequent to June 30, 1957, records were provided by the Virginia Department of Environmental Quality - Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1950	May 5, 1950	3.20	216	1982	June 13, 1982	4.63	582
1951	December 4, 1950	6.16	962	1983	April 3, 1983	3.48	347
1952	April 27, 1952	4.20	458	1984	February 14, 1984	5.34	982
1953	November 21, 1952	4.74	590	1985	February 12, 1985	4.83	829
1954	March 1, 1954	3.87	379	1986	August 17, 1986	4.22	658
1955	August 18, 1955	4.96	650	1987	September 8, 1987	5.72	1,100
1956	July 5, 1956	2.96	192	1988	May 18, 1988	6.14	1,220
1957	April 6, 1957	2.83	168	1989	March 6, 1989	3.41	433
1958	February 27, 1958	2.85	182	1990	August 5, 1990	3.01	329
1959	June 2, 1959	4.57	542	1991	October 13, 1990	6.73	1,400
1960	June 3, 1960	3.26	256	1992	April 21, 1992	6.78	1,410
1979	July 20, 1979	4.28	509	1993	March 4, 1993	5.61	1,060
1980	May 21, 1980	4.18	487	1994	August 17, 1994	6.34	1,280
1981	July 28, 1981	3.94	435				

**Table 7. 01616100 Dry Marsh Run near Berryville, Va.**

LOCATION.--Latitude 39°11'33.33", Longitude 078°04'07.07", NAD83, Clarke County, Hydrologic Unit 02070004, on right bank, 20 ft upstream from bridge on State Highway 645 (Wrights Mill Road), 5.8 mi northwest of Berryville, and 4.5 mi east of Winchester.

DRAINAGE AREA.--11.0 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 540 ft NGVD of 1929, from topographic map.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

<b>Water year</b>	<b>Date</b>	<b>Gage height (ft)</b>	<b>Discharge (ft<sup>3</sup>/s)</b>	<b>Water year</b>	<b>Date</b>	<b>Gage height (ft)</b>	<b>Discharge (ft<sup>3</sup>/s)</b>
Annual maximum stages and discharges							
2003	June 22, 2003	3.31	274	2006	June 28, 2006	2.60	124
2004	December 11, 2003	3.48	318	2007	April 15, 2007	2.07	51
2005	March 28, 2005	2.87	174				

**Table 8. 01620500 North River near Stokesville, Va.**

LOCATION.--Latitude 38°20'06", Longitude 079°14'21", NAD83, Augusta County, Hydrologic Unit 02070005, George Washington National Forest, on left bank 575 ft upstream from highway bridge, 2.8 mi upstream from city of Staunton dam, 3.8 mi upstream from Broad Run, 5.0 mi west of Stokesville, and 7.8 mi upstream from Skidmore Fork.

DRAINAGE AREA.--17.3 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 2,051.37 ft NGVD of 1929. From June 10, 1958 to October 25, 1996 water-stage recorder, at present site and datum. Prior to June 10, 1958 water-stage recorder at site 575 ft downstream and datum of 2,048.57 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 900 ft<sup>3</sup>/s and extended above on basis of flow-over-dam measurement of 11,000 ft<sup>3</sup>/s at Staunton Dam, 2.8 mi downstream. Peak flow for flood of November 1985 determined from slope-area measurement of 5,030 ft<sup>3</sup>/s made 3.8 mi upstream and adjusted for drainage area difference.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1947	March 14, 1947	4.07 <sup>1</sup>	326	1978	January 26, 1978	5.36 <sup>1</sup>	1,230
1948	February 14, 1948	3.65 <sup>1</sup>	299	1979	September 5, 1979	6.74 <sup>1</sup>	1,200
1949	June 17, 1949	10.90 <sup>1</sup>	9,530	1980	April 9, 1980		390
1950	September 13, 1950	2.68 <sup>1</sup>	908	1981	May 20, 1981	3.63 <sup>1</sup>	210
1951	December 7, 1950	5.60 <sup>1</sup>	1,650	1982	March 20, 1982	4.26 <sup>1</sup>	496
1952	March 11, 1952		685	1983	April 15, 1983	3.90 <sup>1</sup>	373
1953	February 21, 1953	4.32 <sup>1</sup>	697	1984	February 14, 1984	4.20 <sup>1</sup>	528
1954	March 1, 1954	6.78 <sup>1</sup>	1,850	1985	November 28, 1984	3.42 <sup>1</sup>	229
1955	August 18, 1955	4.64 <sup>1</sup>	888	1986	November 5, 1985	19.80 <sup>1,2</sup>	7,600
1956	March 15, 1956	3.37 <sup>1</sup>	179	1987	April 17, 1987	6.66 <sup>1</sup>	2,440
1957	April 5, 1957	4.68 <sup>1</sup>	930	1988	May 7, 1988	4.83 <sup>1</sup>	315
1958	April 7, 1958	3.87 <sup>1</sup>	404	1989	June 20, 1989	5.31 <sup>1</sup>	657
1959	June 2, 1959	4.12 <sup>1</sup>	712	1990	May 29, 1990	4.97 <sup>1</sup>	374
1960	May 28, 1960	4.87 <sup>1</sup>	1,250	1991	March 4, 1991	5.47 <sup>1</sup>	826
1961	February 25, 1961	3.79 <sup>1</sup>	386	1992	April 21, 1992	7.22 <sup>1</sup>	3,740
1962	March 21, 1962	3.81 <sup>1</sup>	395	1993	March 4, 1993	5.63 <sup>1</sup>	1,120
1963	March 12, 1963	3.88 <sup>1</sup>	441	1994	August 18, 1994	5.46 <sup>1</sup>	1,020
1964	March 5, 1964	4.04 <sup>1</sup>	662	1995	January 15, 1995	6.23 <sup>1</sup>	1,490
1965	February 7, 1965	3.60 <sup>1</sup>	440	1996	September 6, 1996	9.79 <sup>1</sup>	3,750
1966	February 13, 1966	3.92 <sup>1</sup>	600	1997	November 9, 1996	5.97	686
1967	March 7, 1967	4.69 <sup>1</sup>	1,110	1998	January 8, 1998	6.59	1,600
1968	May 28, 1968	3.80 <sup>1</sup>	540	1999	January 24, 1999	3.28	145
1969	November 18, 1968	3.13 <sup>1</sup>	227	2000	November 3, 1999	4.64	864
1970	December 31, 1969	3.65 <sup>1</sup>	465	2001	March 21, 2001	3.52	233
1971	May 30, 1971	6.58 <sup>1</sup>	1,700	2002	April 22, 2002	4.07	442

1972	June 21, 1972	5.86 <sup>1</sup>	1,650	2003	September 19, 2003	5.63	2,080
1973	October 5, 1972	6.58 <sup>1</sup>	2,400	2004	September 8, 2004	5.47	1,850
1974	December 26, 1973	5.82 <sup>1</sup>	1,640	2005	March 29, 2005	2.72	182
1975	March 19, 1975	5.42 <sup>1</sup>	1,290	2006	June 26, 2006	4.84	1,220
1976	January 1, 1976	3.58 <sup>1</sup>	275	2007	November 16, 2006	3.94	647
1977	October 9, 1976	4.97 <sup>1</sup>	939				

---

<sup>1</sup>Gage height at different site and (or) datum.

<sup>2</sup>Gage height affected by backwater.

**Table 9. 01620800 Briery Branch tributary near Spring Creek, Va.**

LOCATION.--Latitude 38°26'45", Longitude 079°06'15", NAD27, Rockingham County, Hydrologic Unit 02070005, at culvert on State Highway 257, 4.9 mi northwest of Spring Creek.

DRAINAGE AREA.--0.082 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is not determined. Prior to Nov. 5, 1969, flood-hydrograph recorder at present site and datum.

STAGE-DISCHARGE RELATION.--Not developed.

BANKFULL STAGE.--1.5 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Insufficient field data available to develop stage-discharge rating.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1966	February 28, 1966	4.70		1970		2.27 <sup>1</sup>	
1967	March 7, 1967	4.61		1971	May 30, 1971	2.97	
1968		3.00 <sup>1</sup>		1972		2.27 <sup>1</sup>	
1969		2.77 <sup>1</sup>					

<sup>1</sup>Gage height below minimum recordable elevation.

**Table 10. 01621000 Dry River at Rawley Springs, Va.**

LOCATION.--Latitude 38°30'10", Longitude 079°03'14", NAD27, Rockingham County, Hydrologic Unit 02070005, at downstream side of bridge at Rawley Springs, 1.25 mi downstream from Rock Run, 9.0 mi upstream from North River and 11 mi west of Harrisonburg.

DRAINAGE AREA.--73.0 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 1,606.42 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 1,000 ft<sup>3</sup>/s and extended above on basis of slope-area measurements at 4,670 ft<sup>3</sup>/s and 6,900 ft<sup>3</sup>/s.

BANKFULL STAGE.--6 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1943	October 1942	10.50	13,000 <sup>1,2</sup>	1962	March 21, 1962	4.07	1,700
1947	March 14, 1947	3.90	1,560	1963	March 12, 1963	4.18	1,850
1948	February 14, 1948	3.74	1,290	1964	March 3, 1964	4.47	2,100
1949	June 17, 1949	6.50	4,670	1965	February 7, 1965	4.30	1,950
1950	September 13, 1950	4.96	2,650	1966	February 13, 1966	3.95	1,650
1951	December 7, 1950	6.20	4,250	1967	March 7, 1967	4.71	2,370
1952	March 10, 1952	5.16	2,900	1968	May 28, 1968	4.24	1,850
1953	March 23, 1953	4.73	2,400	1969	July 21, 1969	3.29	1,030
1954	March 1, 1954	5.28	3,100	1970	December 31, 1969	3.85	1,520
1955	August 18, 1955	7.76	6,900	1971	May 30, 1971	5.05	2,760
1956	March 15, 1956	3.87	1,470	1972	October 24, 1971	3.62	1,310
1957	April 5, 1957	4.88	2,580	1973	October 5, 1972	6.60	4,900
1958	April 23, 1958	3.48	900	1974	December 26, 1973	5.05	2,760
1959	June 2, 1959	4.77	2,400	1975	March 19, 1975	5.06	2,770
1960	May 8, 1960	5.44	3,200	1986	November 4, 1985	12.30	20,000 <sup>1</sup>
1961	February 25, 1961	4.22	1,850				

<sup>1</sup>Discharge is a historic peak.

<sup>2</sup>Month or day of occurrence is unknown or not exact.

**Table 11. 01621050 Muddy Creek at Mount Clinton, Va.**

LOCATION.--Latitude 38°29'12", Longitude 078°57'38", NAD27, Rockingham County, Hydrologic Unit 02070005, on right downstream side of bridge on State Highway 726, at Mount Clinton.

DRAINAGE AREA.--14.3 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 1,320 ft NGVD of 1929, from topographic map.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

<b>Water year</b>	<b>Date</b>	<b>Gage height (ft)</b>	<b>Discharge (ft<sup>3</sup>/s)</b>	<b>Water year</b>	<b>Date</b>	<b>Gage height (ft)</b>	<b>Discharge (ft<sup>3</sup>/s)</b>
Annual maximum stages and discharges							
1994	January 28, 1994	5.96	830	2001	April 10, 2001	4.50	262
1995	July 5, 1995	6.96	415	2002	May 27, 2002	5.31	543
1996	September 6, 1996	10.37	3,850	2003	September 19, 2003	8.68	2,550
1997	March 3, 1997	5.27	527	2004	November 19, 2003	5.30	539
1998	January 8, 1998	6.89	1,330	2005	July 17, 2005	5.16	486
1999	September 6, 1999	4.07	157	2006	November 29, 2005	6.00	850
2000	July 29, 2000	5.24	516	2007	November 16, 2006	6.63	1,180

**Table 12.** 01621200 War Branch near Hinton, Va.

LOCATION.--Latitude 38°28'28", Longitude 078°59'14", NAD27, Rockingham County, Hydrologic Unit 02070005, at bridge on U.S. Highway 33, 100 ft upstream from Buttermilk Run, and 1.0 mi northwest of Hinton.

DRAINAGE AREA.--9.73 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 1,349.09 ft NGVD of 1929. July 26, 1965, to Nov. 2, 1973, flood-hydrograph recorder at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 125 ft<sup>3</sup>/s and extended above on basis of slope-area measurement at 570 ft<sup>3</sup>/s and contracted-opening measurement at 2,290 ft<sup>3</sup>/s.

BANKFULL STAGE.--4 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1949	August 15, 1949	6.70	2,500	1963	March 12, 1963	2.82	395
1950	September 13, 1950	4.05	850	1964	March 3, 1964	2.40	285
1951	December 7, 1950	3.10	490	1965	February 7, 1965	3.46	620
1952	May 12, 1952	4.05	850	1966	August 9, 1966	3.98	820
1953	March 23, 1953	2.88	420	1967	August 7, 1967	3.93	780
1954	March 1, 1954	2.18	235	1968	March 12, 1968	2.82	390
1955	August 18, 1955	6.44	2,290	1969	July 20, 1969	5.00	1,370
1956	March 15, 1956	1.91	175	1970		1.70 <sup>1</sup>	140 <sup>2,3</sup>
1957	April 5, 1957	2.74	380	1971	June 23, 1971	4.03	835
1958	July 27, 1958	3.45	600	1972	June 21, 1972	3.70	700
1959	June 2, 1959	3.35	570	1973	May 28, 1973	3.63	672
1960	May 8, 1960	3.50	625	1974	December 26, 1973	3.58	652
1961	February 25, 1961	2.45	295	1975	March 19, 1975	4.04	840
1962	March 21, 1962	2.47	300	1976	December 31, 1975	3.29	546

<sup>1</sup>Gage height below minimum recordable elevation.

<sup>2</sup>Discharge is less than indicated value, which is minimum recordable discharge at this site.

<sup>3</sup>Month or day of occurrence is unknown or not exact.

**Table 13. 01621400 Blacks Run at Harrisonburg, Va.**

LOCATION.--Latitude 38°25'52", Longitude 078°53'02", NAD27, Rockingham County, Hydrologic Unit 02070005, at bridge on U.S. Highway 11 at south edge of Harrisonburg.

DRAINAGE AREA.--5.44 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 1,260 ft NGVD of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 75 ft<sup>3</sup>/s and extended above on basis of slope-area measurement at 430 ft<sup>3</sup>/s and contracted-opening measurement at 1,000 ft<sup>3</sup>/s.

BANKFULL STAGE.--6 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1949	August 15, 1949	11.20	1,920	1956	March 15, 1956	4.00	320
1950	September 13, 1950	6.06	710	1957	April 5, 1957	3.65	235
1951	December 7, 1950	5.30	570	1958	July 28, 1958	4.30	385
1952	December 21, 1951	4.85	490	1959	September 30, 1959	4.89	500
1953	March 23, 1953	4.80	485	1960	May 8, 1960	5.20	555
1954	March 1, 1954	4.04	325	1961	February 25, 1961	4.96	515
1955	October 15, 1954	8.05	990				

**Table 14.** 01621450 Blacks Run tributary number 1 near Harrisonburg, Va.

LOCATION.--Latitude 38°23'30", Longitude 078°55'05", NAD27, Rockingham County, Hydrologic Unit 02070005, at culvert on U.S. Highway 11, 4.9 mi southwest of Harrisonburg.

DRAINAGE AREA.--0.67 mi<sup>2</sup>.

GAGE.--Water-stage recorder (flood-hydrograph recorder). Datum of gage is 1,189.31 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert and flow over road.

BANKFULL STAGE.--5 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1966	February 28, 1966	5.13	30.0	1971	February 13, 1971	5.95	38.0
1967	March 7, 1967	5.65	35.0	1972	June 22, 1972	6.80	114
1968	March 12, 1968	4.13	20.0	1973	October 5, 1972	5.75	37.0
1969	July 6, 1969	7.30	230	1974	December 26, 1973	5.21	31.0
1970	May 23, 1970	6.50	59.0	1975	March 19, 1975	6.48	55.0

**Table 15.** 01621470 Blacks Run at Route 704 near Mount Crawford, Va.

LOCATION.--Latitude 38°22'43", Longitude 078°55'42", NAD27, Rockingham County, Hydrologic unit 02070005, on right bank at downstream side of bridge on State Highway 704, 2.5 mi upstream from North River and 2 mi north of Mount Crawford.

DRAINAGE AREA.--18.8 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 1,170 ft NGVD of 1929, from topographic map.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

<b>Water year</b>	<b>Date</b>	<b>Gage height (ft)</b>	<b>Discharge (ft<sup>3</sup>/s)</b>	<b>Water year</b>	<b>Date</b>	<b>Gage height (ft)</b>	<b>Discharge (ft<sup>3</sup>/s)</b>
Annual maximum stages and discharges							
1999	September 30, 1999	6.96	516	2000	September 19, 2000	6.59	451

**Table 16. 01622000 North River near Burketown, Va.**

LOCATION.--Latitude 38°20'25", Longitude 078°54'50", NAD27, Rockingham County, Hydrologic Unit 02070005, on right bank 0.8 mi downstream from Pleasant Run, 2.8 mi northeast of Burketown, and 8.5 mi upstream from Middle River.

DRAINAGE AREA.--376 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 1,103.49 ft NGVD of 1929. Prior to Dec. 12, 1938, nonrecording gage at site 3.0 mi downstream at different datum.

STAGE-DISCHARGE RELATION.--Prior to Dec. 13, 1938, defined by current-meter measurements below 5,100 ft<sup>3</sup>/s and extended on basis of comparative records at recording site. Defined by current-meter measurements below 15,900 ft<sup>3</sup>/s and extended above on basis of slope-area measurement at gage heights 32.4 ft and 36.3 ft, and contracted-opening measurements at gage heights 35.85 ft and 36.3 ft.

BANKFULL STAGE.--7 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Peaks are from graphs based on gage readings prior to Dec. 12, 1938, unless otherwise noted. Maximum stage since at least 1852, that of June 18, 1949. Subsequent to May 31, 1975, records were provided by the Virginia Department of Environmental Quality – Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1924	May 1924	22.50 <sup>1</sup>	26,000 <sup>2,3</sup>	1966	February 13, 1966	8.20	3,960
1927	November 16, 1926	10.30 <sup>1</sup>	7,440	1967	March 7, 1967	13.90	9,720
1928	August 16, 1928	9.50 <sup>1</sup>	6,730	1968	May 28, 1968	8.64	4,410
1929	April 16, 1929	10.00 <sup>1</sup>	7,170	1969	August 1, 1969	10.35	5,900
1930	October 22, 1929	9.80 <sup>1</sup>	7,010	1970	May 24, 1970	10.24	5,800
1931	July 23, 1931	7.58 <sup>1</sup>	5,090	1971	May 30, 1971	14.26	10,200
1932	March 28, 1932	7.50 <sup>1</sup>	4,980	1972	June 22, 1972	16.58	12,900
1933	April 17, 1933	11.50 <sup>1</sup>	8,550	1976	January 1, 1976	10.02	5,580
1934	September 16, 1934	8.50 <sup>1</sup>	5,850	1977	October 9, 1976		9,000 <sup>5,6</sup>
1935	December 1, 1934	19.45 <sup>1</sup>	19,100	1978	January 26, 1978	14.89	10,900
1936	March 17, 1936	26.70 <sup>1</sup>	37,000	1979	September 6, 1979	14.27	10,200
1937	April 26, 1937	15.00 <sup>1</sup>	12,600	1980	October 3, 1979	13.00	8,650
1938	October 19, 1937	12.00 <sup>1,4</sup>	9,050	1981	July 5, 1981	7.37	3,280
1939	July 30, 1939	15.20	10,500	1982	June 13, 1982	11.98	7,530
1940	June 14, 1940	16.07	11,500	1983	April 15, 1983	10.36	5,900
1941	April 5, 1941	7.76	3,390	1984	March 29, 1984	11.94	7,480
1942	May 22, 1942	23.37	22,600	1985	February 12, 1985	9.23	4,890
1943	October 15, 1942	32.40	43,000	1986	November 5, 1985	35.85	65,000
1944	May 7, 1944	9.77	5,100	1987	April 17, 1987	14.36	10,300
1945	September 18, 1945	15.38	10,700	1988	May 6, 1988	7.13	3,080
1946	May 4, 1946	6.65	2,510	1989	August 25, 1989	8.83	4,530
1947	July 17, 1947	8.48	3,950	1990	May 29, 1990	6.68	2,720

1948	February 14, 1948	9.40	4,740	1991	October 23, 1990	9.26	4,910
1949	June 18, 1949	36.30	62,600	1992	April 22, 1992	16.05	12,300
1950	September 13, 1950	13.35	8,650	1993	March 4, 1993	14.87	10,900
1951	December 7, 1950	16.56	12,100	1994	August 17, 1994	10.89	6,390
1952	March 11, 1952	14.73	9,970	1995	January 15, 1995	13.26	8,960
1953	March 24, 1953	13.16	8,450	1996	September 6, 1996	36.70	70,400
1954	March 1, 1954	14.30	9,550	1997	March 3, 1997	9.27	4,920
1955	August 18, 1955	21.04	18,600	1998	January 8, 1998	14.91	11,200
1956	March 15, 1956	5.28	1,760	1999	September 6, 1999	5.38	1,880
1957	April 5, 1957	12.67	8,320	2000	July 30, 2000	6.26	2,520
1958	May 25, 1958	6.94	2,900	2001	March 21, 2001	6.49	2,700
1959	June 2, 1959	14.60	10,600	2002	April 22, 2002	9.87	5,680
1960	May 28, 1960	14.83	10,800	2003	September 19, 2003	16.99	13,600
1961	February 26, 1961	8.61	4,320	2004	September 28, 2004	13.06	9,050
1962	March 21, 1962	8.80	4,500	2005	July 18, 2005	6.35	2,590
1963	March 12, 1963	11.40	6,900	2006	November 29, 2005	15.35	11,700
1964	March 5, 1964	10.32	5,850	2007	November 16, 2006	14.18	10,300
1965	February 7, 1965	11.60	7,110				

<sup>1</sup>Gage height at different site and (or) datum.

<sup>2</sup>Month or day of occurrence is unknown or not exact.

<sup>3</sup>Discharge is a historic peak.

<sup>4</sup>Gage datum changed during this year.

<sup>5</sup>Discharge is an estimate.

<sup>6</sup>Discharge is a maximum daily average.

**Table 17. 01622100 North River tributary near Mount Crawford, Va.**

LOCATION.--Latitude 38°19'55", Longitude 078°56'20", NAD27, Rockingham County, Hydrologic Unit 02070005, at culvert on U.S. Highway 11, 1.7 mi south of Mount Crawford.

DRAINAGE AREA.--1.56 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 1,132.55 ft NGVD of 1929. Prior to Oct. 27, 1974, flood-hydrograph recorder at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--5 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

<b>Water year</b>	<b>Date</b>	<b>Gage height (ft)</b>	<b>Discharge (ft<sup>3</sup>/s)</b>	<b>Water year</b>	<b>Date</b>	<b>Gage height (ft)</b>	<b>Discharge (ft<sup>3</sup>/s)</b>
Annual maximum stages and discharges							
1966	February 28, 1966	2.75	21.0	1971	February 13, 1971	4.47	74.0
1967	August 7, 1967	3.68	46.0	1972	June 22, 1972	3.70	52.0
1968	March 12, 1968	3.12	34.0	1973	October 5, 1972	5.72	146
1969	July 6, 1969	5.13	115	1974	December 26, 1973	4.45	82.0
1970	December 30, 1969	3.20	31.0	1975	March 19, 1975	5.04	112

**Table 18.** 01622300 Buffalo Branch tributary number 1 near Augusta Springs, Va.

LOCATION.--Latitude 38°09'42", Longitude 079°16'08", NAD27, Augusta County, Hydrologic Unit 02070005, at culvert on State Highway 42, 5.0 mi northeast of Augusta Springs.

DRAINAGE AREA.--0.54 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 2,020 ft NGVD of 1929, from topographic map. Prior to Nov. 1, 1973, flood-hydrograph recorder at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--8 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1967	March 7, 1967	3.33	36.0	1972	June 21, 1972	3.92	62.0
1968	May 27, 1968	3.37	38.0	1973	October 5, 1972	4.50	91.0
1969	August 20, 1969	4.40	86.0	1974	December 26, 1973	4.35	84.0
1970	December 31, 1969	3.30	35.0	1975	March 19, 1975	3.84	58.0
1971	May 30, 1971	3.60	47.0	1976	December 31, 1975	3.42	40.0

**Table 19. 01622400 Buffalo Branch tributary number 2 near Christians, Va.**

LOCATION.--Latitude 38°11'55", Longitude 079°13'10", NAD27, Augusta County, Hydrologic Unit 02070005, at culvert on State Highway 42, 1.3 mi north of Christian.

DRAINAGE AREA.--0.46 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 1,622.53 ft NGVD of 1929. Prior to Aug. 17, 1978, flood-hydrograph recorder at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--5 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1967	August 23, 1967	4.08	70.0	1984	March 29, 1984	2.94	28.0
1968	August 15, 1968	3.32	40.0	1985		2.77 <sup>1</sup>	24.0 <sup>2,3</sup>
1969		3.00 <sup>1</sup>	30.0 <sup>2,3</sup>	1986	November 4, 1985	6.96	240
1970	December 31, 1969	3.60	51.0	1987	April 16, 1987	3.94	65.0
1971	May 30, 1971	3.45	45.0	1988		2.78 <sup>1</sup>	23.0 <sup>2,3</sup>
1972	June 21, 1972	3.37	42.0	1989	May 2, 1989	3.26	33.0
1973	May 28, 1973	4.25	77.0	1990	October 19, 1989	3.57	50.0
1974	May 12, 1974	4.80	103	1991	March 4, 1991	4.07	70.0
1975	March 19, 1975	5.18	122	1992	April 21, 1992	4.69	98.0
1976	December 31, 1975	3.35	41.0	1993	March 4, 1993	4.58	92.0
1977	October 9, 1976	3.65	53.0	1994	August 17, 1994	3.27	38.0
1978	January 26, 1978	3.92	64.0	1995	January 16, 1995	3.71	55.0
1979	September 22, 1979	5.55 <sup>4</sup>		1996	September 6, 1996	7.68	244
1980	October 10, 1979	4.81	109	1997	December 1, 1996	2.97	29
1981	February 20, 1981	3.18	30.0	1998	January 8, 1998	4.76	101
1982	March 20, 1982	4.36	84.0	1999		2.78 <sup>1</sup>	22 <sup>2,3</sup>
1983	March 19, 1983	2.92	27.0	2000	September 2, 2000	3.26	38

<sup>1</sup>Gage height below minimum recordable elevation.

<sup>2</sup>Discharge is less than indicated value, which is minimum recordable discharge at this site.

<sup>3</sup>Month or day of occurrence is unknown or not exact.

<sup>4</sup>Gage height is greater than indicated value.

**Table 20. 01623000 Bell Creek at St. Pauls Chapel near Staunton, Va.**

LOCATION.--Latitude 38°10'00", Longitude 079°07'35", NAD27, Augusta County, Hydrologic Unit 02070005, on right bank 400 ft upstream from culvert on State Highway 720, 500 ft southwest of St. Pauls Chapel, and 3.0 mi west of Staunton.

DRAINAGE AREA.--0.67 mi<sup>2</sup>.

GAGE.--Water-stage recorder and V-notch sharp-crested weir. Datum of gage is 1,520 ft NGVD of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by current-meter and volumetric measurements below 7.34 ft<sup>3</sup>/s and extended above on basis of slope-area measurement at 193 ft<sup>3</sup>/s.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Records of daily discharge and annual maximum were provided by the U.S. Department of Agriculture, Soil Conservation Service. Discharge measurements were made, stage-discharge relations determined, and discharge records reviewed by the U.S. Geological Survey.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1949	April 13, 1949	1.86	193	1953	March 25, 1953	0.91	0.61
1950	November 1, 1949	1.37	13.0	1954	June 8, 1954	1.05	1.90
1951	April 12, 1951	1.10	2.60	1955	October 15, 1954	2.12	306
1952	March 11, 1952	1.27	7.70				

**Table 21. 01623500 Bell Creek near Staunton, Va.**

LOCATION.--Latitude 38°11'00", Longitude 079°07'05", NAD27, Augusta County, Hydrologic Unit 02070005, on left bank 1.2 mi upstream from bridge on U.S. Highway 250 and 3.2 mi northwest of Staunton.

DRAINAGE AREA.--3.85 mi<sup>2</sup>.

GAGE.--Water-stage recorder and V-notch sharp-crested weir. Datum of gage is 1,470 ft NGVD of 1929 from topographic map.

STAGE-DISCHARGE RELATION.--Defined by current-meter and volumetric measurements below 8.87 ft<sup>3</sup>/s and extended above on basis of slope-area measurement at 630 ft<sup>3</sup>/s.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Records of daily discharge were provided by the U.S. Department of Agriculture, Soil Conservation Service. Discharge measurements were made, stage-discharge relations determined, and discharge records reviewed by the U.S. Geological Survey.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1949	June 20, 1949	2.74	722	1953	March 25, 1953	1.47	14.0
1950	November 1, 1949	1.78	52.0	1954	March 1, 1954	1.38	8.20
1951	July 25, 1951	1.69	37.0	1955	February 6, 1955	2.05	132
1952	March 11, 1952	1.55	21.0				

**Table 22.** 01624000 Bell Creek at Franks Mill near Staunton, Va.

LOCATION.--Latitude 38°13'10", Longitude 079°06'35", NAD27, Augusta County, Hydrologic Unit 02070005, on right bank 0.3 mi southwest of Franks Mill, 0.4 mi upstream from mouth, and 5.0 mi northwest of Staunton.

DRAINAGE AREA.--9.81 mi<sup>2</sup>.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,350 ft NGVD of 1929, by barometer.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 157 ft<sup>3</sup>/s and extended above on basis of slope-area measurement at 840 ft<sup>3</sup>/s.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1949	June 28, 1949	4.86	912	1953	March 25, 1953	2.34	123
1950	November 1, 1949	2.26	112	1954	March 1, 1954	1.96	76.0
1951	July 25, 1951	4.10	840	1955	August 18, 1955	3.77	602
1952	March 11, 1952	2.64	169	1956	March 15, 1956	1.21	18.0

**Table 23. 01624300 Middle River near Verona, Va.**

LOCATION.--Latitude 38°14'36", Longitude 079°02'08", NAD27, Augusta County, Hydrologic Unit 02070005, on right bank at downstream side of bridge on State Highway 742, 2.7 mi downstream from Moffett Creek, and 3.2 mi northwest of Verona.

DRAINAGE AREA.--179 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 1,260.78 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 6,410 ft<sup>3</sup>/s and extended above on basis of slope-area measurement at 45,000 ft<sup>3</sup>/s.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Records were provided by the Virginia Department of Environmental Quality - Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1968	May 27, 1968	6.71	2,120	1978	January 26, 1978	12.27	6,630
1969	August 20, 1969	9.42	3,790	1979	September 6, 1979	14.17	8,650
1970	December 31, 1969	8.74	3,300	1980	October 2, 1979	11.65	5,980
1971	May 30, 1971	13.79	7,220	1981	February 11, 1981	4.67	1,130
1972	June 21, 1972	13.10	6,590	1982	June 13, 1982	11.49	5,820
1973	October 5, 1972	13.26	6,770	1983	April 24, 1983	8.45	3,300
1974	December 26, 1973	10.50	4,560	1984	March 29, 1984	7.81	2,850
1975	March 19, 1975	13.11	7,440	1985	August 18, 1985	7.39	2,560
1976	January 1, 1976	8.47	3,160	1986	November 5, 1985	24.29	45,000
1977	October 9, 1976	11.35	5,740				

**Table 24. 01624800 Christians Creek near Fishersville, Va.**

LOCATION.--Latitude 38°07'42", Longitude 078°59'41", NAD27, Augusta County, Hydrologic Unit 02070005, on right bank at upstream side of bridge on State Highway 794, 2.2 mi northwest of Fishersville, and 12 mi upstream from mouth.

DRAINAGE AREA.--73.0 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 1,230 ft NGVD of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 2,360 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Records were provided by the Virginia Department of Environmental Quality - Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1968	March 12, 1968	6.22	685	1983	March 19, 1983	10.82	3,030
1969	August 20, 1969	12.78	3,800	1984	March 29, 1984	10.87	3,060
1970	December 31, 1969	8.72	1,790	1985	February 12, 1985	6.77	1,490
1971	May 30, 1971	11.79	3,240	1986	November 4, 1985	13.58	4,520
1972	June 21, 1972	12.50	3,630	1987	April 17, 1987	11.10	3,170
1973	October 5, 1972	12.91	3,850	1988	January 20, 1988	4.41	742
1974	December 26, 1973	9.65	2,180	1989	May 1, 1989	10.80	3,020
1975	March 19, 1975	11.45	3,020	1990	October 17, 1989	11.35	3,290
1976	December 31, 1975	9.12	2,180	1991	July 29, 1991	9.71	2,530
1977	October 9, 1976	12.14	3,680	1992	April 21, 1992	10.17	2,730
1978	January 26, 1978	10.76	3,020	1993	March 4, 1993	12.15	3,700
1979	September 21, 1979	10.92	3,070	1994	February 23, 1994	8.17	1,960
1980	October 1, 1979	10.50	2,880	1995	June 28, 1995	11.38	3,310
1981	September 6, 1981	4.25	618	1996	September 6, 1996	16.14	16,200
1982	March 20, 1982	7.79	1,830	1997	March 3, 1997	6.35	1,300

**Table 25. 01625000 Middle River near Grottoes, Va.**

LOCATION.--Latitude 38°15'42", Longitude 078°51'44", NAD27, Augusta County, Hydrologic Unit 02070005, on left bank at upstream side of bridge on State Highway 769 at Mount Meridian, 1.8 mi upstream from mouth, and 2.0 mi west of Grottoes.

DRAINAGE AREA.--373 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 1,061.51 ft NGVD of 1929. Prior to Sept. 1, 1938, nonrecording gage at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 14,500 ft<sup>3</sup>/s and extended above on basis of slope-area measurement at 38,500 ft<sup>3</sup>/s.

BANKFULL STAGE.--8 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Peaks are from graphs based on gage readings prior to Sept. 1, 1938. Flood of Mar. 18, 1936, was considered by local opinion to have been the highest since 1877. However, flood of Nov. 5, 1985, is now the highest on record. Subsequent to Sept. 30, 1981, records were provided by the Virginia Department of Environmental Quality - Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1924	May 1924	22.80	16,200 <sup>12</sup>	1968	December 11, 1967	9.49	2,520
1928	August 17, 1928	12.90	5,740	1969	August 20, 1969	13.04	5,860
1929	April 16, 1929	13.30	6,090	1970	December 31, 1969	12.76	5,600
1930	October 2, 1929	9.30	2,950	1971	May 30, 1971	18.70	11,200
1931	August 23, 1931	8.70	2,530	1972	June 22, 1972	21.51	16,300
1932	March 28, 1932	11.00	4,220	1973	October 6, 1972	21.08	15,600
1933	October 18, 1932	17.00	9,560	1974	December 27, 1973	15.99	8,590
1934	March 3, 1934	11.00	4,220	1975	March 19, 1975	18.63	12,000
1935	December 1, 1934	20.60	13,500	1976	January 1, 1976	12.66	5,090
1936	March 18, 1936	28.57	24,500	1977	October 9, 1976	17.40	10,300
1937	April 26, 1937	17.13	9,660	1978	January 26, 1978	17.18	10,000
1938	October 20, 1937	16.1	8,660	1979	February 25, 1979	15.15	7,660
1939	February 4, 1939	12.15	5,310	1980	October 3, 1979	11.78	4,330
1940	August 16, 1940	19.81	12,500	1981	May 20, 1981	5.79	707
1941	April 5, 1941	8.14	2,090	1982	June 14, 1982	14.51	6,930
1942	May 22, 1942	19.08	11,800	1983	March 19, 1983	14.20	6,610
1943	October 15, 1942	26.30	21,000	1984	March 29, 1984	14.70	7,140
1944	September 19, 1944	14.1	6,810	1985	August 19, 1985	9.43	2,630
1945	September 18, 1945	20.5	13,400	1986	November 5, 1985	33.09	38,500
1946	December 31, 1945	7.18	1,700	1987	April 17, 1987	18.80	12,200
1947	March 14, 1947	10.50	3,820	1988	January 20, 1988	7.19	1,510
1948	February 14, 1948	16.40	8,960	1989	May 2, 1989	12.03	4,580
1949	June 18, 1949	22.74	16,100	1990	January 1, 1990	12.31	4,820
1950	February 2, 1950	9.07	2,810	1991	October 23, 1990	10.91	3,710
1951	December 8, 1950	12.53	5,420	1992	April 22, 1992	18.16	11,300
1952	February 4, 1952	11.47	4,620	1993	March 4, 1993	19.56	13,300

1953	March 25, 1953	13.70	6,450	1994	March 29, 1994	12.65	5,540
1954	March 1, 1954	11.86	4,940	1995	June 28, 1995	12.55	5,460
1955	August 18, 1955	19.93	12,700	1996	September 7, 1996	35.62	44,300
1956	March 15, 1956	6.62	1,400	1997	December 2, 1996	9.63	3,200
1957	April 6, 1957	11.58	4,700	1998	January 8, 1998	16.79	9,590
1958	April 23, 1958	10.97	4,220	1999	September 30, 1999	6.68	1,350
1959	June 3, 1959	9.68	3,230	2000	September 2, 2000	7.49	1,820
1960	May 28, 1960	12.67	5,580	2001	March 21, 2001	12.10	5,090
1961	April 13, 1961	9.52	3,090	2002	April 22, 2002	6.91	1,480
1962	October 21, 1961	16.98	9,560	2003	September 19, 2003	19.31	12,900
1963	March 12, 1963	14.53	7,170	2004	September 29, 2004	16.79	9,590
1964	January 25, 1964	8.98	2,800	2005	March 29, 2005	7.80	2,000
1965	February 8, 1965	9.71	3,230	2006	June 28, 2006	13.22	6,070
1966	February 14, 1966	8.20	2,320	2007	November 17, 2006	13.09	5,950
1967	March 7, 1967	15.24	7,840				

---

<sup>1</sup>Discharge is a historic peak.

<sup>2</sup>Month or day of occurrence is unknown or not exact.

**Table 26. 01625500 North River at Port Republic, Va.**

LOCATION.--Latitude 38°17'50", Longitude 078°48'37", NAD27, Rockingham County, Hydrologic Unit 02070005, at highway bridge 500 ft upstream from confluence with South River, at Port Republic.

DRAINAGE AREA.--819 mi<sup>2</sup>.

GAGE.--Nonrecording gage (staff gage). Datum of gage is 1,040 ft NGVD of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 3,500 ft<sup>3</sup>/s and extended above on basis of logarithmic plotting and flows at other sites in the Potomac River basin.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1896	September 30, 1896		24,000	1898	August 10, 1898		11,400
1897	May 2, 1897		16,400				

**Table 27. 01625900 Back Creek at Lyndhurst, Va.**

LOCATION.--Latitude 38°01'44", Longitude 078°55'58", NAD27, Augusta County, Hydrologic Unit 02070005, on left bank at downstream side of bridge on Stat. Highway 624, 0.7 mi east of Lyndhurst, 0.7 mi downstream from Inch Branch, and 0.7 mi upstream from mouth.

DRAINAGE AREA.--40.8 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 1,338.83 ft NGVD of 1929 (levels by Higgs and Shumate Engineers).

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 3,870 ft<sup>3</sup>/s and extended above on basis of logarithmic plotting.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Records were provided by the Virginia Department of Environmental Quality - Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1975	March 19, 1975	7.13	4,000	1977	October 9, 1976		1,300 <sup>1</sup>
1976	January 1, 1976	4.36	968				

<sup>1</sup>Discharge is a maximum daily average.

**Table 28. 01626000 South River near Waynesboro, Va.**

LOCATION.--Latitude 38°03'27", Longitude 078°54'30", NAD27, Waynesboro City, Hydrologic Unit 02070005, on right bank 80 ft downstream from bridge on State Highway 664, 1.3 mi southwest of Waynesboro post office, and 2.4 mi downstream from Back Creek.

DRAINAGE AREA.--127 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 1,296.20 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 4,150 ft<sup>3</sup>/s and extended above on basis of contracted-opening measurement at 13,700 ft<sup>3</sup>/s.

BANKFULL STAGE.--5 ft.

REGULATION.--High-flow conditions at this site are considered unregulated. After 1954, slight regulation by multiple flood-detention reservoirs.

REMARKS.--Subsequent to Sept. 30, 1982, records were provided by the Virginia Department of Environmental Quality - Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1943	October 1942	14.30	14,500 <sup>12</sup>	1980	April 14, 1980	7.47	2,620
1953	March 25, 1953	7.20	2,410	1981	February 11, 1981	3.87	419
1954	March 1, 1954	6.56	1,680	1982	June 14, 1982	5.60	1,120
1955	August 18, 1955	13.95	13,500	1983	March 19, 1983	8.46	3,700
1956	September 27, 1956	5.73	1,160	1984	February 14, 1984	8.07	3,270
1957	October 31, 1956	7.46	2,550	1985	August 18, 1985	8.24	3,450
1958	April 23, 1958	7.42	2,450	1986	November 4, 1985	15.30	17,500
1959	September 30, 1959	7.18	2,270	1987	April 17, 1987	9.58	5,110
1960	October 24, 1959	7.92	3,090	1988	May 18, 1988	5.58	1,310
1961	April 13, 1961	6.17	1,380	1989	May 6, 1989	6.80	2,040
1962	October 21, 1961	8.76	4,110	1990	October 19, 1989	5.52	1,250
1963	March 12, 1963	6.12	1,340	1991	October 23, 1990	6.92	2,190
1964	January 25, 1964	6.21	1,470	1992	April 21, 1992	9.01	4,370
1965	February 7, 1965	6.69	1,880	1993	November 23, 1992	9.25	4,680
1966	February 13, 1966	5.38	1,000	1994	March 8, 1994	6.35	1,760
1967	March 7, 1967	7.17	2,320	1995	June 28, 1995	8.71	4,000
1968	May 27, 1968	5.76	1,140	1996	January 19, 1996	13.58	12,500
1969	August 20, 1969	15.27	17,400	1997	December 2, 1996	5.64	1,320
1970	December 31, 1969	5.38	990	1998	February 17, 1998	10.05	5,810
1971	May 30, 1971	9.99	5,690	1999	September 30, 1999	6.90	2,250
1972	June 21, 1972	14.25	14,400	2000	November 26, 1999	4.92	897
1973	October 5, 1972	11.41	8,040	2001	March 21, 2001	5.56	1,270
1974	December 27, 1973	6.84	2,010	2002	April 22, 2002	4.22	592
1975	March 19, 1975	10.30	6,180	2003	September 19, 2003	13.95	13,800
1976	October 18, 1975	6.02	1,340	2004	September 28, 2004	10.45	6,460
1977	October 9, 1976	9.33	4,780	2005	December 23, 2004	5.49	1,220

1978	May 13, 1978	8.52	3,780	2006	November 29, 2005	10.54	6,610
1979	September 5, 1979	11.37	7,970	2007	October 7, 2006	8.68	3,920

---

<sup>1</sup>Discharge is a historic peak.

<sup>2</sup>Month or day of occurrence is unknown or not exact.

**Table 29. 01626500 South River at Waynesboro, Va.**

LOCATION.--Latitude 38°03'40", Longitude 078°53'50", NAD27, Augusta County, Hydrologic Unit 02070005, on left bank 50 ft downstream from highway bridge in Waynesboro, 4.2 mi downstream from Back Creek.

DRAINAGE AREA.--133 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Concrete control since Mar. 11, 1941. Datum of gage is 1,277.13 ft NGVD of 1929. June 1905 to July 1906, chain gage at site 2 mi downstream at different datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 5,000 ft<sup>3</sup>/s and extended above by logarithmic plotting.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1929	May 2, 1929	7.52	2,530	1941	December 29, 1940	4.63	1,010
1930	October 22, 1929	7.90	2,770	1942	May 16, 1942	10.77	5,920
1931	August 22, 1931	5.32	1,350	1943	October 15, 1942	14.80	12,000
1932	March 28, 1932	4.26	870	1944	September 19, 1944	11.06	6,290
1933	October 17, 1932	10.98	6,140	1945	September 18, 1945	13.60	9,970
1934	September 16, 1934	7.39	2,470	1946	May 5, 1946	4.34	715
1935	December 1, 1934	10.92	6,020	1947	March 14, 1947	6.19	1,780
1936	March 17, 1936	13.90	10,500	1948	April 1, 1948	6.71	2,140
1937	April 26, 1937	10.88	6,020	1949	June 18, 1949	10.42	8,580
1938	July 23, 1938	5.07	1,200	1950	September 10, 1950	6.77	2,510
1939	August 19, 1939	4.40	945	1951	December 4, 1950	8.60	4,340
1940	August 16, 1940	13.90	10,500	1952	March 11, 1952	9.01	5,420

**Table 30. 01626850 South River near Dooms, Va.**

LOCATION.--Latitude 38°05'19", Longitude 078°52'38", NAD27, Augusta County, Hydrologic Unit 02070005, on left bank at downstream side of Hopeman Parkway Road bridge, 1.1 mi downstream from Steele Run, and 1.6 mi southwest of Dooms.

DRAINAGE AREA.--148 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 1,247.04 ft NGVD of 1929 (Norfolk and Western Railway bench mark). Prior to Sept. 18, 1980, nonrecording gage at site 30 ft upstream at present datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 8,100 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--10 ft.

REGULATION.--High-flow conditions at this site are considered unregulated. After 1954, slight regulation by multiple flood-detention reservoirs.

REMARKS.--Records were provided by the Virginia Department of Environmental Quality - Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1975	March 19, 1975	12.02 <sup>1</sup>	8,000 <sup>2</sup>	1987	April 17, 1987	11.64	6,120
1976	October 9, 1975	6.31 <sup>1</sup>	1,620 <sup>2,3</sup>	1988	May 18, 1988	7.34	1,990
1977	October 9, 1976	11.31 <sup>1</sup>	6,040 <sup>2</sup>	1989	May 6, 1989	8.84	2,600
1978	January 26, 1978	10.86 <sup>1</sup>	5,260 <sup>2</sup>	1990	October 19, 1989	7.35	1,800
1979	September 5, 1979	11.09 <sup>1</sup>	5,630 <sup>2</sup>	1991	October 23, 1990	9.54	3,150
1980	April 14, 1980	9.46 <sup>1</sup>	3,510	1992	April 21, 1992	11.75	6,370
1981	February 11, 1981	4.00	630	1993	November 23, 1992	11.58	5,990
1982	June 13, 1982	6.65	1,780	1994	January 28, 1994	8.24	2,280
1983	March 19, 1983	11.07	5,570	1995	June 28, 1995	11.36	5,590
1984	August 12, 1984	8.06	2,560	1996	September 6, 1996	14.25	21,100
1985	August 18, 1985	10.20	4,260	2006	November 19, 2005	12.80	11,400
1986	November 4, 1985	14.03	19,100	2007	October 7, 2006	11.54	6,220

<sup>1</sup>Gage height at different site and (or) datum.

<sup>2</sup>Discharge actually greater than indicated value.

<sup>3</sup>Discharge is a maximum daily average.

**Table 31. 01627300 South River tributary near Harriston, Va.**

LOCATION.--Latitude 38°12'10", Longitude 078°50'10", NAD27, Augusta County, Hydrologic Unit 02070005, at culvert on U.S. Highway 340, 1.1 mi south of Harriston.

DRAINAGE AREA.--2.22 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 1,176.67 ft NGVD of 1929. Prior to Oct. 21, 1969, flood-hydrograph recorder at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--5 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1966		3.10 <sup>1</sup>	70.0 <sup>2,3</sup>	1971	May 30, 1971	5.79	280
1967	March 7, 1967	2.63	44.0	1972	June 21, 1972	5.57	253
1968		3.08 <sup>1</sup>	67.0 <sup>2,3</sup>	1973	October 6, 1972	6.09	318
1969	August 10, 1969	2.40	33.0	1974		3.10 <sup>1</sup>	70.0 <sup>2,3</sup>
1970	December 31, 1969	2.00	15.0	1975	March 19, 1975	6.10	319

<sup>1</sup>Gage height below minimum recordable elevation.

<sup>2</sup>Discharge is less than indicated value, which is minimum recordable discharge at this site.

<sup>3</sup>Month or day of occurrence is unknown or not exact.

**Table 32. 01627500 South River at Harriston, Va.**

LOCATION.--Latitude 38°13'07", Longitude 078°50'13", NAD27, Augusta County, Hydrologic Unit 02070005, on left bank 100 ft. downstream from bridge on State Highway 778, 0.3 mi northwest of Harriston, 0.6 mi downstream from Paine Run, and 7.2 mi upstream from confluence with North River.

DRAINAGE AREA.--212 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 1,129.87 ft NGVD of 1929. Prior to Sept. 1, 1938, nonrecording gage at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 10,200 ft<sup>3</sup>/s and extended above on basis of slope-area measurement at 28,500 ft<sup>3</sup>/s.

BANKFULL STAGE.--8 ft.

REGULATION.--High-flow conditions at this site are considered unregulated. After 1954, slight regulation by multiple flood-detention reservoirs.

REMARKS.--Peaks are from graph based on gage readings prior to Sept. 1, 1938, unless otherwise noted. Subsequent to Sept. 30, 1968, records were provided by the Virginia Department of Environmental Quality - Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1870	September 1870	18.80		1974	December 21, 1973	8.00	3,660
1878	November 1877	18.80		1975	March 19, 1975	12.20	12,400
1924	May 1924	16.60	21,000 <sup>1,2</sup>	1976	January 1, 1976	6.82	2,400
1926	January 18, 1926	7.50	2,770	1977	October 9, 1976	10.62	8,250
1927	November 16, 1926	10.00	6,100	1978	January 26, 1978	10.38	7,800
1928	September 20, 1928	11.90	10,100	1979	September 6, 1979	13.47	16,200
1929	May 3, 1929	10.00	6,100	1980	April 15, 1980	8.45	4,260
1930	October 22, 1929	10.00	6,100	1981	February 11, 1981	4.28	694
1931	August 22, 1931	7.30	2,550	1982	June 13, 1982	6.90	2,480
1932	March 28, 1932	5.90	1,430	1983	March 19, 1983	11.44	10,300
1933	October 17, 1932	11.50	8,700	1984	February 14, 1984	10.60	8,250
1934	September 16, 1934	8.50	3,960	1985	August 19, 1985	7.91	3,550
1935	December 1, 1934	11.30	8,340	1986	November 4, 1985	15.47	28,100
1936	March 18, 1936	13.07	12,600	1987	April 17, 1987	11.08	8,120
1937	April 26, 1937	13.00	11,700	1988	May 18, 1988	6.86	2,300
1938	November 13, 1937	8.20	3,590	1989	May 6, 1989	7.89	3,360
1939	August 19, 1939	5.64	1,260	1990	October 19, 1989	7.31	2,870
1940	August 16, 1940	12.91	12,100	1991	October 23, 1990	8.19	3,620
1941	April 5, 1941	6.00	1,540	1992	April 22, 1992	11.80	9,840
1942	May 16, 1942	10.21	6,420	1993	March 4, 1993	10.67	7,360
1943	October 15, 1942	17.20	23,100	1994	March 9, 1994	7.13	2,800
1944	September 19, 1944	11.33	8,340	1995	June 28, 1995	9.77	5,550
1945	September 18, 1945	12.80	11,300	1996	September 6, 1996	15.57	28,900
1946	May 5, 1946	5.26	998	1997	December 2, 1996	6.06	1,820
1947	March 14, 1947	7.53	2,660	1998	February 17, 1998	11.59	10,000

1948	February 14, 1948	8.52	3,960	1999	September 30, 1999	7.33	3,470
1949	June 18, 1949	11.06	7,980	2000	September 3, 2000	5.51	1,770
1950	September 10, 1950	8.52	3,960	2001	March 21, 2001	6.77	2,910
1951	December 4, 1950	10.64	7,100	2002	April 22, 2002	4.26	960
1969	August 20, 1969	12.72	11,100	2003	September 19, 2003	14.41	22,000
1970	December 31, 1969	5.78	1,720	2004	September 28, 2004	12.26	12,300
1971	May 30, 1971	11.93	9,460	2005	December 23, 2004	5.15	1,690
1972	June 21, 1972	15.25	21,300	2006	November 29, 2005	11.84	10,900
1973	October 5, 1972	13.24	15,300	2007	October 7, 2006	9.73	7,160

<sup>1</sup>Discharge is a historic peak.

<sup>2</sup>Month or day of occurrence is unknown or not exact.

**Table 33.** 01628000 South River at Port Republic, Va.

LOCATION.--Latitude 38°17'42", Longitude 078°48'36", NAD27, Rockingham County, Hydrologic Unit 02070005, at highway bridge just east of Port Republic, 300 ft upstream from confluence with North River.

DRAINAGE AREA.--234 mi<sup>2</sup>.

GAGE.--Nonrecording gage (staff gage). Datum of gage is 1,040 ft NGVD of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 1,600 ft<sup>3</sup>/s and extended above on basis of logarithmic plotting of flows at other sites in the Potomac River basin.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1896	September 29, 1896		9,700	1898	August 10, 1898		5,600
1897	May 2, 1897		5,800	1899	March 5, 1899		7,700 <sup>1</sup>

<sup>1</sup>Discharge is a maximum daily average.

**Table 34.** 01628060 White Oak Run near Grottoes, Va.

LOCATION.--Latitude 38°15'01", Longitude 078°44'57", NAD27, Rockingham County, Hydrologic Unit 02070005, Shenandoah National Park, on left bank 700 ft upstream from Madison Run, 0.2 mi south of Madison Run Forest Trail, 1.4 mi upstream from southwest boundary of Shenandoah National Park, and 4.3 mi southeast of Grottoes.

DRAINAGE AREA.--1.95 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 1,480 ft NGVD of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Based on current-meter measurements below 33 ft<sup>3</sup>/s and extended above by slope-area measurements of 200 ft<sup>3</sup>/s and 515 ft<sup>3</sup>/s.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1980	November 26, 1979	2.59	150	1989	May 1, 1989	3.09	111
1981	February 20, 1981	1.77	16.0	1990	October 17, 1989	3.04	106
1982	June 13, 1982	2.85	255	1991	July 2, 1991	3.76	183
1983	March 18, 1983	3.90	200	1992	April 21, 1992	4.20	237
1984	February 14, 1984	3.87	197	1993	March 4, 1993	3.19	116
1985	November 28, 1984	2.14	33.0	1994	August 17, 1994	3.29	131
1986	November 4, 1985	6.17	515	1995	June 27, 1995	4.32	252
1987	April 16, 1987	3.34	136	1996	September 6, 1996	6.25	530
1988	May 18, 1988	3.38	140				

**Table 35.** 01628150 Deep Run near Grottoes, Va.

LOCATION.--Latitude 38°16'23", Longitude 078°45'36", NAD27, Rockingham County, Hydrologic Unit 02070005, Shenandoah National Park, on right bank, 0.2 mi southeast of boundary of Shenandoah National Park, 0.5 mi upstream from culvert on State Highway 708, and 3.7 mi east of Grottoes.

DRAINAGE AREA.--1.18 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 1,480 ft NGVD of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 11 ft<sup>3</sup>/s and extended above by logarithmic plotting.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1980	April 30, 1980	2.10	43.0	1982	March 21, 1982	2.15	48.0
1981	June 3, 1981	1.31	5.50				

**Table 36. 01628500 South Fork Shenandoah River near Lynnwood, Va.**

LOCATION.--Latitude 38°19'21", Longitude 078°45'18", NAD27, Rockingham County, Hydrologic Unit 02070005, on left bank 1.2 mi northeast of Lynnwood and 3.3 mi downstream from confluence of North and South Rivers.

DRAINAGE AREA.--1,079 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 1,013.17 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 34,000 ft<sup>3</sup>/s and extended above on basis of computations of flow over dam at 49,300 ft<sup>3</sup>/s and 77,000 ft<sup>3</sup>/s.

BANKFULL STAGE.--10 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Maximum stage known since at least 1870, that of Nov. 5, 1985. Subsequent to Sept. 30, 1981, records were provided by the Virginia Department of Environmental Quality - Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1931	August 23, 1931	7.80	5,220	1970	December 31, 1969	11.66	10,800
1932	March 28, 1932	10.62	8,990	1971	May 30, 1971	19.43	31,700
1933	April 17, 1933	14.73	17,300	1972	June 22, 1972	23.45	50,700
1934	September 17, 1934	10.18	8,430	1973	October 6, 1972	21.92	42,600
1935	December 1, 1934	21.62	45,600	1974	December 27, 1973	15.73	19,800
1936	March 18, 1936	26.57	77,000	1975	March 19, 1975	20.44	35,800
1937	April 26, 1937	20.48	39,800	1976	January 1, 1976	12.76	12,800
1938	October 20, 1937	14.72	18,600	1977	October 9, 1976	17.99	26,500
1939	February 4, 1939	13.20	14,900	1978	January 26, 1978	16.74	22,700
1940	August 17, 1940	19.86	33,100	1979	September 6, 1979	17.89	26,200
1941	April 5, 1941	9.30	7,520	1980	April 15, 1980	12.06	11,600
1942	May 22, 1942	20.37	36,300	1981	July 5, 1981	7.59	5,010
1943	October 15, 1942	27.20	80,000	1982	June 13, 1982	13.52	14,500
1944	September 19, 1944	13.98	15,800	1983	March 19, 1983	14.87	17,600
1945	September 18, 1945	21.70	42,800	1984	February 14, 1984	15.21	18,400
1946	May 5, 1946	8.00	5,530	1985	February 12, 1985	10.84	9,450
1947	March 15, 1947	11.44	10,600	1986	November 5, 1985	29.46	95,100
1948	February 14, 1948	15.20	18,500	1987	April 17, 1987	19.29	33,900
1949	June 18, 1949	23.60	53,600	1988	May 19, 1988	7.41	5,050
1950	September 13, 1950	12.25	12,100	1989	May 2, 1989	11.57	11,100
1951	December 8, 1950	16.88	22,900	1990	October 19, 1989	10.05	8,480
1952	March 11, 1952	15.36	18,100	1991	October 23, 1990	12.15	12,300
1953	March 25, 1953	15.17	17,500	1992	April 22, 1992	17.91	28,700
1954	March 1, 1954	14.12	15,000	1993	March 4, 1993	19.45	34,500
1955	August 18, 1955	22.94	46,800	1994	March 29, 1994	12.92	14,200
1956	March 15, 1956	6.38	3,560	1995	January 16, 1995	14.81	19,200
1957	April 6, 1957	13.31	13,400	1996	September 7, 1996	30.84	107,000

1958	April 23, 1958	12.05	11,400	1997	December 2, 1996	10.21	8,740
1959	June 3, 1959	13.13	13,500	1998	February 18, 1998	17.49	27,600
1960	May 8, 1960	14.55	17,000	1999	September 30, 1999	8.21	6,040
1961	April 13, 1961	11.69	10,900	2000	September 3, 2000	6.58	3,980
1962	October 21, 1961	13.45	14,200	2001	March 21, 2001	11.63	11,200
1963	March 13, 1963	14.30	16,200	2002	April 22, 2002	9.29	7,550
1964	March 6, 1964	11.02	9,700	2003	September 19, 2003	22.40	48,400
1965	February 8, 1965	12.48	12,400	2004	September 29, 2004	18.92	32,900
1966	February 14, 1966	9.76	7,900	2005	March 29, 2005	8.33	6,200
1967	March 7, 1967	14.37	16,400	2006	November 30, 2005	17.81	28,700
1968	May 28, 1968	9.99	8,120	2007	November 17, 2006	14.79	19,100
1969	August 20, 1969	14.32	16,300				

---

**Table 37. 01628600 Cub Run tributary at Montevideo, Va.**

LOCATION.--Latitude 38°22'15", Longitude 078°47'00", NAD27, Rockingham County, Hydrologic Unit 02070005, at culvert on U.S. Highway 33, 1.0 mi northwest of Montevideo.

DRAINAGE AREA.--0.49 mi<sup>2</sup>.

GAGE.--Water-stage recorder (flood-hydrograph recorder). Datum of gage is 1,189.68 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--2 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1966	February 28, 1966	3.30	35.0	1971	May 30, 1971	4.40	66.0
1967	March 7, 1967	4.17	60.0	1972	June 21, 1972	5.12	91.0
1968	March 12, 1968	2.80	22.0	1973	October 5, 1972	5.23	95.0
1969	July 12, 1969	5.15	92.0	1974	December 26, 1973	3.40	36.0
1970		3.00 <sup>1</sup>	27.0 <sup>2,3</sup>	1975	July 25, 1975	4.70	75.0

<sup>1</sup>Gage height below minimum recordable elevation.

<sup>2</sup>Discharge is less than indicated value, which is minimum recordable discharge at this site.

<sup>3</sup>Month or day of occurrence is unknown or not exact.

**Table 38. 01629400 South Fork Shenandoah River tributary near Luray, Va.**

LOCATION.--Latitude 38°38'35", Longitude 078°33'20", NAD27, Page County, Hydrologic Unit 02070005, at culvert on U.S. Highway 211, 5.5 mi southwest of Luray.

DRAINAGE AREA.--0.66 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 776.14 ft NGVD of 1929. Prior to Apr. 3, 1975, flood-hydrograph recorder at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--5 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1966	February 28, 1966	3.80	20.0	1971	February 13, 1971	4.45	36.0
1967	July 2, 1967	6.60	102	1972	June 22, 1972	6.48	99.0
1968	March 13, 1968	4.30	33.0	1973	October 5, 1972	8.10	164
1969	September 20, 1969	5.40	62.0	1974	December 21, 1973	5.05	52.0
1970		4.00 <sup>1</sup>	25.0 <sup>2,3</sup>	1975	March 19, 1975	5.78	73.0

<sup>1</sup>Gage height below minimum recordable elevation.

<sup>2</sup>Discharge is less than indicated value, which is minimum recordable discharge at this site.

<sup>3</sup>Month or day of occurrence is unknown or not exact.

**Table 39. 01629500 South Fork Shenandoah River near Luray, Va.**

LOCATION.--Latitude 38°38'46", Longitude 078°32'06", NAD27, Page County, Hydrologic Unit 02070005, on right bank between bridges on U.S. Highway 211, 1.2 mi downstream from Big Run, 2.2 mi upstream from Mill Creek, and 4.1 mi west of Luray.

DRAINAGE AREA.--1,372 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 721.76 ft NGVD of 1929. April 1925 to September 1930, nonrecording gage at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 86,300 ft<sup>3</sup>/s and extended above by logarithmic plotting.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Peaks are from graphs based on gage readings prior to Oct. 1, 1930, unless otherwise noted. Subsequent to May 31, 1979, records were provided by the Virginia Department of Environmental Quality - Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1897	October 1896	25.40		1983	March 19, 1983	13.99	25,800
1924	May 1924	22.50	72,800 <sup>1,2</sup>	1984	February 14, 1984	15.62	32,300
1926	January 19, 1926	7.80	7,420	1985	February 13, 1985	9.98	13,400
1927	November 17, 1926	11.11	15,100	1986	November 5, 1985	26.72	110,000
1928	September 20, 1928	11.10	15,100	1987	April 17, 1987	18.50	47,000
1929	April 17, 1929	13.20	20,300	1988	May 19, 1988	7.69	7,870
1930	October 23, 1929	12.00	17,300	1989	May 2, 1989	11.40	17,300
1936	March 18, 1936	23.60	81,600 <sup>1</sup>	1990	October 19, 1989	9.31	11,700
1939	February 4, 1939	11.90	17,000	1991	October 23, 1990	11.30	17,000
1940	August 17, 1940	17.87	41,100	1992	April 22, 1992	16.33	35,600
1941	April 6, 1941	8.34	8,260	1993	March 5, 1993	17.18	39,700
1942	May 23, 1942	17.82	40,500	1994	March 29, 1994	12.30	19,900
1943	October 16, 1942	25.70	100,000	1995	January 16, 1995	13.62	24,400
1944	September 19, 1944	11.77	16,100	1996	September 7, 1996	26.95	112,000
1945	September 19, 1945	18.36	44,100	1997	December 2, 1996	9.40	12,000
1946	May 5, 1946	7.36	6,320	1998	January 8, 1998	16.39	36,700
1947	March 15, 1947	9.75	11,200	1999	September 30, 1999	8.26	9,760
1948	February 15, 1948	12.66	18,600	2000	March 22, 2000	6.20	5,550
1949	June 18, 1949	20.46	58,100	2001	March 22, 2001	9.72	13,000
1950	September 13, 1950	9.96	11,200	2002	April 23, 2002	8.28	9,810
1951	December 8, 1950	15.18	26,900	2003	September 20, 2003	19.11	50,600
1979	September 6, 1979	15.73	32,700	2004	September 29, 2004	16.24	36,000
1980	October 6, 1979	10.51	14,900	2005	March 29, 2005	7.58	7,920
1981	July 6, 1981	6.93	5,470	2006	November 30, 2005	15.77	33,800

1982	June 14, 1982	12.18	19,600	2007	November 17, 2006	12.88	21,900
------	---------------	-------	--------	------	-------------------	-------	--------

---

<sup>1</sup>Discharge is a historic peak.

<sup>2</sup>Month or day of occurrence is unknown or not exact.

**Table 40. 01629945 Chub Run near Stanley, Va.**

LOCATION.--Latitude 38°34'31", Longitude 078°27'32", NAD27, Page County, Hydrologic Unit 02070005, at culvert on State Highway 689, 2.2 mi east of Stanley, and 3.1 mi upstream from mouth.

DRAINAGE AREA.--3.00 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 1,023.05 ft NGVD of 1929. Prior to 1970, recording gage with concrete control at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by computation of flow over V-notched weir.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Prior to 1970, records were provided by the U.S. Department of Agriculture, Soil Conservation Service.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1959	January 30, 1959	4.13	422	1984	February 14, 1984	3.94	393
1960	February 18, 1960	1.43	95.0	1985	February 4, 1985	4.19	428
1961	April 12, 1961	1.57	117	1986	November 4, 1985	9.66	
1962	June 19, 1962	2.29	190	1987	April 16, 1987	2.65	238
1963	November 9, 1962	1.89	148	1988	November 29, 1987	2.42	210
1964	January 9, 1964	1.31	71.0	1989	May 2, 1989	2.28	194
1965	March 5, 1965	1.21	56.0	1990	October 19, 1989	1.81	139
1966	July 5, 1966	1.17	50.0	1991	October 23, 1990	4.48	472
1967	March 7, 1967	1.47	103	1992	April 21, 1992	5.02	553
1968	January 14, 1968	1.14	46.0	1993	December 17, 1992	2.69	243
1969	January 24, 1969	0.88	20.0	1994	November 28, 1993	2.22	186
1970	July 9, 1970	4.13	422	1995	January 15, 1995	2.89	267
1971	February 13, 1971	1.08	41.0	1996	September 6, 1996	10.08	
1972	June 22, 1972	4.48	473	1997		2.14 <sup>1</sup>	177 <sup>2,3</sup>
1973	October 5, 1972	5.98	705	1998	February 5, 1998	4.57	486
1974	October 29, 1973	2.26	191	1999	September 30, 1999	0.96	29
1975	March 19, 1975	5.23	584	2000		2.14 <sup>1</sup>	177 <sup>2,3</sup>
1976	December 31, 1975	2.03	164	2001		2.14 <sup>1</sup>	177 <sup>2,3</sup>
1977	October 9, 1976	4.11	416	2002		2.14 <sup>1</sup>	177 <sup>2,3</sup>
1978	November 7, 1977	6.26	752	2003	September 19, 2003	8.23	1,100
1979	September 6, 1979	4.28	442	2004	December 10, 2003	4.08	422
1980	October 5, 1979	2.49	219	2005		2.14 <sup>1</sup>	98 <sup>2,3</sup>
1981	June 4, 1981	1.43	95.0	2006		2.14 <sup>1</sup>	98 <sup>2,3</sup>
1982	June 13, 1982	1.52	110	2007		2.14 <sup>1</sup>	98 <sup>2,3</sup>
1983	May 16, 1983	1.97	156				

<sup>1</sup>Gage height below minimum recordable elevation.

<sup>2</sup>Discharge is less than indicated value, which is minimum recordable discharge at this site.

<sup>3</sup>Month or day of occurrence is unknown or not exact.

**Table 41. 01630700 Gooney Run near Glen Echo, Va.**

LOCATION.--Latitude 38°50'06", Longitude 078°13'56", NAD27, Warren County, Hydrologic Unit 02070005, on right bank along State Highway 649 (Browntown Road), 40 ft upstream from bridge on State Highway 622, 6.3 mi southwest of Front Royal, and 1.1 mi south of Glen Echo.

DRAINAGE AREA.--20.5 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 810.97 ft NAVD of 1988.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

<b>Water year</b>	<b>Date</b>	<b>Gage height (ft)</b>	<b>Discharge (ft<sup>3</sup>/s)</b>	<b>Water year</b>	<b>Date</b>	<b>Gage height (ft)</b>	<b>Discharge (ft<sup>3</sup>/s)</b>
Annual maximum stages and discharges							
2003	September 19, 2003	8.89	2,650	2006	June 27, 2006	7.71 <sup>1</sup>	1,940
2004	September 17, 2004	8.08	2,080	2007	November 16, 2006	6.02	1,180
2005	May 14, 2005	5.53	917				

<sup>1</sup>Gage height is not the maximum for the year.

**Table 42. 01631000 South Fork Shenandoah River at Front Royal, Va.**

LOCATION.--Latitude 38°54'50", Longitude 078°12'40", NAD27, Warren County, Hydrologic Unit 02070005, on left bank 0.7 mi downstream from bridge on Stat. Highway 619, 1.0 mi west of Front Royal, and 3.5 mi upstream from confluence with North Fork.

DRAINAGE AREA.--1,634 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 469.38 ft NGVD of 1929. June 1899 to July 1906, nonrecording gage at site 1.0 mi upstream at different datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 5,700 ft<sup>3</sup>/s at 1899-1906 site. Defined by current-meter measurements below 92,000 ft<sup>3</sup>/s and extended above on basis of slope-area measurement at 130,000 ft<sup>3</sup>/s at present site.

BANKFULL STAGE.--7 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Peaks are from graphs based on gage readings prior to September 1930, unless otherwise noted. Until November 1985, the flood peak of March 1936 was the highest known since at least 1870, from information by local residents.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1900	January 21, 1900		12,800 <sup>1</sup>	1967	March 8, 1967	11.78	23,400
1901	April 21, 1901		46,200 <sup>1</sup>	1968	May 29, 1968	7.40	10,400
1902	March 1, 1902	23.50 <sup>2</sup>	76,800	1969	August 21, 1969	9.35	15,500
1903	March 1, 1903	13.70 <sup>2</sup>	22,800	1970	January 1, 1970	8.58	13,300
1904	July 11, 1904	10.20 <sup>2</sup>	11,400	1971	May 31, 1971	17.86	46,600
1905	June 25, 1905	9.80 <sup>2</sup>	10,400	1972	June 22, 1972	23.98	75,100
1931	August 24, 1931	5.12	5,550	1973	October 7, 1972	21.35	62,500
1932	May 13, 1932	8.23	12,100	1974	December 27, 1973	13.32	29,000
1933	April 18, 1933	11.65	21,600	1975	March 20, 1975	18.74	50,500
1934	September 18, 1934	7.18	9,620	1976	January 2, 1976	9.87	17,200
1935	December 2, 1934	17.99	47,400	1977	October 10, 1976	14.12	31,900
1936	March 18, 1936	26.01	98,000	1978	January 27, 1978	14.13	32,000
1937	April 27, 1937	18.94	51,500	1979	February 26, 1979	14.43	33,100
1938	October 21, 1937	11.65	23,600	1980	October 6, 1979	9.35	15,500
1939	February 5, 1939	9.90	17,400	1981	July 6, 1981	4.90	5,420
1940	August 17, 1940	15.86	40,400	1982	June 14, 1982	10.38	18,900
1941	April 6, 1941	6.96	9,220	1983	March 20, 1983	12.61	26,500
1942	May 23, 1942	16.20	41,400	1984	February 15, 1984	15.85	38,500
1943	October 16, 1942	34.80	130,000	1985	February 13, 1985	8.39	13,000
1944	September 20, 1944	10.00	17,600	1986	November 6, 1985	32.43	120,000
1945	September 19, 1945	17.80	49,200	1987	April 18, 1987	18.51	49,400
1946	May 5, 1946	5.94	6,930	1988	May 7, 1988	6.18	7,850
1947	March 15, 1947	8.12	12,000	1989	May 7, 1989	10.16	18,200
1948	February 15, 1948	10.70	19,900	1990	October 20, 1989	7.72	11,300
1949	June 19, 1949	19.20	52,900	1991	October 24, 1990	10.05	17,900

1950	September 14, 1950	7.89	11,400	1992	April 23, 1992	15.03	35,300
1951	December 5, 1950	13.64	30,000	1993	March 5, 1993	16.55	41,200
1952	March 12, 1952	11.20	21,600	1994	March 30, 1994	11.00	20,900
1953	March 26, 1953	12.44	25,800	1995	January 16, 1995	11.69	23,300
1954	March 2, 1954	10.74	19,900	1996	September 7, 1996	32.57	121,000
1955	August 19, 1955	22.54	68,200	1997	December 3, 1996	7.73	11,300
1956	March 16, 1956	4.69	4,950	1998	January 9, 1998	15.42	36,800
1957	April 6, 1957	10.16	18,200	1999	March 19, 1999	4.58	4,900
1958	April 24, 1958	8.87	14,200	2000	October 1, 1999	6.20	7,890
1959	June 3, 1959	9.50	16,000	2001	March 22, 2001	8.79	14,100
1960	May 9, 1960	11.75	23,700	2002	April 23, 2002	6.24	7,960
1961	April 14, 1961	9.12	14,800	2003	September 19, 2003	18.07	47,500
1962	March 22, 1962	9.51	16,000	2004	September 29, 2004	14.77	34,400
1963	March 13, 1963	11.07	21,200	2005	March 30, 2005	6.09	7,670
1964	March 6, 1964	7.74	11,000	2006	November 30, 2005	13.64	30,200
1965	February 9, 1965	8.90	14,200	2007	November 17, 2006	10.71	20,000
1966	February 15, 1966	6.65	8,700				

---

<sup>1</sup>Discharge is a maximum daily average.

<sup>2</sup>Gage height at different site and (or) datum.

**Table 43. 01632000 North Fork Shenandoah River at Cootes Store, Va.**

LOCATION.--Latitude 38°38'13", Longitude 078°51'11", NAD27, Rockingham County, Hydrologic Unit 02070006, on right bank at Cootes Store, 300 ft upstream from bridge on State Highway 259, and 3.7 mi upstream from Linville Creek.

DRAINAGE AREA.--210 mi<sup>2</sup>.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,051.8 ft NGVD of 1929 (U.S. Army Corps of Engineers bench mark). Prior to Nov. 15, 1937, nonrecording gage at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 9,000 ft<sup>3</sup>/s and extended above on basis of contracted-opening measurement at 50,000 ft<sup>3</sup>/s. A change in relation below gage height 15 ft occurred in October 1942.

BANKFULL STAGE.--6 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Peaks are from graphs based on gage readings prior to Nov. 15, 1957, unless otherwise noted. Flood peak of October 1942 is highest known since at least 1836, from information by local residents.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1878	October 1877	20.90		1966	February 28, 1966	7.31	2,690
1889	June 1889	18.80		1967	March 7, 1967	13.70	11,500
1924	May 1924	16.70	17,800 <sup>1,2</sup>	1968	December 11, 1967	9.16	4,610
1926	August 25, 1926	9.60	4,230	1969	August 1, 1969	10.20	5,910
1927	November 16, 1926	14.00	11,400	1970	July 9, 1970	16.55	17,400
1928	April 30, 1928	11.00	6,000	1971	May 30, 1971	13.63	11,300
1929	April 16, 1929	15.40	14,600	1972	June 22, 1972	14.98	13,900
1930	October 22, 1929	12.00	7,600	1973	October 5, 1972	19.50	26,400
1931	August 23, 1931	7.00	1,600	1974	June 2, 1974	14.47	12,800
1932	February 4, 1932	10.20	4,880	1975	March 19, 1975	17.29	19,500
1933	April 17, 1933	11.70	7,120	1976	January 1, 1976	12.75	9,800
1934	September 16, 1934	8.50	2,860	1977	October 9, 1976	16.98	18,500
1935	December 1, 1934	19.00	24,600	1978	November 7, 1977	14.81	13,500
1936	March 17, 1936	23.25	40,500	1979	September 5, 1979	15.69	15,500
1937	April 25, 1937	17.00	18,600	1980	October 2, 1979	15.25	14,600
1938	October 28, 1937	10.00	4,600	1981	May 28, 1981	6.08	1,770
1939	February 3, 1939	12.84	9,040	1982	June 13, 1982	10.56	6,470
1940	May 31, 1940	11.70	6,800	1983	March 19, 1983	10.56	6,470
1941	April 5, 1941	10.26	5,040	1984	December 12, 1983	11.54	7,880
1942	May 22, 1942	16.93	18,300	1985	May 31, 1985	9.01	4,850
1943	October 15, 1942	25.30	50,000	1986	November 4, 1985	25.13	49,200
1944	May 24, 1944	11.45	7,640	1987	April 16, 1987	13.72	12,000
1945	September 18, 1945	15.90	15,800	1988	May 6, 1988	10.94	7,580
1946	May 4, 1946	9.73	5,260	1989	May 2, 1989	7.26	3,330
1947	March 14, 1947	7.28	2,800	1990	May 29, 1990	7.16	3,240
1948	August 11, 1948	9.35	4,900	1991	March 23, 1991	12.44	9,860
1949	June 28, 1949	14.84	13,500	1992	April 21, 1992	13.35	11,400

1950	September 13, 1950	14.36	12,700	1993	March 4, 1993	14.71	13,800
1951	December 4, 1950	13.89	11,800	1994	August 17, 1994	15.26	14,800
1952	March 11, 1952	13.01	10,200	1995	January 15, 1995	12.61	10,100
1953	March 24, 1953	11.93	8,440	1996	September 6, 1996	27.86	63,400
1954	March 1, 1954	11.88	8,440	1997	November 8, 1996	8.38	6,160
1955	August 18, 1955	16.60	17,500	1998	February 17, 1998	10.97	10,700
1956	August 6, 1956	7.86	3,170	1999	September 6, 1999	6.87	3,810
1957	April 5, 1957	10.59	6,440	2000	June 14, 2000	5.68	2,240
1958	July 27, 1958	7.54	2,770	2001	June 22, 2001	12.37	13,600
1959	June 2, 1959	13.91	11,800	2002	April 22, 2002	10.70	10,200
1960	May 8, 1960	14.25	12,400	2003	September 19, 2003	15.22	20,400
1961	February 19, 1961	9.37	4,900	2004	September 28, 2004	13.09	15,200
1962	March 21, 1962	10.33	6,040	2005	March 28, 2005	7.67	5,100
1963	March 19, 1963	13.80	11,600	2006	November 29, 2005	14.63	18,900
1964	March 3, 1964	9.85	5,390	2007	November 16, 2006	14.09	17,600
1965	February 7, 1965	11.02	7,000				

<sup>1</sup>Discharge is a historic peak.

<sup>2</sup>Month or day of occurrence is unknown or not exact.

**Table 44. 01632082 Linville Creek at Broadway, Va.**

LOCATION.--Latitude 38°36'24", Longitude 078°48'13", NAD27, Rockingham County, Hydrologic Unit 02070006, on left bank at Linville, 170 ft downstream from bridge on State Highway 1421, and 1.1 mi upstream from south.

DRAINAGE AREA.--45.7 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 1,029.90 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 3,100 ft<sup>3</sup>/s and extended above, by logarithmic plotting.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Records were provided by the Virginia Department of Environmental Quality - Water Division.

<b>Water year</b>	<b>Date</b>	<b>Gage height (ft)</b>	<b>Discharge (ft<sup>3</sup>/s)</b>	<b>Water year</b>	<b>Date</b>	<b>Gage height (ft)</b>	<b>Discharge (ft<sup>3</sup>/s)</b>
Annual maximum stages and discharges							
1986	November 4, 1985	6.22	3,160	1997	March 3, 1997	5.38	1,850
1987	April 16, 1987	5.07	1,950	1998	January 8, 1998	5.71	2,200
1988	January 20, 1988	2.89	421	1999	September 30, 1999	3.97	712
1989	May 16, 1989	3.90	970	2000	September 25, 2000	3.69	551
1990	August 25, 1990	3.71	846	2001	April 10, 2001	4.62	1,170
1991	March 23, 1991	4.69	1,590	2002	June 14, 2002	3.50	458
1992	April 21, 1992	4.68	1,580	2003	September 19, 2003	10.54	10,500
1993	March 4, 1993	6.07	3,000	2004	September 28, 2004	6.86	3,620
1994	August 17, 1994	4.94	1,820	2005	August 6, 2005	3.94	693
1995	July 27, 1995	5.54	2,420	2006	June 27, 2006	5.46	1,930
1996	September 6, 1996	13.23	17,800	2007	November 16, 2006	6.85	3,610

**Table 45. 01632300 Long Meadow near Broadway, Va.**

(Formerly published as Long Glade Run near Broadway.)

LOCATION.--Latitude 38°34'43", Longitude 078°45'40", NAD27, Rockingham County, Hydrologic Unit 02070006, at bridge on State Highway 259, 3.2 mi southeast of Broadway.

DRAINAGE AREA.--7.94 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 1,080 ft NGVD of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by step-backwater computations and contracted-opening and flow-over-road measurements at 195 ft<sup>3</sup>/s and 1,260 ft<sup>3</sup>/s.

BANKFULL STAGE.--3 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1950	September 13, 1950	3.80	250	1965	February 27, 1965	2.06	18.0
1951	December 7, 1950	2.60	53.0	1967	August 24, 1967	2.88	82.0
1952	August 1952	2.98	97.0 <sup>1</sup>	1968	March 12, 1968	2.44	40.0
1953	May 15, 1953	3.35	152	1969	September 3, 1969	3.48	176
1954	March 1, 1954	2.45	34.0	1970	June 4, 1970	2.61	54.0
1955	October 15, 1954	4.03	309	1971	February 13, 1971	4.66	586
1958	July 27, 1958	3.87	266	1972	June 22, 1972	3.75	238
1959	September 30, 1959	3.98	295	1973	October 5, 1972	5.43	1,410
1960	May 8, 1960	3.00	100	1974	October 29, 1973	3.45	170
1961	July 22, 1961	3.00	100	1975	September 26, 1975	2.89	84.0
1962	May 27, 1962	4.03	315	1976		2.30 <sup>2</sup>	31.0 <sup>1,3</sup>
1963	March 19, 1963	3.18	127	1977	October 9, 1976	2.89	84.0
1964	March 3, 1964	4.09	327				

<sup>1</sup>Month or day of occurrence is unknown or not exact.

<sup>2</sup>Gage height below minimum recordable elevation.

<sup>3</sup>Discharge is less than indicated value, which is minimum recordable discharge at this site.

**Table 46. 01632900 Smith Creek near New Market, Va.**

LOCATION.--Latitude 38°41'36", Longitude 078°38'35", NAD27, Shenandoah County, Hydrologic Unit 02070006, on left bank 25 ft upstream from bridge on State Highway 616, 3.6 mi north of New Market, and 4.4 mi upstream from mouth.

DRAINAGE AREA.--93.6 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 881.50 ft NGVD of 1929. Prior to Aug. 2, 1963, water-stage recorder on right bank a short distance downstream at datum of 882.21 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 2,230 ft<sup>3</sup>/s and extended above on basis of contracted-opening measurement at 10,600 ft<sup>3</sup>/s.

BANKFULL STAGE.--6 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Records were provided by the Virginia Department of Environmental Quality - Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1960	October 1, 1959	10.70 <sup>1</sup>		1984	February 14, 1984	11.93	4,790
1961	April 13, 1961	7.06 <sup>1</sup>	1,210	1985	February 12, 1985	10.11	2,950
1962	March 21, 1962	8.00 <sup>1</sup>	1,680	1986	November 5, 1985	13.01	6,050
1963	March 19, 1963	9.10 <sup>1</sup>	2,700	1987	April 17, 1987	11.20	4,020
1964	January 21, 1964	7.55	1,300	1988	May 19, 1988	10.06	2,910
1965	February 8, 1965	7.78	1,380	1989	July 12, 1989	6.25	1,030
1966	February 28, 1966	5.82	722	1990	January 1, 1990	7.72	
1967	March 7, 1967	9.93	2,770	1991	October 23, 1990	9.53	2,470
1968	March 13, 1968	7.22	1,100	1992	April 22, 1992	9.31	2,310
1969	August 10, 1969	6.66	935	1993	March 4, 1993	11.52	4,360
1970	April 23, 1970	6.03	745	1994	November 28, 1993	10.60	3,390
1971	February 13, 1971	9.96	2,860	1995	July 22, 1995	6.08	984
1972	June 22, 1972	13.22	6,280	1996	September 6, 1996	17.62	12,400
1973	October 6, 1972	16.38	10,600	1997	March 4, 1997	9.47	2,430
1974	December 26, 1973	11.08	3,920	1998	January 8, 1998	9.78	2,660
1975	March 19, 1975	11.48	4,340	1999	September 30, 1999	5.91	917
1976	January 1, 1976	8.35	1,660	2000	September 26, 2000	4.25	472
1977	October 9, 1976	11.90	4,760	2001	August 12, 2001	9.30	2,300
1978	March 14, 1978	10.62	3,400	2002	April 22, 2002	5.36	600
1979	February 25, 1979	9.30	2,260	2003	September 19, 2003	16.25	10,300
1980	October 5, 1979	8.07	1,500	2004	September 29, 2004	9.95	2,810
1981	February 11, 1981	3.25	229	2005	December 9, 2004	4.44	456
1982	March 20, 1982	8.43	1,680	2006	June 28, 2006	11.91	3,710
1983	May 16, 1983	8.36	1,640	2007	November 16, 2006	6.52	839

<sup>1</sup>Gage height at different site and (or) datum.

**Table 47. 01632950 Crooked Run tributary near Conicville, Va.**

LOCATION.--Latitude 38°47'55", Longitude 078°43'25", NAD27, Shenandoah County, Hydrologic Unit 02070006, at culvert on State Highway 42, 2.7 mi southwest of Conicville.

DRAINAGE AREA.--0.34 mi<sup>2</sup>.

GAGE.--Water-stage recorder (flood-hydrograph recorder). Datum of gage is 1,207.56 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--4 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1966	February 28, 1966	3.82	15.0	1971	February 13, 1971	4.10	22.0
1967	March 7, 1967	4.32	26.0	1972	June 22, 1972	4.72	34.0
1968	December 10, 1967	3.65	12.0	1973	October 5, 1972	4.37	27.0
1969	July 21, 1969	4.13	23.0	1974	June 2, 1974	5.15	44.0
1970	June 16, 1970	3.62	12.0	1975	March 19, 1975	4.83	37.0

**Table 48. 01632970 Crooked Run near Mount Jackson, Va.**

LOCATION.--Latitude 38°45'44", Longitude 078°41'06", NAD27, Shenandoah County, Hydrologic Unit 02070006, on right upstream wingwall of culvert on State Highway 263, 0.4 mi upstream from mouth, and 2.3 mi west of Mount Jackson.

DRAINAGE AREA.--6.61 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 962.84 ft NGVD of 1929. Prior to Aug. 18, 1978, flood-hydrograph recorder at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--3 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1972	June 22, 1972	5.17	326	1990	April 7, 1990	3.83	137
1973	June 4, 1973	5.65	405	1991	March 23, 1991	5.60	396
1974	June 2, 1974	5.25	338	1992	April 21, 1992	4.21	180
1975	July 25, 1975	7.20	697	1993	December 10, 1992	5.32	350
1976	December 31, 1975	5.17	326	1994	August 17, 1994	6.68	604
1977	October 9, 1976	7.25	706	1995	June 27, 1995	3.73	127
1978	August 7, 1978	8.90	1,040	1996	January 19, 1996	11.34	1,640
1979	March 9, 1979	7.14	686	1997	March 3, 1997	3.61	116
1980	October 5, 1979	4.29	189	1998	January 8, 1998	3.68	123
1981	June 14, 1981	3.03	62.2	1999	September 30, 1999	3.81	135
1982	February 3, 1982	3.94	149	2000	December 14, 1999	3.33	87.4
1983	May 17, 1983	4.04	160	2001	April 1, 2001	7.97	846
1984	February 14, 1984	4.59	229	2002		2.91 <sup>1</sup>	52.9 <sup>2,3</sup>
1985	February 12, 1985	5.80	432	2003	September 19, 2003	3.97	152
1986	November 4, 1985	7.24	705	2004	September 28, 2004	5.95	476
1987	September 8, 1987	3.53	107	2005	December 10, 2004	3.54	108
1988	May 6, 1988	3.38	92.1	2006	June 27, 2006	5.28	343
1989	July 12, 1989	5.65	405	2007	November 16, 2006	3.65	120

<sup>1</sup>Gage height below minimum recordable elevation.

<sup>2</sup>Discharge is less than indicated value, which is minimum recordable discharge at this site.

<sup>3</sup>Month or day of occurrence is unknown or not exact.

**Table 49. 01633000 North Fork Shenandoah River at Mount Jackson, Va.**

LOCATION.--Latitude 38°44'44", Longitude 078°38'21", NAD27, Shenandoah County, Hydrologic Unit 02070006, on right bank at upstream side of bridge on State Highway 698 at Mount Jackson and 0.4 mi downstream from Mill Creek.

DRAINAGE AREA.--508 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 838.55 ft NGVD of 1929. Prior to July 1, 1976, nonrecording gage, at present site and present datum. July 1, 1976, to Oct. 23, 1981, water-stage recorder, at site 400 ft upstream at present datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 18,000 ft<sup>3</sup>/s and extended above on basis of peak runoff for flood in October 1942 for stations at Cootes Store and near Strasburg.

BANKFULL STAGE.--9 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Subsequent to June 30, 1957, records were provided by the Virginia Department of Environmental Quality - Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1943	October 1942	20.20 <sup>1</sup>	80,000 <sup>2,3</sup>	1976	January 1, 1976	12.29 <sup>1</sup>	9,800
1944	May 7, 1944	11.35 <sup>1</sup>	8,100	1977	October 9, 1976	16.00 <sup>1</sup>	20,700
1945	September 18, 1945	16.00 <sup>1</sup>	19,000	1978	January 26, 1978	14.78 <sup>1</sup>	16,100
1946	May 4, 1946	10.02 <sup>1</sup>	6,800	1979	September 6, 1979	14.63 <sup>1</sup>	15,500
1947	March 14, 1947	8.00 <sup>1</sup>	3,800	1980	October 3, 1979	14.22 <sup>1</sup>	14,300
1948	February 14, 1948	11.30 <sup>1</sup>	8,050	1981	May 29, 1981	5.97 <sup>1</sup>	1,740
1949	June 28, 1949	12.60 <sup>1</sup>	10,000	1982	June 13, 1982	11.15	7,840
1950	September 13, 1950	13.00 <sup>1</sup>	10,600	1983	April 15, 1983	11.51	8,420
1951	December 4, 1950	15.20 <sup>1</sup>	15,600	1984	February 14, 1984	14.06	15,500
1952	March 11, 1952	13.95 <sup>1</sup>	12,500	1985	February 12, 1985	9.90	6,960
1953	November 21, 1952	13.50 <sup>1</sup>	11,600	1986	November 5, 1985	17.79	50,800
1954	March 1, 1954	13.60 <sup>1</sup>	11,800	1987	April 17, 1987	15.08	19,600
1955	August 18, 1955	17.32 <sup>1</sup>	30,000	1988	May 6, 1988	12.74	12,500
1956	August 6, 1956	7.30 <sup>1</sup>	3,300	1989	May 2, 1989	8.95	5,570
1957	April 5, 1957	11.40 <sup>1</sup>	8,200	1990	May 29, 1990	8.79	5,350
1958	August 13, 1958	9.23 <sup>1</sup>	5,340	1991	March 23, 1991	13.88	15,000
1959	June 2, 1959	13.98 <sup>1</sup>	12,600	1992	April 22, 1992	14.22	16,000
1960	October 1, 1959	14.95 <sup>1</sup>	15,000	1993	March 4, 1993	15.26	20,700
1961	April 13, 1961	10.83 <sup>1</sup>	7,340	1994	August 18, 1994	15.11	19,800
1962	March 21, 1962	11.27 <sup>1</sup>	8,050	1995	January 15, 1995	13.14	13,400
1963	March 20, 1963	14.65 <sup>1</sup>	13,800	1996	September 6, 1996	22.17	103,000
1964	March 3, 1964	10.61 <sup>1</sup>	7,080	1997	March 3, 1997	11.92	10,200
1965	February 8, 1965	12.09 <sup>1</sup>	9,250	1998	January 8, 1998	13.54	13,300
1966	March 1, 1966	8.08 <sup>1</sup>	4,110	1999	September 6, 1999	7.95	4,260
1967	March 7, 1967	14.30 <sup>1</sup>	14,600	2000	February 19, 2000	6.09	2,260
1968	March 17, 1968	11.21 <sup>1</sup>	7,920	2001	June 23, 2001	14.15	14,900
1969	August 2, 1969	9.29 <sup>1</sup>	5,460	2002	April 22, 2002	12.21	10,800

1970	July 10, 1970	9.90 <sup>1</sup>	6,180	2003	September 19, 2003	16.36	27,900
1971	February 13, 1971	14.30 <sup>1</sup>	14,600	2004	September 28, 2004	14.11	14,700
1972	June 22, 1972	16.08 <sup>1</sup>	21,200	2005	March 28, 2005	8.92	5,510
1973	October 6, 1972	18.10 <sup>1</sup>	40,500	2006	November 30, 2005	14.12	14,800
1974	December 26, 1973	14.85 <sup>1</sup>	16,100	2007	November 16, 2006	14.08	14,600
1975	March 19, 1975	17.00 <sup>1</sup>	14,000 <sup>4,5</sup>				

---

<sup>1</sup>Gage height at different site and (or) datum.

<sup>2</sup>Discharge is a historic peak.

<sup>3</sup>Month or day of occurrence is unknown or not exact.

<sup>4</sup>Discharge is a maximum daily average.

<sup>5</sup>Discharge actually greater than indicated value.

**Table 50. 01633500 Stony Creek at Columbia Furnace, Va.**

LOCATION.--Latitude 38°51'55", Longitude 078°37'45", NAD27, Shenandoah County, Hydrologic Unit 02070006, at footbridge 0.8 mi south of Columbia Furnace, 3.6 mi downstream from Little Stony Creek, and 6.4 mi upstream from mouth.

DRAINAGE AREA.--77.5 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 895.29 ft NGVD of 1929. Prior to Nov. 21, 1950, nonrecording staff gage at present site and datum. Since September 1955, crest-stage gage at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 1,200 ft<sup>3</sup>/s and extended above on basis of slope-area measurement at 4,290 ft<sup>3</sup>/s.

BANKFULL STAGE.--4 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Peaks are from graphs based on gage readings prior to Nov. 21, 1950, and from crest-stage gage thereafter. Flood peak of October 1942 is highest known for at least prior 30 years, from information by local resident.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1936	March 1936	7.50		1961	April 13, 1961	5.03	1,670
1943	October 1942	11.50	13,000 <sup>1,2,3</sup>	1962	March 6, 1962	4.22	1,110
1945	September 1945	5.00		1963	March 19, 1963	6.23	2,800
1947	March 14, 1947	3.30	670	1964	March 3, 1964	3.50	810 <sup>2</sup>
1948	April 14, 1948	5.30	1,920	1965	February 7, 1965	4.75	1,510
1949	May 2, 1949	6.60	3,250	1966		3.60 <sup>4</sup>	850 <sup>3,5,6</sup>
1950	May 28, 1950	4.40	1,160	1967	March 7, 1967	4.25	1,110
1951	December 4, 1950	6.80	3,490	1968	January 14, 1968	3.85	930
1952	March 11, 1952	5.97	2,590	1969	August 4, 1969	4.30	1,170
1953	March 24, 1953	6.17	2,530	1970	July 9, 1970	4.50	1,300
1954	March 1, 1954	6.66	3,370	1971	February 13, 1971	5.55	2,140
1955	August 18, 1955	7.97	4,990	1972	June 22, 1972	9.17	6,850
1956	March 14, 1956	3.65	850	1973	October 6, 1972	7.85	4,840
1957	April 5, 1957	4.80	1,510	1974	October 29, 1973	5.96	2,550
1958	July 27, 1958	4.88	1,590	1975	September 26, 1975	6.48	3,110
1959	September 30, 1959	9.20	6,900	1976	January 1, 1976	6.52	3,150
1960	May 8, 1960	7.04	3,700				

<sup>1</sup>Discharge is a historic peak.

<sup>2</sup>Discharge is an estimate.

<sup>3</sup>Month or day of occurrence is unknown or not exact.

<sup>4</sup>Gage height below minimum recordable elevation.

<sup>5</sup>Discharge is less than indicated value, which is minimum recordable discharge at this site.

<sup>6</sup>Month or day of occurrence is unknown or not exact.

**Table 51. 01633650 Pughs Run near Woodstock, Va.**

LOCATION.--Latitude 38°55'48", Longitude 078°32'43", NAD27, Shenandoah County, Hydrologic Unit 02070006, 4.0 mi northwest of Woodstock and 5.4 mi upstream from mouth.

DRAINAGE AREA.--3.43 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 1,027.27 ft NGVD of 1929. Prior to Aug. 18, 1978, flood-hydrograph recorder at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--4 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1971	October 1, 1970	5.20	141	1990	July 13, 1990	3.65	42.0
1972	June 22, 1972	9.30	543	1991	October 23, 1990	6.05	214
1973	July 26, 1973	4.80	111	1992	April 21, 1992	5.13	135
1974	December 26, 1973	4.60	97.0	1993	March 4, 1993	5.97	207
1975	September 26, 1975	6.10	219	1994	March 29, 1994	5.25	145
1976	December 31, 1975	5.70	183	1995	January 15, 1995	4.42	85.0
1977	October 9, 1976	7.85	385	1996	September 6, 1996	13.39	1,100
1978	January 26, 1978	4.45	87.0	1997	June 2, 1997	4.84	114
1979	June 3, 1979	8.87	497	1998	February 5, 1998	5.19	139
1980	October 1, 1979	5.20	141	1999	March 17, 1999	2.94	13
1981	May 21, 1981	3.79	50.0	2000	September 25, 2000	3.56	38
1982	March 30, 1982	3.51	36.0	2001	March 21, 2001	3.85	52
1983	May 17, 1983	4.11	67.0	2002	April 22, 2002	4.32	80
1984	July 1, 1984	5.39	156	2003	September 19, 2003	6.29	236
1985	February 12, 1985	5.37	155	2004	December 10, 2003	4.93	120
1986	November 4, 1985	5.08	131	2005	July 8, 2005	4.89	117
1987	September 8, 1987	4.11	67.0	2006	November 30, 2005	4.18	70.8
1988	May 6, 1988	4.14	68.0	2007	March 16, 2007	4.86	115
1989	May 2, 1989	3.58	39.0				

**Table 52.** 01633700 Pughs Run tributary near Columbia Furnace, Va.

LOCATION.--Latitude 38°56'17", Longitude 078°31'22", NAD27, Shenandoah County, Hydrologic Unit 02070006, at culvert on State Highway 623, 7.0 mi northeast of Columbia Furnace.

DRAINAGE AREA.--0.41 mi<sup>2</sup>.

GAGE.--Water-stage recorder (flood-hydrograph recorder). Datum of gage is 1,025 ft NGVD of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--5 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1966	February 28, 1966	2.80	24.0	1971	July 29, 1971	4.54	84.0
1967	March 7, 1967	3.15	38.0	1972	June 22, 1972	4.96	98.0
1968	January 14, 1968	2.90	27.0	1973	July 26, 1973	6.70	180
1969		2.80 <sup>1</sup>	24.0 <sup>2,3</sup>	1974	December 26, 1973	3.21	35.0
1970		2.80 <sup>1</sup>	24.0 <sup>2,3</sup>	1975	March 19, 1975	3.73	51.0

<sup>1</sup>Gage height below minimum recordable elevation.

<sup>2</sup>Discharge is less than indicated value, which is minimum recordable discharge at this site.

<sup>3</sup>Month or day of occurrence is unknown or not exact.

**Table 53. 01634000 North Fork Shenandoah River near Strasburg, Va.**

LOCATION.--Latitude 38°58'36", Longitude 078°20'11", NAD27, Warren County, Hydrologic Unit 02070006, on right bank at downstream side of bridge on State Highway 55, 1.5 mi southeast of Strasburg, 2.2 mi upstream from Cedar Creek, and 10 mi upstream from confluence with South Fork.

DRAINAGE AREA.--770 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 494.03 ft NGVD of 1929. Prior to Sept. 21, 1930, nonrecording gage at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 52,600 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--11 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Peaks are from graphs based on gage readings prior to Sept. 21, 1930. Flood peak of October 1942 is highest known since at least 1870.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1926	August 26, 1926	9.74	7,190	1967	March 8, 1967	15.56	15,000
1927	November 17, 1926	12.11	10,100	1968	March 17, 1968	9.39	6,530
1928	May 1, 1928	15.50	14,200	1969	August 2, 1969	10.62	8,040
1929	April 17, 1929	16.30	15,600	1970	July 10, 1970	11.31	8,900
1930	November 19, 1929	9.90	7,170	1971	February 14, 1971	16.13	15,900
1931	August 23, 1931	5.50	2,780	1972	June 22, 1972	20.88	25,100
1932	May 13, 1932	12.72	9,600	1973	October 6, 1972	23.48	35,700
1933	April 21, 1933	16.65	16,200	1974	December 27, 1973	17.33	18,000
1934	September 17, 1934	9.32	6,200	1975	March 20, 1975	21.22	26,100
1935	December 2, 1934	18.99	20,500	1976	January 1, 1976	15.19	14,400
1936	March 18, 1936	30.21	89,000	1977	October 10, 1976	19.33	21,800
1937	April 26, 1937	20.93	24,900	1978	January 27, 1978	17.21	17,800
1938	October 29, 1937	13.48	10,900	1979	February 26, 1979	15.42	14,800
1939	February 4, 1939	15.65	14,200	1980	October 3, 1979	14.67	13,600
1940	June 1, 1940	10.02	6,740	1981	May 21, 1981	4.71	1,930
1941	April 6, 1941	10.42	7,160	1982	June 14, 1982	11.90	9,670
1942	May 23, 1942	19.28	21,400	1983	April 16, 1983	12.04	9,860
1943	October 16, 1942	31.20	100,000	1984	February 15, 1984	16.86	17,200
1944	May 7, 1944	11.80	8,810	1985	February 13, 1985	10.36	7,720
1945	September 19, 1945	20.40	24,000	1986	November 5, 1985	27.37	62,600
1946	May 5, 1946	10.02	6,740	1987	April 17, 1987	18.27	19,800
1947	March 15, 1947	7.29	4,040	1988	May 7, 1988	13.03	11,200
1948	February 15, 1948	9.96	6,740	1989	May 2, 1989	8.30	5,330
1949	October 6, 1948	12.50	9,720	1990	January 3, 1990	8.66	
1950	September 14, 1950	10.96	7,820	1991	March 24, 1991	15.28	14,600
1951	December 5, 1950	16.91	16,700	1992	April 22, 1992	15.88	15,600
1952	April 28, 1952	16.24	15,500	1993	March 5, 1993	19.06	21,300

1953	November 22, 1952	14.20	12,100	1994	August 18, 1994	15.38	14,700
1954	March 2, 1954	13.63	11,500	1995	January 16, 1995	13.06	11,300
1955	August 18, 1955	23.55	36,100	1996	September 7, 1996	32.27	114,000
1956	March 15, 1956	6.84	3,720	1997	March 4, 1997	12.51	10,500
1957	April 6, 1957	11.47	8,760	1998	January 9, 1998	14.90	14,000
1958	July 28, 1958	7.44	4,320	1999	September 7, 1999	6.69	3,700
1959	June 3, 1959	14.89	13,400	2000	February 20, 2000	5.52	2,600
1960	October 1, 1959	15.31	14,100	2001	June 23, 2001	14.37	13,300
1961	April 13, 1961	11.26	8,890	2002	April 22, 2002	12.21	10,200
1962	March 22, 1962	11.93	9,670	2003	September 20, 2003	19.27	21,800
1963	March 20, 1963	16.44	16,400	2004	September 29, 2004	14.14	12,900
1964	March 4, 1964	10.77	8,260	2005	March 29, 2005	8.64	5,760
1965	February 8, 1965	11.58	9,280	2006	November 30, 2005	14.37	13,300
1966	March 1, 1966	7.06	4,100	2007	November 17, 2006	14.16	12,900

---

**Table 54. 01634500 Cedar Creek near Winchester, Va.**

LOCATION.--Latitude 39°04'52", Longitude 078°19'47", NAD27, Frederick County, Hydrologic Unit 02070006, on left bank 0.2 mi upstream from Fawcett Run, 0.3 mi upstream from bridge on State Highway 628, 1.3 mi downstream from Froman Run, and 11.4 mi southwest of Winchester.

DRAINAGE AREA.--102 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 647.09 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 2,960 ft<sup>3</sup>/s and extended above on basis of slope-area measurement at 20,300 ft<sup>3</sup>/s.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Subsequent to June 30, 1957, records were provided by the Virginia Department of Environmental Quality - Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1936	March 17, 1936	25.00	18,000 <sup>1</sup>	1973	December 22, 1972	6.83	2,120
1938	October 28, 1937	11.32	3,660	1974	June 2, 1974	8.80	3,320
1939	February 3, 1939	10.38	3,250	1975	March 19, 1975	12.60	5,840
1940	June 12, 1940	9.81	2,980	1976	January 1, 1976	11.68	5,160
1941	April 5, 1941	8.80	2,530	1977	October 9, 1976	17.00	10,000
1942	May 22, 1942	10.45	2,950	1978	August 6, 1978	22.14	17,800
1943	October 15, 1942	27.00	22,000	1979	February 26, 1979	11.16	4,790
1944	May 7, 1944	7.33	1,680	1980	November 2, 1979	11.08	4,720
1945	September 18, 1945	13.37	4,290	1981	June 13, 1981	9.17	3,540
1946	June 2, 1946	8.73	2,230	1982	June 13, 1982	10.92	4,600
1947	May 18, 1947	3.95	526	1983	April 24, 1983	9.07	3,480
1948	April 14, 1948	6.14	1,240	1984	February 14, 1984	14.28	7,240
1949	December 30, 1948	7.51	1,750	1985	November 28, 1984	10.35	4,240
1950	May 18, 1950	6.25	1,270	1986	November 5, 1985	16.05	8,980
1951	May 11, 1951	15.11	5,470	1987	April 17, 1987	11.06	4,690
1952	April 28, 1952	10.88	3,170	1988	May 6, 1988	10.24	4,180
1953	November 21, 1952	10.10	2,820	1989	June 23, 1989	9.53	3,750
1954	March 1, 1954	13.30	4,340	1990	January 3, 1990	3.93	703
1955	August 18, 1955	20.49	11,100	1991	October 23, 1990	13.14	6,270
1956	March 14, 1956	6.04	1,260	1992	April 21, 1992	11.99	5,380
1957	April 5, 1957	7.22	1,650	1993	March 4, 1993	16.15	9,090
1958	March 27, 1958	5.32	1,040	1994	November 28, 1993	10.39	4,270
1959	June 2, 1959	11.68	3,540	1995	June 27, 1995	13.09	6,230
1960	May 8, 1960	8.23	2,030	1996	September 6, 1996	23.40	20,800
1961	February 19, 1961	7.17	1,670	1997	June 2, 1997	8.04	2,860
1962	March 21, 1962	8.04	1,950	1998	November 7, 1997	9.60	3,800
1963	March 19, 1963	10.96	3,220	1999	March 17, 1999	4.06	711

1964	March 3, 1964	6.61	1,470	2000	February 19, 2000	7.49	2,510
1965	March 5, 1965	8.89	2,310	2001	March 21, 2001	10.42	4,330
1966	September 21, 1966	7.55	1,810	2002	April 28, 2002	5.43	1,370
1967	March 7, 1967	10.86	3,170	2003	January 1, 2003	13.81	6,840
1968	March 17, 1968	8.08	1,990	2004	September 28, 2004	12.70	5,900
1969	August 4, 1969	2.97	245	2005	March 28, 2005	6.11	1,730
1970	June 25, 1970	7.52	1,780	2006	November 29, 2005	11.32	4,940
1971	May 30, 1971	9.18	3,560	2007	April 15, 2007	10.73	4,540
1972	June 22, 1972	23.19	20,300				

---

<sup>†</sup>Discharge is a historic peak.

**Table 55.** 01635090 Cedar Creek above Highway 11 near Middletown, Va.

LOCATION.--Latitude 39°00'24", Longitude 078°19'00", NAD27, Warren County, Hydrologic Unit Code 02070006, on left bank, 5 ft upstream from U.S. Highway 11, 1.5 mi north of Strasburg.

DRAINAGE AREA.--154 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 600 ft NGVD of 1929, from topographic map.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
2002	April 28, 2002	4.79	1,500	2005	March 28, 2005	6.11	1,730
2003	January 2, 2003	11.94	9,320	2006	November 30, 2005	9.36	5,170
2004	September 28, 2004	11.36	8,270	2007	April 15, 2007	9.14	7,650

**Table 56. 01635200 North Fork Shenandoah River tributary near Waterlick, Va.**

LOCATION.--Latitude 38°58'25", Longitude 078°18'30", NAD27, Warren County, Hydrologic Unit 02070006, at culvert on State Highway 55, 1.3 mi west of Waterlick.

DRAINAGE AREA.--0.38 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 568.11 ft NGVD of 1929. Prior to Apr. 24, 1967, flood-hydrograph recorder at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--4 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Annual peak stage did not reach lowest point on crest-stage gage during many years.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1966	September 21, 1966	3.47	16.0	1972	June 21, 1972	4.86	63.0
1967	March 7, 1967	3.68	22.0	1973		3.60 <sup>1</sup>	20.0 <sup>2,3</sup>
1968		3.60 <sup>1</sup>	20.0 <sup>2,3</sup>	1974	October 29, 1973	4.11	35.0
1969		3.60 <sup>1</sup>	20.0 <sup>2,3</sup>	1975	September 26, 1975	4.58	52.0
1970		3.60 <sup>1</sup>	20.0 <sup>2,3</sup>	1976	October 17, 1975	4.14	36.0
1971	May 30, 1971	3.89	29.0				

<sup>1</sup>Gage height below minimum recordable elevation.

<sup>2</sup>Discharge is less than indicated value, which is minimum recordable discharge at this site.

<sup>3</sup>Month or day of occurrence is unknown or not exact.

**Table 57. 01635500 Passage Creek near Buckton, Va.**

LOCATION.--Latitude 38°57'29", Longitude 078°16'01", NAD27, Warren County, Hydrologic Unit 02070006, on right bank 350 ft upstream from bridge on State Highway 55, 1.2 mi south of Buckton railroad station, 1.4 mi upstream from mouth, and 4.2 mi west of Riverton.

DRAINAGE AREA.--86.5 mi<sup>2</sup>.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 525.14 ft NGVD of 1929. October 1905 to July 1906, nonrecording gage at site 1 mi downstream at different datum. Apr. 4, 1932, to Oct. 7, 1937, nonrecording gage at site 350 ft downstream at different datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 3,000 ft<sup>3</sup>/s and extended above 5,000 ft<sup>3</sup>/s on basis of gage-height relation curve prior to 1938. Defined by current-meter measurements below 5,200 ft<sup>3</sup>/s and extended above since 1938.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Subsequent to June 30, 1957, records were provided by the Virginia Department of Environmental Quality - Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1933	April 21, 1933	8.00 <sup>1</sup>	3,860	1971	May 31, 1971	9.13	3,230
1934	March 3, 1934	4.50 <sup>1</sup>	588	1972	June 22, 1972	13.56	13,100
1935	December 1, 1934	10.00 <sup>1</sup>	6,800	1973	November 14, 1972	7.78	2,130
1936	March 17, 1936	14.29 <sup>1</sup>	17,000	1974	June 2, 1974	10.06	4,220
1937	April 26, 1937	9.00 <sup>1</sup>	5,060	1975	March 20, 1975	9.32	3,410
1938	October 28, 1937	7.39	1,810	1976	January 1, 1976	8.65	2,780
1939	February 4, 1939	8.37	2,610	1977	October 9, 1976	9.21	3,320
1940	June 12, 1940	8.00	2,290	1978	January 26, 1978	9.40	3,500
1941	April 5, 1941	6.85	1,400	1979	February 25, 1979	7.67	2,110
1942	May 22, 1942	7.76	2,130	1980	October 6, 1979	7.52	1,970
1943	October 15, 1942	15.50	21,000	1981	February 21, 1981	5.32	586
1944	May 7, 1944	7.27	1,690	1982	June 13, 1982	7.73	2,130
1945	September 18, 1945	9.80	3,900	1983	May 17, 1983	8.01	2,330
1946	May 4, 1946	7.22	1,650	1984	February 14, 1984	10.69	4,980
1947	May 1, 1947	5.50	576	1985	February 12, 1985	7.95	2,280
1948	February 14, 1948		1,440	1986	November 5, 1985	10.45	4,640
1949	July 8, 1949	7.42	1,810	1987	April 17, 1987	7.60	2,040
1950	May 29, 1950	6.68	1,290	1988	May 6, 1988	7.35	1,860
1951	December 4, 1950	9.60	3,700	1989	May 17, 1989	6.74	1,450
1952	April 28, 1952	9.12	3,230	1990	May 29, 1990	5.82	872
1953	March 24, 1953	7.62	1,970	1991	March 23, 1991	9.37	3,470
1954	March 1, 1954	8.80	2,960	1992	April 22, 1992	12.66	9,860
1955	August 18, 1955	14.02	14,700	1993	March 4, 1993	9.97	4,080
1956	March 14, 1956	6.58	1,230	1994	December 5, 1993	8.12	2,420

1957	June 5, 1957	6.52	1,160	1995	January 16, 1995	8.40	2,650
1958	April 23, 1958	8.37	2,610	1996	September 6, 1996	15.89	23,000
1959	June 3, 1959	7.36	1,850	1997	June 2, 1997	9.64	3,750
1960	April 5, 1960	8.17	2,450	1998	January 8, 1998	9.12	3,270
1961	February 19, 1961	7.36	1,810	1999	September 30, 1999	5.96	964
1962	March 21, 1962	7.52	1,890	2000	September 19, 2000	5.98	976
1963	March 20, 1963	8.66	2,870	2001	March 21, 2001	8.37	2,620
1964	March 3, 1964	6.69	1,340	2002	May 27, 2002	7.47	1,930
1965	February 8, 1965	7.09	1,590	2003	September 19, 2003	10.72	4,990
1966	February 13, 1966	7.86	2,210	2004	September 28, 2004	9.58	3,690
1967	March 7, 1967	10.20	4,330	2005	April 3, 2005	7.67	2,080
1968	March 17, 1968	6.61	1,240	2006	June 28, 2006	7.20	1,740
1969	August 2, 1969	5.96	838	2007	March 2, 2007	6.58	1,330
1970	July 10, 1970	5.98	865				

---

<sup>1</sup>Gage height at different site and (or) datum.

**Table 58.** 01636000 North Fork Shenandoah River near Riverton, Va.

LOCATION.—Latitude 38°57'30", Longitude 078°13'25", NAD27, Warren County, Hydrologic Unit 02070006, 2 mi northwest of Riverton and 2 mi upstream from confluence with South Fork Shenandoah River.

DRAINAGE AREA.—1,032 mi<sup>2</sup>.

GAGE.—Nonrecording gage (staff gage). Datum of gage is 470 ft NGVD of 1929, from topographic map.

STAGE-DISCHARGE RELATION.—Defined by current-meter measurements below 3,000 ft<sup>3</sup>/s and extended above by logarithmic plotting on basis of records at other sites on the Shenandoah River.

BANKFULL STAGE.—Not determined.

REGULATION.—High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1900	March 20, 1900		7,000	1904	April 29, 1904		2,880
1901	April 21, 1901		34,000	1905	June 25, 1905		9,800
1903	June 10, 1903		19,300	1906	December 22, 1905		7,000

**Table 59. 01636200 Shenandoah River at Riverton, Va.**

LOCATION.—Latitude 38°56'38", Longitude 078°11'19", NAD27, Warren County, Hydrologic Unit 02070007, at Norfolk Southern Railroad bridge just downstream from junction of North and South Fork Shenandoah River at Riverton.

DRAINAGE AREA.—2,684 mi<sup>2</sup>.

GAGE.—Nonrecording gage (wire-weight gage). Datum of gage is 455.60 ft NGVD of 1929. Prior to April 8, 1931, nonrecording staff gage at present site and datum of 450 ft NGVD of 1929. From April 8, 1931 to October 18, 1934, chain gage at present site and datum of 455.5 ft NGVD of 1929. From October 18, 1934 to October 22, 1942, wire-weight gage at present site and datum of 455.5 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.—Not developed.

BANKFULL STAGE.—22 ft.

REGULATION.—High-flow conditions at this site are considered unregulated.

REMARKS.—Water-stage readings were provided by the National Weather Service. Lower stage readings affected by backwater from dam about 2 mi downstream.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1870	September 30, 1870	47.00 <sup>1</sup>		1933	April 21, 1933	16.80 <sup>1</sup>	
1878	November 24, 1877	41.00 <sup>1</sup>		1934	August 18, 1934	7.20 <sup>1</sup>	
1889	June 1, 1889	36.00 <sup>1</sup>		1935	December 2, 1934	23.70 <sup>1</sup>	
1893	May 5, 1893	15.80 <sup>1</sup>		1936	March 18, 1936	37.50 <sup>1</sup>	
1894	October 14, 1893	16.70 <sup>1</sup>		1937	April 27, 1937	27.00 <sup>1</sup>	
1896	January 25, 1896	34.20 <sup>1</sup>		1938	October 29, 1937	14.40 <sup>1</sup>	
1897	October 1, 1896	33.30 <sup>1</sup>		1939	February 4, 1939	13.90 <sup>1</sup>	
1902	March 1, 1902	27.60 <sup>1</sup>		1940	August 17, 1940	15.60 <sup>1</sup>	
1903	June 10, 1903	10.00 <sup>1</sup>		1941	April 6, 1941	8.00 <sup>1</sup>	
1904	March 1904	11.00 <sup>1</sup>		1942	May 23, 1942	20.90 <sup>1</sup>	
1907	October 20, 1906	16.00 <sup>1</sup>		1943	October 16, 1942	46.00 <sup>1</sup>	
1908	January 13, 1908	18.00 <sup>1</sup>		1944	May 8, 1944	10.50	
1909	April 15, 1909	9.90 <sup>1</sup>		1945	September 19, 1945	22.00	
1910	June 17, 1910	24.80 <sup>1</sup>		1946	May 5, 1946	7.60	
1911	August 31, 1911	6.00 <sup>1</sup>		1947	March 16, 1947	8.20	
1912	May 13, 1912	14.60 <sup>1</sup>		1948	February 15, 1948	12.10	
1913	March 28, 1913	14.60 <sup>1</sup>		1949	June 19, 1949	20.40	
1914	November 10, 1913	10.60 <sup>1</sup>		1950	September 14, 1950	10.00	
1915	January 8, 1915	13.60 <sup>1</sup>		1951	December 5, 1950	18.10	
1916	March 29, 1916	10.20 <sup>1</sup>		1952	April 29, 1952	18.00	
1917	March 14, 1917	8.60 <sup>1</sup>		1953	March 26, 1953	15.00	
1924	May 12, 1924	34.00 <sup>1</sup>		1954	March 2, 1954	14.50	
1925	February 12, 1925	12.60 <sup>1</sup>		1955	August 19, 1955	29.00	
1926	September 24, 1926	7.20 <sup>1</sup>		1956	March 16, 1956	6.50	
1927	November 17, 1926	12.00 <sup>1</sup>		1957	April 5, 1957	12.20	
1928	May 1, 1928	13.60 <sup>1</sup>		1958	April 24, 1958	10.30	

1929	April 17, 1929	16.90 <sup>1</sup>	1959	June 3, 1959	12.85
1931	January 7, 1931	6.70 <sup>1</sup>	1960	May 9, 1960	17.90
1932	May 13, 1932	14.50 <sup>1</sup>	1961	February 20, 1961	14.61

---

<sup>1</sup>Gage height at different site and (or) datum.

**Table 60. 01636210 Happy Creek at Front Royal, Va.**

LOCATION.—Latitude 38°54'20", Longitude 078°11'10", NAD27, Warren County, Hydrologic Unit 02070005, on left bank 30 ft upstream from highway bridge, 1.0 mi south of Front Royal, 2.3 mi upstream from Leach Run, and 2.9 mi upstream from mouth.

DRAINAGE AREA.—14.0 mi<sup>2</sup>.

GAGE.—Water-stage recorder. Datum of gage is 610.12 ft NGVD of 1929. Prior to Oct. 1, 1949, water-stage recorder at site 0.3 mi downstream at different datum.

STAGE-DISCHARGE RELATION.—Defined by current-meter measurements below 120 ft<sup>3</sup>/s and extended above by logarithmic plotting at 1949 site. Defined by current-meter measurements below 460 ft<sup>3</sup>/s and extended above on basis of slope-area measurement at 1,490 ft<sup>3</sup>/s.

BANKFULL STAGE.—7 ft.

REGULATION.—High-flow conditions at this site are considered unregulated.

REMARKS.—Subsequent to Sept. 30, 1976, records were provided by the Virginia Department of Environmental Quality — Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1936	March 1936		5,600 <sup>1,2</sup>	1963	November 10, 1962	3.81	464
1943	October 1942		7,100 <sup>1,2</sup>	1964	November 7, 1963	3.73	432
1949	October 5, 1948	6.40 <sup>3</sup>	2,490	1965	May 19, 1965	4.49	780 <sup>4</sup>
1950	June 10, 1950	3.59	356	1966	September 21, 1966	3.72	424
1951	December 4, 1950	7.00	1,920	1967	March 7, 1967	4.46	760
1952	April 27, 1952	5.10	1,080	1968	September 10, 1968	4.17	631
1953	November 21, 1952	5.14	1,100	1969	November 29, 1968	4.37	716
1954	March 1, 1954	4.84	955	1970	December 10, 1969	4.08	586
1955	August 18, 1955	6.48	1,750	1971	May 31, 1971	4.24	658
1956	July 20, 1956	3.26	253	1972	June 22, 1972	6.13	1,600
1957	June 6, 1957	4.00	550	1973	October 11, 1972	3.89	500
1958	January 14, 1958	4.04	568	1974	October 29, 1973	4.93	995
1959	June 3, 1959	4.32	685	1975	March 19, 1975	6.01	1,540
1960	June 13, 1960	5.62	1,330	1976	December 31, 1975	3.61	374
1961	April 13, 1961	4.16	618	1977	October 9, 1976	6.43	1,730
1962	July 30, 1962	3.74	436				

<sup>1</sup>Discharge is a historic peak.

<sup>2</sup>Month or day of occurrence is unknown or not exact.

<sup>3</sup>Gage height at different site and (or) datum.

<sup>4</sup>Caused by draining the reservoir above the gage.

**Table 61.** 01636242 Crooked Run below highway 340 at Riverton, Va.

LOCATION.-- Latitude 38°57'18", Longitude 078°11'51", NAD27, Warren County, Hydrologic Unit 02070007, on left bank 500 ft downstream from U.S. Highway 340 and 0.7 mi north of Riverton.

DRAINAGE AREA.—46.9 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 530 ft NGVD 1929, from topographic map.

STAGE-DISCHARGE RELATION.—Defined by acoustic Doppler current profiler (ADCP) and extended by a contracted-opening indirect storm event measurement on November 29, 2005, defining a new peak stage and flow for the period of record.

BANKFULL STAGE.-- Not determined.

REGULATION.-- High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
2005	March 28, 2005	6.76	943	2007	March 16, 2007	8.35	1,560
2006	November 29, 2005	12.65	3,240				

**Table 62.** 0163626650 Manassas Run at Route 645 near Front Royal, Va.

LOCATION.--Latitude 38°56'03", Longitude 078°07'41", NAD83, Warren County, Hydrologic Unit 02070007, on right bank at end of State Highway 645, 5.6 mi northeast of Front Royal, and 7.5 mi upstream from mouth.

DRAINAGE AREA.--11.2 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 540 ft NGVD of 1929, from topographic map.

BANKFULL STAGE.-- Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

<b>Water year</b>	<b>Date</b>	<b>Gage height (ft)</b>	<b>Discharge (ft<sup>3</sup>/s)</b>	<b>Water year</b>	<b>Date</b>	<b>Gage height (ft)</b>	<b>Discharge (ft<sup>3</sup>/s)</b>
Annual maximum stages and discharges							
2003	September 23, 2003	6.75	685	2006	November 29, 2005	6.72	678
2004	September 28, 2004	6.65	662	2007	November 16, 2006	4.38	244
2005	July 8, 2005	5.70	461				

**Table 63.** 01636316 Spout Run at Route 621 near Millwood, Va.

LOCATION.--Latitude 39°04'01.29", Longitude 078°00'13.51", NAD83, Clarke County, Hydrologic Unit 02070007, on left bank, 300 ft downstream from bridge on State Highway 621, 2 mi west of Millwood, 10 mi south of Berryville, and 0.2 mi upstream from mouth.

DRAINAGE AREA.--21.4 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 440 ft NGVD of 1929, from topographic map.

BANKFULL STAGE.-- Not determined.

REGULATION.—High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
2004	December 11, 2003	4.68 <sup>1</sup>	741 <sup>2</sup>	2006	June 27, 2006	2.28 <sup>3</sup>	84
2005	March 28, 2005	2.97	225	2007	March 2, 2007	2.20	68

<sup>1</sup>Gage height is an estimate.

<sup>2</sup>Discharge actually greater than indicated value.

<sup>3</sup>Gage height not the maximum for the year.

**Table 64.** 01636690 Piney Run near Lovettsville, Va.

LOCATION.--Latitude 39°18'39.0", Longitude 077°43'06.6", NAD83, Loudoun County, Hydrologic Unit 02070008, on right bank 100 ft downstream from State Highway 671, 0.2 mi south of Loudoun Heights, and 1.3 mi upstream from mouth.

DRAINAGE AREA.--13.5 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 396.78 ft NAVD of 1988.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

<b>Water year</b>	<b>Date</b>	<b>Gage height (ft)</b>	<b>Discharge (ft<sup>3</sup>/s)</b>	<b>Water year</b>	<b>Date</b>	<b>Gage height (ft)</b>	<b>Discharge (ft<sup>3</sup>/s)</b>
Annual maximum stages and discharges							
2002	March 20, 2002	2.26	65	2005	July 8, 2005	5.45	476
2003	May 16, 2003	6.98	631	2006	June 27, 2006	5.36	465
2004	June 5, 2004	7.66	685	2007	April 27, 2007	3.46	199

**Table 65. 01638350 South Fork Catoclin Creek at Route 698 near Waterford, Va.**

LOCATION.--Latitude 39°11'28.0", Longitude 077°36'55.6", NAD83, Loudoun County, Hydrologic Unit 02070008, on right bank 50 ft downstream from State Highway 698 and 0.25 mi northwest of Waterford.

DRAINAGE AREA.--31.6 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 335.84 ft NAVD of 1988.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

<b>Water year</b>	<b>Date</b>	<b>Gage height (ft)</b>	<b>Discharge (ft<sup>3</sup>/s)</b>	<b>Water year</b>	<b>Date</b>	<b>Gage height (ft)</b>	<b>Discharge (ft<sup>3</sup>/s)</b>
Annual maximum stages and discharges							
2002	June 15, 2002	5.35	435	2005	July 8, 2005	10.49	3,200
2003	September 23, 2003	12.10	5,700	2006	November 30, 2005	7.99	1,360
2004	September 28, 2004	11.24	4,210	2007	March 16, 2007	6.31	791

**Table 66.** 01638420 North Fork Catoclin Creek at Route 681 near Waterford, Va.

LOCATION.--Latitude 39°12'18", Longitude 077°37'26", NAD83, Loudoun County, Hydrologic Unit 02070008, on left bank 2 ft downstream from State Highway 681 and 2.2 mi northeast of Waterford.

DRAINAGE AREA.--23.1 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 325.21 ft NAVD of 1988.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

<b>Water year</b>	<b>Date</b>	<b>Gage height (ft)</b>	<b>Discharge (ft<sup>3</sup>/s)</b>	<b>Water year</b>	<b>Date</b>	<b>Gage height (ft)</b>	<b>Discharge (ft<sup>3</sup>/s)</b>
Annual maximum stages and discharges							
2002	March 20, 2002	3.01	67	2005	January 14, 2005	7.59	1,120
2003	September 23, 2003	10.91	2,150	2006	November 29, 2005	6.49	868
2004	September 28, 2004	10.97	2,170	2007	November 16, 2006	4.11	282

**Table 67. 01638480 Catoctin Creek at Taylorstown, Va.**

LOCATION.--Latitude 39°15'18", Longitude 077°34'36", NAD27, Loudoun County, Hydrologic Unit 02070008, on left bank downstream side of bridge on State Highway 663 at Taylorstown and 3.2 mi downstream from Milltown Creek.

DRAINAGE AREA.--89.5 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 247.37 ft NGVD of 1929. Prior to Nov. 3, 1983, water-stage recorder at site 60 ft upstream at datum of 249.15 NGVD 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 7,400 ft<sup>3</sup>/s and extended above on basis of contracted-opening measurements at 23,800 ft<sup>3</sup>/s.

BANKFULL STAGE.--11 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Records were provided by the Virginia Department of Environmental Quality - Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1971	September 12, 1971	11.03 <sup>1</sup>	4,600	1990	May 29, 1990	5.48	856
1972	June 22, 1972	23.83 <sup>1</sup>	23,800	1991	October 23, 1990	9.20	2,960
1973	May 28, 1973	7.90 <sup>1</sup>	2,640	1992	April 22, 1992	8.07	2,280
1974	December 26, 1973	6.48 <sup>1</sup>	1,920	1993	December 11, 1992	15.69	8,430
1975	September 25, 1975	11.43 <sup>1</sup>	4,920	1994	December 5, 1993	10.41	3,690
1976	January 1, 1976	12.23 <sup>1</sup>	3,620	1995	July 11, 1995	8.29	2,410
1977	October 9, 1976	19.92 <sup>1</sup>	15,900	1996	January 19, 1996	14.43	6,820
1978	January 26, 1978	10.43 <sup>1</sup>	4,180	1997	December 13, 1996	10.21	3,570
1979	September 6, 1979	12.47 <sup>1</sup>	5,850	1998	March 21, 1998	13.43	7,140
1980	October 1, 1979	10.15 <sup>1</sup>	4,040	1999	September 30, 1999	9.40	3,180
1981	February 11, 1981	4.39 <sup>1</sup>	1,090	2000	February 19, 2000	5.53	862
1982	June 17, 1982	8.45 <sup>1</sup>	3,000	2001	March 30, 2001	7.29	1,800
1983	April 10, 1983	10.77 <sup>1</sup>	4,440	2002	June 15, 2002	4.50	441
1984	August 13, 1984	15.32	7,320	2003	September 23, 2003	15.59	9,800
1985	February 12, 1985	13.08	5,440	2004	September 28, 2004	15.31	9,440
1986	March 15, 1986	7.00	1,640	2005	March 28, 2005	12.81	6,440
1987	July 1, 1987	17.99	13,200	2006	November 30, 2005	8.74	2,720
1988	May 18, 1988	12.98	5,370	2007	March 16, 2007	6.47	1,330
1989	May 16, 1989	10.39	3,670				

<sup>1</sup>Gage height at different site and (or) datum.

**Table 68.** 01643590 Limestone Branch near Leesburg, Va.

LOCATION.--Latitude 39°10'03.4", Longitude 077°32'09.3", NAD83, Loudoun County, Hydrologic Unit Code 02070008, on left bank, 70 ft downstream from U.S. Highway 15 and 4 mi north of Leesburg.

DRAINAGE AREA.--7.88 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 219.97 ft NAVD of 1988.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

<b>Water year</b>	<b>Date</b>	<b>Gage height (ft)</b>	<b>Discharge (ft<sup>3</sup>/s)</b>	<b>Water year</b>	<b>Date</b>	<b>Gage height (ft)</b>	<b>Discharge (ft<sup>3</sup>/s)</b>
Annual maximum stages and discharges							
2002	May 26, 2002	1.74	96	2005	January 14, 2005	7.71	2,900
2003	September 23, 2003	11.19	8,950	2006	June 27, 2006	6.01	1,550
2004	December 11, 2003	7.45	2,660	2007	March 16, 2007	2.85	282

**Table 69. 01643700 Goose Creek near Middleburg, Va.**

LOCATION.--Latitude 38°59'11", Longitude 077°47'49", NAD27, Loudoun County, Hydrologic Unit 02070008, on right bank 250 ft upstream from bridge on State Highway 611, 2.0 mi downstream from Panther Skin Creek, and 3.4 mi northwest of Middleburg.

DRAINAGE AREA.--122 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 329.80 ft NGVD of 1929. October 1965 to September 1967, water-stage recorder at site 300 ft downstream at datum of 329.07 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 3,130 ft<sup>3</sup>/s and extended above on basis of slope-area measurements at 7,000 ft<sup>3</sup>/s and 19,000 ft<sup>3</sup>/s.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Records were provided by the Virginia Department of Environmental Quality - Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1966	February 13, 1966	8.96 <sup>1</sup>	2,350	1986	March 15, 1986	7.27	1,630
1967	August 25, 1967	14.44 <sup>1</sup>	6,920	1987	April 17, 1987	9.16	2,340
1970	July 10, 1970	8.31	3,020	1988	May 18, 1988	8.88	2,240
1971	February 13, 1971	11.92	6,170	1989	July 20, 1989	17.36	7,330
1972	June 22, 1972	27.46	19,200	1990	July 16, 1990	7.23	1,470
1973	May 28, 1973	8.75	1,820	1991	March 23, 1991	12.60	3,980
1974	December 26, 1973	8.00	1,510	1992	April 22, 1992	10.38	2,840
1975	December 1, 1974	17.08	7,190	1993	March 4, 1993	17.46	7,510
1976	January 1, 1976	12.23	3,620	1994	November 28, 1993	8.72	2,180
1977	October 9, 1976	25.50	16,600	1995	June 27, 1995	9.47	2,470
1978	January 26, 1978	14.17	4,890	1996	January 19, 1996	19.68	9,680
1979	August 24, 1979	16.26	6,500	2002	April 28, 2002	4.39	533
1980	March 21, 1980	11.40	3,300	2003	September 23, 2003	24.36	23,000
1981	August 31, 1981	5.68	924	2004	December 11, 2003	15.85	10,200
1982	June 13, 1982	10.19	2,700	2005	July 8, 2005	11.36	5,300
1983	April 10, 1983	13.30	4,400	2006	November 30, 2005	7.55	1,850
1984	February 14, 1984	16.66	6,810	2007	February 21, 2007	7.88	1,950
1985	February 12, 1985	16.72	6,860				

<sup>1</sup>Gage height at different site and (or) datum.

**Table 70. 01643805 North Fork Goose Creek at Route 729 near Lincoln, Va.**

LOCATION.--Latitude 39°04'20.3", Longitude 077°41'02.2", NAD83, Loudoun County, Hydrologic Unit Code 02070008, on left bank, 5 ft downstream from bridge on State Highway 729, 5 mi south of Lincoln.

DRAINAGE AREA.--38.1 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 300 ft NGVD of 1929, from topographic map.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

<b>Water year</b>	<b>Date</b>	<b>Gage height (ft)</b>	<b>Discharge (ft<sup>3</sup>/s)</b>	<b>Water year</b>	<b>Date</b>	<b>Gage height (ft)</b>	<b>Discharge (ft<sup>3</sup>/s)</b>
Annual maximum stages and discharges							
2002	May 26, 2002	8.16	1,120	2005	July 8, 2005	11.62	7,440
2003	September 23, 2003	13.45	13,500	2006	June 27, 2006	10.14	4,590
2004	September 28, 2004	12.80	10,200	2007	November 16, 2006	7.89	2,090

**Table 71. 01643880 Beaverdam Creek at Route 734 near Mountville, Va.**

LOCATION.--Latitude 39°02'15.8", Longitude 077°43'20.1", NAD83, Loudoun County, Hydrologic Unit 02070008, on left bank 250 ft downstream from State Highway 743 and 2.0 mi northwest of Mountville.

DRAINAGE AREA.--47.2 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 307.03 ft NAVD of 1988.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

<b>Water year</b>	<b>Date</b>	<b>Gage height (ft)</b>	<b>Discharge (ft<sup>3</sup>/s)</b>	<b>Water year</b>	<b>Date</b>	<b>Gage height (ft)</b>	<b>Discharge (ft<sup>3</sup>/s)</b>
Annual maximum stages and discharges							
2002	June 15, 2002	4.87	293	2005	July 8, 2005	11.77	5,300
2003	September 23, 2003	17.00	22,000	2006	November 30, 2005	7.15	1,060
2004	December 11, 2003	12.20	6,070	2007	February 21, 2007	6.99	991

**Table 72. 01644000 Goose Creek near Leesburg, Va.**

LOCATION.--Latitude 39°01'10", Longitude 077°34'40", NAD27, Loudoun County, Hydrologic Unit 02070008, on left bank 400 ft upstream from bridge on State Highway 621 at Evergreen Mills, 1.4 mi downstream from Little River, 6.7 mi south of Leesburg, and 10.9 mi upstream from mouth.

DRAINAGE AREA.--332 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 248.93 ft NGVD of 1929. July 12, 1909, to Dec. 31, 1912, nonrecording gage at site 1,000 ft downstream at different datum. Jan. 21, 1930, to Nov. 28, 1938, recording gage at site 400 ft downstream at datum of 244.73 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Prior to 1938, defined by current-meter measurements below 7,400 ft<sup>3</sup>/s and extended above. After 1938, defined by current-meter measurements below 13,600 ft<sup>3</sup>/s and extended above on basis of slope-area measurement at 48,000 ft<sup>3</sup>/s and 78,000 ft<sup>3</sup>/s.

BANKFULL STAGE.--8 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Peak discharges for 1937, 1943, 1951 and 1956 water years were revised in 1972 based on a slope-area measurement of the June 22, 1972 flood of 78,000 ft<sup>3</sup>/s. Subsequent to Sept. 30, 1981, records were provided by the Virginia Department of Environmental Quality - Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1889	June 1889	29.00	45,000 <sup>1,2</sup>	1968	January 14, 1968	12.35	8,470
1910	January 18, 1910	11.00 <sup>3</sup>	4,000	1969	August 3, 1969	4.34	1,960
1911	September 6, 1911	4.00 <sup>3</sup>	1,150	1970	April 14, 1970	6.43	3,790
1912	September 24, 1912	20.00 <sup>3</sup>	13,000	1971	November 13, 1970	12.26	8,380
1930	March 8, 1930	11.82 <sup>3</sup>	4,800	1972	June 22, 1972	30.59	78,100
1931	January 6, 1931	5.60 <sup>3</sup>	1,300	1973	December 22, 1972	8.94	5,620
1932	May 13, 1932	18.45 <sup>3</sup>	9,650	1974	December 27, 1973	9.10	5,750
1933	August 23, 1933	21.60 <sup>3</sup>	17,000	1975	December 2, 1974	18.84	20,300
1934	September 16, 1934	11.00 <sup>3</sup>	4,270	1976	January 1, 1976	13.32	9,490
1935	December 1, 1934	15.00 <sup>3</sup>	7,010	1977	October 9, 1976	25.74	48,700
1936	March 17, 1936	13.61 <sup>3</sup>	6,010	1978	January 26, 1978	14.94	11,700
1937	August 26, 1937	26.86 <sup>3</sup>	35,600	1979	February 26, 1979	16.36	14,300
1938	October 28, 1937	17.00 <sup>3</sup>	8,530	1980	October 1, 1979	10.14	6,580
1939	February 4, 1939	7.85	4,660	1981	February 11, 1981	6.56	3,950
1940	February 19, 1940	7.53	4,450	1982	June 13, 1982	10.21	6,640
1941	April 5, 1941	7.70	4,590	1983	April 10, 1983	14.86	11,500
1942	August 9, 1942	6.43	3,560	1984	February 15, 1984	16.36	14,000
1943	October 16, 1942	22.90	35,600	1985	February 12, 1985	15.88	13,100
1944	January 4, 1944	8.00	4,820	1986	March 15, 1986	6.44	3,870
1945	September 18, 1945	18.00	18,500	1987	April 4, 1987	8.72	5,460
1946	May 27, 1946	11.53	7,440	1988	November 29, 1987	9.37	5,970
1947	August 4, 1947	7.23	4,220	1989	May 6, 1989	8.71	5,460

1948	February 14, 1948	8.49	5,170	1990	August 20, 1990	4.46	2,340
1949	December 30, 1948	9.21	5,700	1991	March 23, 1991	11.99	8,120
1950	May 19, 1950	10.82	6,880	1992	April 22, 1992	8.94	5,630
1951	December 4, 1950	18.25	18,600	1993	December 11, 1992	19.04	21,000
1952	April 28, 1952	14.30	11,700	1994	November 28, 1993	11.85	8,000
1953	November 22, 1952	12.13	8,840	1995	June 27, 1995	7.48	4,590
1954	April 28, 1954	4.82	2,320	1996	January 20, 1996	20.11	24,400
1955	August 19, 1955	11.58	8,320	1997	December 13, 1996	11.87	8,010
1956	July 21, 1956	20.90	27,600	1998	March 21, 1998	17.43	16,500
1957	November 1, 1956	7.03	4,220	1999	September 30, 1999	10.95	7,240
1958	January 14, 1958	12.50	9,280	2000	August 8, 2000	5.68	3,370
1959	June 3, 1959	9.81	6,600	2001	March 21, 2001	9.53	6,160
1960	April 5, 1960	8.95	5,880	2002	April 28, 2002	3.89	1,850
1961	April 13, 1961	9.41	6,240	2003	September 23, 2003	23.32	36,900
1963	March 20, 1963	6.67	4,070	2004	December 11, 2003	17.31	16,200
1964	January 9, 1964	10.78	6,580	2005	July 8, 2005	14.34	10,800
1965	March 5, 1965	12.48	8,600	2006	June 28, 2006	9.29	5,980
1966	February 14, 1966	8.35	5,210	2007	February 22, 2007	11.49	7,690
1967	August 25, 1967	14.00	10,300				

<sup>1</sup>Discharge is a historic peak.

<sup>2</sup>Month or day of occurrence is unknown or not exact.

<sup>3</sup>Gage height at different site and (or) datum.

**Table 73.** 01644100 South Fork Sycolin Creek near Leesburg, Va.

LOCATION.--Latitude 39°04'15", Longitude 077°36'35", NAD27, Loudoun County, Hydrologic Unit 02070008, at culvert on State Highway 15, 3.9 mi southwest of Leesburg.

DRAINAGE AREA.--2.06 mi<sup>2</sup>.

GAGE.--Water-stage recorder (flood-hydrograph recorder). Datum of gage is 380.47 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--6 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1966	February 13, 1966	4.35	175	1972	June 21, 1972	12.33	1,130
1967	August 7, 1967	7.60	505	1973	April 27, 1973	4.22	165
1968	June 12, 1968	7.60	505	1974	June 20, 1974	4.45	186
1969	July 22, 1969	8.00	550	1975	September 26, 1975	6.16	348
1970	July 9, 1970	5.10	244	1976	July 29, 1976	8.32	588
1971	September 11, 1971	6.25	358	1977	October 9, 1976	11.50	1,010

**Table 74. 01644200 Lenah Run at Lenah, Va.**

(Formerly published as Broad Run at Lenah.)

LOCATION.--Latitude 38°57'06", Longitude 077°34'37", NAD27, Loudoun County, Hydrologic Unit 02070008, at bridge on State Highway 50, at Lenah.

DRAINAGE AREA.--1.11 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 311.12 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Not developed.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1962		2.56 <sup>1</sup>		1971	May 30, 1971	3.01	
1963		2.56 <sup>1</sup>		1972	June 21, 1972	8.46	
1964	April 29, 1964	2.23		1973	October 28, 1972	2.92	
1965	March 5, 1965	3.18		1974		2.57 <sup>1</sup>	
1966	September 14, 1966	2.26		1975	September 26, 1975	4.21	
1967	August 24, 1967	4.20		1976	January 1, 1976	2.92	
1968	June 12, 1968	4.10		1977	October 9, 1976	3.88	
1969	September 3, 1969	4.34		2002	April 28, 2002	7.77	2,050
1970	April 14, 1970	2.31					

<sup>1</sup>Gage height below minimum recordable elevation.

**Table 75. 01644250 South Fork Broad Run near Arcola, Va.**

LOCATION.--Latitude 38°56'30", Longitude 077°33'05", NAD27, Loudoun County, Hydrologic Unit 02070008, at culvert on U.S. Highway 50, 1.2 mi southwest of Arcola.

DRAINAGE AREA.--3.88 mi<sup>2</sup>.

GAGE.--Water-stage recorder (flood-hydrograph recorder). Datum of gage is not determined.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--6 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Local resident reported flow about 2 ft deep over road shortly after the present culvert was installed in the early 1950s. Low point in highway is about 12.4 ft.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1966	February 13, 1966	6.53	286	1970	December 10, 1969	5.80	180
1967	August 24, 1967	10.80	1,070	1971	November 4, 1970	6.60	295
1968	June 12, 1968	6.51	282	1972	June 21, 1972	16.80	4,180
1969	September 3, 1969	10.60	1,040	1973	April 27, 1973	6.25	240

**Table 76.** 01644280 Broad Run near Leesburg, Va.

LOCATION.--Latitude 39°02'47.1", Longitude 077°25'56.6", NAD83, Loudoun County, Hydrologic Unit 02070008, on right bank 15 ft upstream from State Highway 7 and 8 mi southeast of Leesburg.

DRAINAGE AREA.--76.1 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 193.65 ft NAVD of 1988.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

<b>Water year</b>	<b>Date</b>	<b>Gage height (ft)</b>	<b>Discharge (ft<sup>3</sup>/s)</b>	<b>Water year</b>	<b>Date</b>	<b>Gage height (ft)</b>	<b>Discharge (ft<sup>3</sup>/s)</b>
Annual maximum stages and discharges							
2002	April 28, 2002	7.77	2,050	2005	March 28, 2005	9.81	5,620
2003	May 16, 2003	10.43	6,890	2006	June 26, 2006	10.64	7,360
2004	December 11, 2003	9.18	4,490	2007	April 15, 2007	9.24	4,590

**Table 77. 01644290 Stave Run at Reston, Va.**

LOCATION.--Latitude 38°56'57", Longitude 077°22'18", NAD27, Fairfax County, Hydrologic Unit 02070008, on left bank 0.28 mi upstream from mouth, and 1.9 mi southwest of Reston.

DRAINAGE AREA.--0.069 mi<sup>2</sup>.

GAGE.--Water-stage recorder and V-notch sharp-crest weir. Datum of gage is 380.87 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements and volumetric measurements below 1.85 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1967	March 7, 1967	1.12	4.00	1970	September 30, 1970	1.93	39.0
1968	May 28, 1968	0.99	2.00	1971	July 29, 1971	2.07	50.0
1969	August 10, 1969	0.97	2.00				

**Table 78.** 01644291 Stave Run near Reston, Va.

LOCATION.--Latitude 38°56'59", Longitude 077°22'24", NAD27, Fairfax County, Hydrologic Unit 02070008, on left bank 450 ft downstream from the western boundary line of the U.S. Geological Survey National Center property, 0.31 mi upstream from mouth, and 1.4 mi southwest of Sunset Hills in Reston.

DRAINAGE AREA.--0.085 mi<sup>2</sup>.

GAGE.--Water-stage recorder, trapezoidal flume, and crest-stage gage. Datum of gage is 367.25 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 67 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1972	June 21, 1972	1.84	87.0	1977	August 24, 1977	2.84	170
1973	September 14, 1973	2.09	75.0	1978	August 13, 1978	3.43	281
1974	August 4, 1974	2.04	71.0	1979	August 2, 1979	2.89	178
1975	September 25, 1975	2.79	170	1980	October 1, 1979	1.99	63.0
1976	June 16, 1976	2.05	72.0	1981	June 13, 1981	2.16	80.0

**Table 79. 01644295 Smilax Branch at Reston, Va.**

LOCATION.--Latitude 38°57'10", Longitude 077°22'04", NAD27, Fairfax County, Hydrologic Unit 02070008, on right bank 100 ft upstream from Dulles Airport Road, 0.4 mi upstream from mouth, 1.0 mi west of Sunset Hills in Reston, and 4.3 mi east of Dulles International Airport.

DRAINAGE AREA.--0.33 mi<sup>2</sup>.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 356.59 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 79 ft<sup>3</sup>/s and extended above on basis of computation of peak-flow-through-culvert measurements at 230 ft<sup>3</sup>/s.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

<b>Water year</b>	<b>Date</b>	<b>Gage height (ft)</b>	<b>Discharge (ft<sup>3</sup>/s)</b>	<b>Water year</b>	<b>Date</b>	<b>Gage height (ft)</b>	<b>Discharge (ft<sup>3</sup>/s)</b>
Annual maximum stages and discharges							
1968	June 12, 1968	3.80	23.0	1974	June 17, 1974	4.50	88.0
1969	August 9, 1969	4.10	39.0	1975	September 26, 1975	5.16	160
1970	April 14, 1970	4.01	30.0	1976	April 1, 1976	4.35	67.0
1971	May 13, 1971	4.38	70.0	1977	August 24, 1977	4.92	126
1972	June 21, 1972	5.79	230	1978	August 13, 1978	6.37	301
1973	September 14, 1973	4.89	129				

**Table 80. 01644300 Sugarland Run at Herndon, Va.**

LOCATION.--Latitude 38°58'00", Longitude 077°22'17", NAD27, Fairfax County, Hydrologic Unit 02070008, at bridge at State Highway 606 in Herndon, 2.6 mi upstream from Folly Lick Branch.

DRAINAGE AREA.--3.39 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 309.26 ft NGVD of 1929. Prior to Mar. 13, 1970, water-stage recorder at present site and datum of 309.40 NGVD 1929. Prior to August 27, 1968, water-stage recorder at present site and datum of 309.95 NGVD 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 188 ft<sup>3</sup>/s and extended above on basis of computation of peak-flow-through-culvert measurements at 325 ft<sup>3</sup>/s, 450 ft<sup>3</sup>/s and 530 ft<sup>3</sup>/s.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1965	March 5, 1965	6.56 <sup>1</sup>	480	1968	January 14, 1968	5.55 <sup>1</sup>	250
1966	September 14, 1966	5.85 <sup>1</sup>	320	1970	April 14, 1970	6.50	240 <sup>2</sup>
1967	August 24, 1967	6.98 <sup>1</sup>	565				

<sup>1</sup>Gage height at different site and (or) datum.

<sup>2</sup>Discharge is a historic peak.

**Table 81.** 01644370 Sugarland Run near Dranesville, Va.

LOCATION.--Latitude 39°00'47", Longitude 077°22'12", NAD27, Fairfax County, Hydrologic Unit 02070008, at Leesburg Turnpike (State Highway 7), 1.5 mi northwest of Dranesville.

DRAINAGE AREA.--13.4 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is not determined.

STAGE-DISCHARGE RELATION.--Not developed. Flood peak for June 1972 determined from slope-area measurement.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1961	April 13, 1961	3.98		1967	August 24, 1967	4.24	
1962	March 12, 1962	2.23		1968	May 28, 1968	3.68	
1963	August 20, 1963	3.48		1969	July 22, 1969	4.68	
1964	May 13, 1964	3.07		1970	April 14, 1970	3.59	
1965	July 18, 1965	3.68		1971	September 11, 1971	4.62	
1966	September 14, 1966	2.87		1972	June 21, 1972	8.69	8,800

**Table 82.** 01645700 Difficult Run near Fairfax, Va.

LOCATION.--Latitude 38°52'29", Longitude 077°20'18", NAD27, Fairfax County, Hydrologic Unit 02070008, at bridge on State Highway 665, 2.5 mi northwest of Fairfax.

DRAINAGE AREA.--4.36 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 310 ft NGVD of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by contracted-opening measurements at 470 ft<sup>3</sup>/s and 783 ft<sup>3</sup>/s.

BANKFULL STAGE.--6 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1950	July 16, 1950	7.05	705	1961	April 13, 1961	5.60	420
1951	December 4, 1950	6.21	530	1962	March 12, 1962	7.90	900
1952	September 1, 1952	7.40	783	1963	June 30, 1963	6.50	590
1953	November 21, 1952	5.90	470	1964	May 13, 1964	4.30	225
1954	December 14, 1953	4.10	205	1965	March 5, 1965	6.90	670
1955	August 22, 1955	6.96	690	1966	September 14, 1966	6.80	650
1956	December 14, 1955	6.20	530	1967	August 24, 1967	7.80	1,180
1957	October 22, 1956	6.49	590	1968	September 10, 1968	5.05	330
1958	December 21, 1957	6.98	700	1969	July 22, 1969	8.67	
1959	September 2, 1959	4.60	270	1970	August 14, 1970	4.40	240
1960	April 5, 1960	5.00	320				

**Table 83.** 01645750 South Fork Little Difficult Run near Fairfax, Va.

LOCATION.--Latitude 38°53'52", Longitude 077°21'12", NAD27, Fairfax County, Hydrologic Unit 02070008, at bridge on Fox Mill Road, 1.2 mi upstream from its confluence with Little Difficult Run, and 3.2 mi northwest of Fairfax.

DRAINAGE AREA.--1.58 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 317.09 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 40 ft<sup>3</sup>/s and extended above on basis of slope-area measurements at 81 ft<sup>3</sup>/s and 200 ft<sup>3</sup>/s.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1966	September 14, 1966	6.37	80.0	1969	June 3, 1969	8.37	210
1967	August 24, 1967	8.31	200	1970	August 14, 1970	6.50	80.0
1968	January 14, 1968	5.66	60.0				

**Table 84. 01645784 Snakeden Branch at Reston, Va.**

LOCATION.--Latitude 38°55'48", Longitude 077°20'43", NAD27, Fairfax County, Hydrologic Unit 02070008, on right bank at upstream side of culvert on Soapstone Drive, 1.1 mi upstream from Lake Dam, and 1.7 mi south of Sunset Hills in Reston.

DRAINAGE AREA.--0.79 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 320.15 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 100 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1972	June 21, 1972	6.40	760	1988	May 18, 1988	5.44	612
1973	September 14, 1973	5.04	523	1989	May 5, 1989	4.90	515
1974	June 17, 1974	3.61	308	1990	August 20, 1990	3.85	340
1975	September 26, 1975	4.91	516	1991	June 3, 1991	5.47	618
1976	April 1, 1976	3.28	262	1992	July 25, 1992	4.60	463
1977	August 24, 1977	4.28	412	1993	November 23, 1992	4.09	378
1978	May 14, 1978	3.91	354	1994	July 27, 1994	5.16	561
1985	February 12, 1985	2.29	141	1995	June 26, 1995	3.99	359
1986	August 8, 1986	2.75	196	1996	September 6, 1996	7.62	1,050
1987	June 4, 1987	4.50	447				

**Table 85.** 01645800 Piney Branch at Vienna, Va.

LOCATION.--Latitude 38°54'06", Longitude 077°15'57", NAD27, Fairfax County, Hydrologic Unit 02070008, on right bank 30 ft downstream from North Center Street at Vienna, 400 ft upstream from the Washington and Old Dominion Railroad.

DRAINAGE AREA.--0.27 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is not determined.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 100 ft<sup>3</sup>/s and extended above on basis of computation of peak-flow-through-culvert measurements at 200 ft<sup>3</sup>/s, 250 ft<sup>3</sup>/s and 280 ft<sup>3</sup>/s.

BANKFULL STAGE.--4 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1963	June 30, 1963	5.00	194	1967	August 24, 1967	6.20	280
1964	May 13, 1964	4.88	182	1968	September 10, 1968	7.20	200
1965	August 18, 1965	5.40	235	1969	July 22, 1969		250
1966	September 14, 1966	5.64	261				

**Table 86.** 01645900 Colvin Run at Reston, Va.

(Formerly published as Colvin Run near Herndon.)

LOCATION.--Latitude 38°57'56", Longitude 077°18'36", NAD27, Fairfax County, Hydrologic Unit 02070008, on right bank 10 ft downstream from highway bridge, 1.2 mi upstream from Leesburg Pike, and 4.1 mi northeast of Reston.

DRAINAGE AREA.--5.04 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 285.39 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 170 ft<sup>3</sup>/s and extended above on basis of slope-area measurement at 400 ft<sup>3</sup>/s.

BANKFULL STAGE.--Not determined.

REMARKS.—Some regulation by Lake Fairfax 0.5 mi upstream.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1961	June 10, 1961	3.39	320	1964	January 9, 1964	3.13	268
1962	March 12, 1962	2.64	176	1966	September 14, 1966	5.82	420
1963	June 30, 1963	5.13	790	1967	August 24, 1967	6.37	600

**Table 87.** 01645950 Piney Run at Reston, Va.

LOCATION.--Latitude 38°58'49", Longitude 077°19'09", NAD27, Fairfax County, Hydrologic Unit 02070008, at downstream end of culvert on Leesburg Pike, 1 mi northeast of Reston.

DRAINAGE AREA.--2.05 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 285.39 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 45 ft<sup>3</sup>/s and extended above on basis of slope-area measurement at 200 ft<sup>3</sup>/s.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1965	March 5, 1965	9.44	150	1967	August 24, 1967	10.00	220
1966	September 14, 1966	9.83	195				

**Table 88.** 01645975 Rocky Run near Great Falls, Va.

LOCATION.--Latitude 38°58'16", Longitude 077°14'49", NAD27, Fairfax County, Hydrologic Unit 02070008, on right downstream end of bridge at Towlston Road, 1.9 mi southeast of Great Falls.

DRAINAGE AREA.--3.19 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is not determined.

STAGE-DISCHARGE RELATION.--Not fully developed.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1961	April 13, 1961	1.43		1967	August 24, 1967	5.00	1,150
1962	March 12, 1962	1.72		1968	September 10, 1968	5.24	1,200
1963	June 30, 1963	1.58		1969	August 10, 1969	3.63	
1964	May 13, 1964	1.97		1971	February 13, 1971	1.50	
1965	August 18, 1965	2.45		1972	June 21, 1972	5.90	1,360
1966	September 14, 1966	3.83					

**Table 89. 01646000 Difficult Run near Great Falls, Va.**

LOCATION.--Latitude 38°58'33", Longitude 077°14'46", NAD27, Fairfax County, Hydrologic Unit 02070008, on right bank 250 ft downstream from bridge on State Highway 193, 300 ft downstream from Rocky Run, 0.7 mi upstream from mouth, and 1.5 mi southeast of Great Falls.

DRAINAGE AREA.--57.8 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 151.30 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 1,560 ft<sup>3</sup>/s and extended above on basis of contracted-opening measurement at 6,600 ft<sup>3</sup>/s and slope-area measurement at 32,000 ft<sup>3</sup>/s.

BANKFULL STAGE.--8 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Subsequent to June 30, 1957, records were provided by the Virginia Department of Environmental Quality - Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1935	September 6, 1935	7.03	810	1972	June 22, 1972	21.40	32,200
1936	June 13, 1936	10.58	2,890	1973	April 27, 1973	8.86	1,740
1937	April 26, 1937	8.88	1,760	1974	December 21, 1973	7.59	1,120
1938	October 28, 1937	10.64	2,890	1975	September 26, 1975	13.82	7,770
1939	January 30, 1939	7.36	1,040	1976	January 1, 1976	9.59	2,160
1940	April 20, 1940	7.71	1,170	1977	October 9, 1976	7.46	1,080
1941	April 5, 1941	6.49	685	1978	January 26, 1978	11.11	3,480
1942	March 31, 1942	6.24	634	1979	September 6, 1979	11.54	3,960
1943	October 16, 1942	10.50	2,820	1980	October 1, 1979		3,000 <sup>1,2</sup>
1944	November 9, 1943	8.50	1,550	1981	July 4, 1981	7.80	1,200
1945	August 1, 1945	8.26	1,450	1982	June 13, 1982	8.41	1,500
1946	May 18, 1946	7.68	1,170	1983	April 15, 1983	9.21	1,920
1947	August 21, 1947	6.42	682	1984	March 29, 1984	8.96	1,770
1948	June 20, 1948	8.05	1,300	1985	February 12, 1985	9.33	1,990
1949	December 4, 1948	7.30	1,000	1986	April 16, 1986	6.42	689
1950	July 16, 1950	8.90	1,760	1987	September 8, 1987	8.41	1,490
1951	June 14, 1951	8.88	1,660	1988	May 19, 1988	11.75	4,310
1952	September 1, 1952	9.17	1,940	1989	May 6, 1989	13.31	6,810
1953	November 21, 1952	8.90	1,760	1990	November 16, 1989	7.31	1,000
1954	December 14, 1953	6.59	748	1991	October 23, 1990	10.89	3,050
1955	August 13, 1955	10.70	2,960	1992	April 22, 1992	8.55	1,560
1956	July 21, 1956	10.96	3,190	1993	March 4, 1993	9.09	1,840
1957	May 14, 1957	7.85	1,220	1994	November 28, 1993	12.04	4,720
1958	December 21, 1957	9.05	1,820	1995	January 20, 1995	7.58	1,110
1959	September 2, 1959	7.54	1,080	1996	January 19, 1996	11.25	3,660
1960	August 5, 1960	8.49	1,550	1997	October 19, 1996	10.15	2,570
1961	April 13, 1961	7.60	1,120	1998	March 21, 1998	10.51	3,030

1962	March 12, 1962	7.69	1,170	1999	September 16, 1999	8.42	1,680
1963	June 30, 1963	8.08	1,350	2000	April 17, 2000	8.37	1,650
1964	January 9, 1964	7.59	1,120	2001	August 11, 2001	12.03	4,830
1965	March 5, 1965	7.82	1,220	2002	April 28, 2002	7.54	1,240
1966	September 14, 1966	8.84	1,710	2003	September 23, 2003	11.71	4,400
1967	August 25, 1967	13.18	6,610	2004	December 11, 2003	12.20	5,070
1968	September 10, 1968	9.37	2,030	2005	March 28, 2005	10.66	3,170
1969	July 23, 1969	10.97	3,360	2006	June 26, 2006	15.01	10,200
1970	April 14, 1970	8.30	1,440	2007	November 16, 2006	11.61	4,270
1971	February 14, 1971	9.07	1,850				

---

<sup>1</sup>Discharge is a maximum daily average.

<sup>2</sup>Discharge actually greater than indicated value.

**Table 90. 01646200 Scott Run near McLean, Va.**

LOCATION.--Latitude 38°57'32", Longitude 077°12'21", NAD27, Fairfax County, Hydrologic Unit 02070008, on left bank at bridge on Old Georgetown Pike, 0.8 mi upstream from mouth, and 2.3 mi northwest of McLean.

DRAINAGE AREA.--4.67 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 145.75 ft NGVD of 1929. Prior to Sept. 6, 1961 nonrecording gage (crest-stage gage), datum of gage was 161.76 ft NGVD of 1929. Prior to Sept. 18, 1973, water-stage recorder at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 280 ft<sup>3</sup>/s and extended above on basis of seven slope-area measurements between 500 ft<sup>3</sup>/s and 3,600 ft<sup>3</sup>/s.

BANKFULL STAGE.--9 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1961	June 10, 1961	19.63 <sup>1</sup>	810	1968	September 10, 1968	23.32	2,620
1962	May 1, 1962	19.17	485	1969	August 9, 1969	21.92	1,450
1963	November 10, 1962	19.01	444	1970	July 9, 1970	21.59	1,200
1964	November 7, 1963	19.07	472	1971	July 29, 1971	23.20	1,740
1965	March 5, 1965	19.90	571	1972	June 21, 1972	25.00	2,800
1966	September 14, 1966	23.30	3,560	1973	August 20, 1973	20.40	700
1967	August 24, 1967	22.75	2,900				

<sup>1</sup>Gage height at different site and (or) datum.

**Table 91.** 01646300 Dead Run near McLean, Va.

LOCATION.--Latitude 38°57'19", Longitude 077°10'51", NAD27, Fairfax County, Hydrologic Unit 02070010, at culvert on Benjamin Street, 1.5 mi north of McLean.

DRAINAGE AREA.--1.89 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is not determined.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 17 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1961	September 4, 1961	5.31	200	1962	June 2, 1962	5.48	232

**Table 92.** 01646600 Pimmit Run near Falls Church, Va.

LOCATION.--Latitude 38°54'41", Longitude 077°11'05", NAD27, Fairfax County, Hydrologic Unit 02070010, at bridge at Great Falls Road, 1.1 mi north of city boundary of Falls Church.

DRAINAGE AREA.--2.88 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 269.55 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 500 ft<sup>3</sup>/s and extended above on basis of slope-area measurement at 1,100 ft<sup>3</sup>/s.

BANKFULL STAGE.--5 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1961	June 10, 1961	5.53	622	1966	September 14, 1966	6.58	1,120
1962	May 1, 1962	3.82	330	1967	August 24, 1967	6.34	1,000
1963	June 20, 1963	3.58	291	1968	September 10, 1968	6.00	860
1964	May 13, 1964	4.70	485	1969	July 22, 1969	6.20	940
1965	August 18, 1965	4.79	510	1970	July 9, 1970	5.50	760

**Table 93.** 01646700 Pimmit Run at Arlington, Va.

LOCATION.--Latitude 38°56'10", Longitude 077°08'22", NAD27, Fairfax County, Hydrologic Unit 02070010, on right bank 150 ft downstream from bridge on Kirby Road, 150 ft upstream from Little Pimmit Run, and 0.8 mi northwest of Arlington County line.

DRAINAGE AREA.--8.26 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 129.12 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 800 ft<sup>3</sup>/s and extended above on basis of indirect measurements at 1,900 ft<sup>3</sup>/s and 2,700 ft<sup>3</sup>/s.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1961	August 26, 1961	4.28	1,070	1965	March 5, 1965	5.13	1,540
1962	May 2, 1962	3.24	546	1966	September 14, 1966	8.79	2,700
1963	August 20, 1963	3.70	750	1967	August 24, 1967	8.80	2,700
1964	May 13, 1964	5.20	935	1968	September 10, 1968	7.20	1,880

**Table 94.** 01646750 Little Pimmit Run tributary at Arlington, Va.

LOCATION.--Latitude 38°54'18", Longitude 077°08'17", NAD27, Arlington County, Hydrologic Unit 02070010, on left bank at 30th street, 0.2 mi northeast Yorktown High School, and 0.9 mi upstream from junction with Little Pimmit Run.

DRAINAGE AREA.--0.43 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is not determined.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 20 ft<sup>3</sup>/s and extended above on basis of computation of peak flow through culverts at 300 ft<sup>3</sup>/s and 700 ft<sup>3</sup>/s and slope-area measurement at 500 ft<sup>3</sup>/s.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1962	June 19, 1962	3.63	119	1965	July 18, 1965	6.24	692
1963	June 20, 1963	4.73	307	1966	September 14, 1966	4.48	295
1964	May 13, 1964	4.82	325				

**Table 95. 01646755 Little Pimmit Run tributary at Little Falls Road at Arlington, Va.**

LOCATION.--Latitude 38°54'25", Longitude 077°08'20", NAD27 Arlington County, Hydrologic Unit 02070010, on left bank 10 ft upstream from culvert entrance on Little Falls Road at intersection with North George Mason Drive and Rock Spring Road.

DRAINAGE AREA.—0.54 mi<sup>2</sup>.

GAGE.—Crest-stage gage. Datum of gage is not determined.

BANKFULL STAGE.—Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

<b>Water year</b>	<b>Date</b>	<b>Gage height (ft)</b>	<b>Discharge (ft<sup>3</sup>/s)</b>	<b>Water year</b>	<b>Date</b>	<b>Gage height (ft)</b>	<b>Discharge (ft<sup>3</sup>/s)</b>
Annual maximum stages and discharges							
1967	August 24, 1967	4.50	386	1969	June 3, 1969	4.87	430
1968	September 10, 1968	2.65	200				

**Table 96.** 01646800 Little Pimmit Run at Arlington, Va.

LOCATION.--Latitude 38°55'22", Longitude 077°08'43", NAD27, Fairfax County, Hydrologic Unit 02070010, at bridge on State Highway 689, 0.4 mi northwest of Arlington County Line.

DRAINAGE AREA.--2.31 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 186.30 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 160 ft<sup>3</sup>/s and extended above on basis of contracted-opening measurements at 740 ft<sup>3</sup>/s, 1,000 ft<sup>3</sup>/s, 1,200 ft<sup>3</sup>/s, and 2,600 ft<sup>3</sup>/s.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1961	June 8, 1961	7.67	1,040	1964	May 13, 1964	9.10	1,160
1962	June 19, 1962	4.60	461	1965	July 18, 1965	10.54	2,600
1963	August 20, 1963	7.56	855	1966	September 14, 1966		890

**Table 97. 01652400 Long Branch at Arlington, Va.**

LOCATION.--Latitude 38°51'31", Longitude 077°07'37", NAD27, Arlington County, Hydrologic Unit 02070010, on right bank at South Carlyn Springs Road, 500 ft downstream from Arlington County line, and 1.8 mi southeast of Seven Corners.

DRAINAGE AREA.--0.94 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 184 ft NGVD of 1929, from topographic map. Prior to Aug. 1, 1964, water-stage recorder at site 100 ft downstream at present datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 30 ft<sup>3</sup>/s and extended above on basis of computation of peak flow through culverts at 260 ft<sup>3</sup>/s, 575 ft<sup>3</sup>/s, 674 ft<sup>3</sup>/s, and 932 ft<sup>3</sup>/s.

BANKFULL STAGE.--6 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1961	June 10, 1961	7.02 <sup>1</sup>	930	1969	July 22, 1969	26.90	1,280
1962	May 13, 1962	7.43 <sup>1</sup>	490	1970	July 9, 1970	22.68	740
1963	August 20, 1963	7.92 <sup>1</sup>	830	1971	May 13, 1971	21.31	575
1964	May 13, 1964	7.44 <sup>1</sup>	575	1972	June 21, 1972	24.68	980
1965	August 18, 1965	20.93	530	1973	August 20, 1973	23.89	880
1966	September 14, 1966	22.18	680	1974	May 12, 1974	20.75	510
1967	August 24, 1967	21.14	555	1975	September 26, 1975	25.34	1,060
1968	June 27, 1968	20.32	456				

<sup>1</sup>Gage height at different site and (or) datum.

**Table 98.** 01652430 Doctors Run at Arlington, Va.

LOCATION.--Latitude 38°51'42", Longitude 077°06'09", NAD27, Arlington County, Hydrologic Unit 02070010, at 8th street, 0.6 mi west of Glebe Road in Arlington.

DRAINAGE AREA.--0.93 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 137 ft NGVD of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1966	September 14, 1966	3.59	420	1971	May 13, 1971	3.81	460
1967	August 24, 1967	3.81	460	1972	June 21, 1972	5.44	700
1968	June 27, 1968	5.12	650	1973	August 20, 1973	5.67	730
1969	July 22, 1969	8.60	1,600	1974	August 30, 1974	3.49	400
1970	July 9, 1970	7.48	1,050	1975	September 26, 1975	8.30	1,400

**Table 99.** 01652470 Lucky Run at Arlington, Va.

LOCATION.--Latitude 38°50'33", Longitude 077°06'16", NAD27, Arlington County, Hydrologic Unit 02070010, at Dinwiddie Street and Walter Reed Drive in Arlington.

DRAINAGE AREA.--1.30 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is not determined.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1966	September 14, 1966	3.70	345	1970	July 9, 1970	9.00	1,600
1967	August 24, 1967	6.00	620	1971	July 29, 1971	3.60	340
1968	June 27, 1968	6.20	670	1972	June 21, 1972	8.22	1,250
1969	July 22, 1969	9.50	1,900				

**Table 100. 01652500 Fourmile Run at Alexandria, Va.**

LOCATION.--Latitude 38°50'36.0", Longitude 077°05'09.1", NAD83, Alexandria City, Hydrologic Unit 02070010, on left upstream wingwall of bridge on Shirlington Road, at Arlington County-Alexandria City line, 0.1 mi upstream from Interstate Highway 395, and 2.5 mi upstream from mouth.

DRAINAGE AREA.--12.6 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 28.57 ft NGVD of 1929. October 1982 to September 1998, nonrecording gage at present site and datum. May 4, 1951, to Sept. 30, 1969, water-stage recorder at site 0.4 mi downstream at datum of 22.55 ft NGVD of 1929. Oct. 1, 1969, to Sept. 27, 1973, nonrecording gage at site 0.4 mi downstream at datum of 22.55 ft NGVD of 1929. Sep. 28, 1973 to Sept. 26, 1975, water-stage recorder at present site and datum. Sept. 27, 1975, to Sept. 30, 1977 nonrecording gage at present site and datum. July 1979 to September 1982, water-stage recorder at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 200 ft<sup>3</sup>/s and extended above on basis of slope-area measurements at 4,900 ft<sup>3</sup>/s and 10,000 ft<sup>3</sup>/s.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1947	June 7, 1947	7.20	2,250 <sup>1</sup>	1980	October 1, 1979	7.49	2,470
1952	July 9, 1952	5.60 <sup>2</sup>	1,600	1981	July 4, 1981	7.96	2,800
1953	May 5, 1953	8.50 <sup>2</sup>	3,450	1982	June 1, 1982	8.20	2,960
1954	May 3, 1954	4.22 <sup>2</sup>	854	1983	June 21, 1983	7.92	2,770
1955	July 8, 1955	6.91 <sup>2</sup>	2,120	1984	March 29, 1984	7.90	2,400
1956	July 22, 1956	5.10 <sup>2</sup>	1,350	1985	September 10, 1985	10.36	4,480
1957	January 23, 1957	4.12 <sup>2</sup>	810	1986	July 20, 1986	8.15	2,930
1958	July 8, 1958	5.27 <sup>2</sup>	1,450	1987	June 26, 1987	10.12	4,310
1959	June 13, 1959	4.90 <sup>2,3</sup>	1,250	1988	May 6, 1988	7.87	2,740
1960	June 13, 1960	4.08 <sup>2</sup>	810	1989	May 5, 1989	8.25	3,100
1961	August 26, 1961	7.00 <sup>2</sup>	3,600	1990	May 9, 1990	8.38	3,090
1962	May 31, 1962	4.45 <sup>2</sup>	1,060	1991	October 23, 1990	9.66	3,990
1963	August 20, 1963	9.89 <sup>2</sup>	11,700	1992	July 24, 1992	8.90	3,460
1964	May 13, 1964	5.41 <sup>2</sup>	1,800	1993	November 23, 1992	8.10	2,480
1965	July 18, 1965	6.15 <sup>2</sup>	2,560	1994	November 28, 1993	10.23	4,310
1966	September 14, 1966	7.83 <sup>2</sup>	6,900	1995	March 8, 1995	7.28	1,610
1967	August 24, 1967	7.93 <sup>2</sup>	6,290	1996	January 19, 1996	7.18	1,500
1968	June 27, 1968	7.28 <sup>2</sup>	5,040	1997	May 26, 1997	5.90	407
1969	July 22, 1969	11.60 <sup>2</sup>	14,600	1998	September 22, 1998	7.94	2,310
1970	July 9, 1970	10.70 <sup>2</sup>	8,800	1999	June 14, 1999	8.58	3,160
1971	July 29, 1971	6.90 <sup>2</sup>	4,300	2000	June 22, 2000	9.79	4,300
1972	June 21, 1972	12.40 <sup>2</sup>	10,000	2001	May 22, 2001	9.01	3,590
1973	August 20, 1973	9.20 <sup>2</sup>	4,900	2002	April 19, 2002	7.48	2,080
1974	August 30, 1974	8.55	2,930	2003	September 23, 2003	11.83	6,040
1975	September 26, 1975	13.07	6,350	2004	September 28, 2004	9.29	3,840

1976	September 16, 1976		2,200 <sup>4</sup>	2005	June 29, 2005	9.28	3,490
1977	July 12, 1977	9.28	3,600 <sup>4</sup>	2006	June 25, 2006	20.20	18,100
1979	September 5, 1979	8.36	3,080	2007	June 13, 2007	8.56	2,890

---

<sup>1</sup>Discharge is a historic peak.

<sup>2</sup>Gage height at different site and (or) datum.

<sup>3</sup>Gage height is not the maximum for the year.

<sup>4</sup>Discharge is an estimate.

**Table 101.** 01652600 Holmes Run at Merrifield, Va.

LOCATION.--Latitude 38°51'57", Longitude 077°12'45", NAD27, Fairfax County, Hydrologic Unit 02070010, on left bank 100 ft downstream from U.S. Highway 50, at Merrifield.

DRAINAGE AREA.--2.73 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 285.65 ft NGVD of 1929. Prior to Oct. 23, 1962, at present site and datum of 283.65 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 200 ft<sup>3</sup>/s and extended above on basis of eight computation of peak flow through culverts between 340 ft<sup>3</sup>/s and 2,330 ft<sup>3</sup>/s.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1960	February 18, 1960	6.16 <sup>1</sup>	185	1966	September 14, 1966	5.11	1,220
1961	June 10, 1961	6.75 <sup>1</sup>	430	1967	August 24, 1967	5.40	2,330
1962	February 28, 1962	5.35 <sup>1</sup>	133	1968	September 10, 1968	5.07	1,040
1963	June 29, 1963	4.68	474	1969	July 22, 1969	5.90	1,130
1964	May 13, 1964	4.81	661	1970	April 14, 1970	4.73	570
1965	March 5, 1965	4.48	337	1972	June 21, 1972	6.10	2,250 <sup>2</sup>

<sup>1</sup>Gage height at different site and (or) datum.

<sup>2</sup>Discharge is a historic peak.

**Table 102.** 01652610 Holmes Run near Annandale, Va.

LOCATION.--Latitude 38°50'47", Longitude 077°10'28", NAD27, Fairfax County, Hydrologic Unit 02070010, on left bank 150 ft downstream from Sleepy Hollow Road, 0.5 mi upstream from Lake Barcroft, and 1.6 mi northeast of Annandale.

DRAINAGE AREA.--7.11 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 215.00 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 600 ft<sup>3</sup>/s and extended above on basis of slope-area measurement at 2,700 ft<sup>3</sup>/s.

BANKFULL STAGE.--4 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1960	May 30, 1960	5.22	446	1966	September 14, 1966	7.93	1,400
1961	August 26, 1961	7.14	715	1967	August 24, 1967	8.70	2,700
1962	June 19, 1962	4.22	306	1968	September 10, 1968	7.35	955
1963	June 30, 1963	7.61	780	1969	July 22, 1969	7.57	1,080
1964	May 13, 1964	6.26	591	1970	July 9, 1970	5.43	490
1965	March 5, 1965	5.69	512	1972	June 21, 1972	9.20	4,600 <sup>1</sup>

<sup>1</sup>Discharge is a historic peak.

**Table 103.** 01652620 Tripps Run at Falls Church, Va.

LOCATION.--Latitude 38°52'46", Longitude 077°10'45", NAD27, Fairfax County, Hydrologic Unit 02070010, on right bank 200 ft upstream from South Washington Street at Falls Church.

DRAINAGE AREA.--1.91 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 273.09 ft NGVD of 1929. Prior to July 27, 1963, at present site and datum of 274.95 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 325 ft<sup>3</sup>/s and extended above on basis of slope-area measurement at 1,100 ft<sup>3</sup>/s.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1960	July 27, 1960	3.62 <sup>1</sup>	260	1965	July 18, 1965	6.08	670
1961	June 10, 1961	6.50 <sup>1</sup>	736	1966	September 14, 1966	8.64	1,500
1962	October 21, 1961	5.06 <sup>1</sup>	292	1967	August 24, 1967	8.50	1,150
1963	June 20, 1963	7.37 <sup>1</sup>	687	1968	September 10, 1968	8.22	1,050
1964	May 13, 1964	7.43	699				

<sup>1</sup>Gage height at different site and (or) datum.

**Table 104.** 01652645 Tripps Run tributary near Falls Church, Va.

LOCATION.--Latitude 38°51'54", Longitude 077°10'16", NAD27, Fairfax County, Hydrologic Unit 02070010, on left bank 10 ft upstream from Holmes Run Drive, 1.1 mi south of Falls Church.

DRAINAGE AREA.--0.51 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 245.00 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 55 ft<sup>3</sup>/s and extended above on basis of computation of peak flow through culvert at 300 ft<sup>3</sup>/s.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1963	August 20, 1963	6.28	285	1966	September 14, 1966	6.52	318
1964	May 13, 1964	6.41	302	1967	August 24, 1967	6.48	315
1965	July 18, 1965	6.20	275				

**Table 105. 01652650 Tripps Run near Falls Church, Va.**

LOCATION.--Latitude 38°51'37", Longitude 077°09'57", NAD27, Fairfax County, Hydrologic Unit 02070010, at Sleepy Hollow Road, 0.7 mi upstream from Lake Barcroft, and 1.0 mi southwest of Falls Church.

DRAINAGE AREA.--4.63 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is not determined.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 1,900 ft<sup>3</sup>/s and extended above on basis of contracted-opening measurements at 3,000 ft<sup>3</sup>/s.

BANKFULL STAGE.--3 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

<b>Water year</b>	<b>Date</b>	<b>Gage height (ft)</b>	<b>Discharge (ft<sup>3</sup>/s)</b>	<b>Water year</b>	<b>Date</b>	<b>Gage height (ft)</b>	<b>Discharge (ft<sup>3</sup>/s)</b>
Annual maximum stages and discharges							
1960	July 27, 1960	4.58	590	1964	May 13, 1964	19.64	1,100
1961	June 10, 1961	21.41	2,610	1965	July 18, 1965	19.63	594
1962	June 19, 1962	18.38	383	1966	September 14, 1966	22.20	3,040
1963	June 29, 1963	19.60	1,070	1967	August 24, 1967		1,700

**Table 106.** 01652670 Holmes Run below Lake Barcroft near Alexandria, Va.

LOCATION.--Latitude 38°50'27", Longitude 077°08'39", NAD27, Fairfax County, Hydrologic Unit 02070010, on left bank 1,200 ft downstream from Columbia Pike, 0.8 mi northwest of Alexandria.

DRAINAGE AREA.--14.8 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 132.10 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 300 ft<sup>3</sup>/s.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1959	July 12, 1959	3.76	875	1961	April 13, 1961	3.29	688
1960	April 5, 1960	3.71	854				

**Table 107.** 01652690 Holmes Run at Alexandria, Va.

LOCATION.--Latitude 38°48'44", Longitude 077°06'51", NAD27, Alexandria City, Hydrologic Unit 02070010, on left bank 300 ft upstream from Duke Street at Alexandria and 2,000 ft upstream from confluence of Holmes Run and Back Lick Run.

DRAINAGE AREA.--18.8 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 52.69 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 1,200 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1959	July 12, 1959	3.62	692	1961	August 26, 1961	5.24	1,440
1960	May 30, 1960	4.68	1,170				

**Table 108. 01652710 Backlick Run at Springfield, Va.**

LOCATION.--Latitude 38°48'05", Longitude 077°11'14", NAD27, Fairfax County, Hydrologic Unit 02070010, on right bank 10 ft downstream from Leesville Boulevard at Springfield.

DRAINAGE AREA.--2.08 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 206.94 ft NGVD of 1929. Prior to Sept. 16, 1968, water-stage recorder at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 200 ft<sup>3</sup>/s and extended above on basis of computation of peak flow through culverts at 1,000 ft<sup>3</sup>/s.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

<b>Water year</b>	<b>Date</b>	<b>Gage height (ft)</b>	<b>Discharge (ft<sup>3</sup>/s)</b>	<b>Water year</b>	<b>Date</b>	<b>Gage height (ft)</b>	<b>Discharge (ft<sup>3</sup>/s)</b>
Annual maximum stages and discharges							
1960	February 18, 1960	3.28	271	1965	March 5, 1965	3.99	442
1961	September 3, 1961	5.50	810	1966	September 14, 1966	6.10	1,050
1962	March 12, 1962	2.55	95.0	1967	August 24, 1967	5.50	810
1963	August 20, 1963	5.53	932	1968	September 10, 1968	5.02	629
1964	May 13, 1964	3.74	380				

**Table 109.** 01652810 Turkeycock Run at Alexandria, Va.

LOCATION.--Latitude 38°48'36", Longitude 077°09'06", NAD27, Fairfax County, Hydrologic Unit 02070010, at upstream end of culvert at Shirley Highway at Alexandria.

DRAINAGE AREA.--2.28 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 141.48 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 160 ft<sup>3</sup>/s and extended above on basis of computation of peak flow through culvert at 390 ft<sup>3</sup>/s.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1959	September 1, 1959	2.98	339	1962	March 12, 1962	1.91	205
1960	May 30, 1960	3.37	385	1963		6.58	827 <sup>1</sup>
1961	August 26, 1961	4.16	485	1964	May 13, 1964	2.60	297

<sup>1</sup>Month or day of occurrence is unknown or not exact.

**Table 110. 01652910 Backlick Run at Alexandria, Va.**

LOCATION.--Latitude 38°48'11", Longitude 077°07'41", NAD27, Alexandria City, Hydrologic Unit 02070010, 0.9 mi upstream from confluence of Back Lick Run and Holmes Run at Alexandria.

DRAINAGE AREA.--13.5 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 69.97 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 525 ft<sup>3</sup>/s and extended above on basis of critical-flow computation.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1960	May 30, 1960	3.54	990	1966	September 14, 1966	9.18	4,960
1961	August 26, 1961	5.62	2,160	1967	August 24, 1967	6.76	2,970
1962	March 12, 1962	2.56	566	1968	September 10, 1968	6.08	2,480
1963	August 20, 1963	7.15	3,230	1969	September 7, 1969	6.14	2,510
1964	May 13, 1964	4.62	1,560	1970	July 9, 1970	9.20	4,980
1965	March 5, 1965	4.66	1,590				

**Table 111. 01653000 Cameron Run at Alexandria, Va.**

LOCATION.--Latitude 38°48'23", Longitude 077°06'36", NAD27, Fairfax County, Hydrologic Unit 02070010, on left downstream side of Norfolk Southern Railway bridge at Alexandria, 800 ft downstream from confluence of Holmes Run and Backlick Run, 0.5 mi east of the U.S. Army Quartermaster Depot, and 3.4 mi upstream from mouth.

DRAINAGE AREA.--33.9 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 37.74 ft NGVD of 1929. Prior to Sept. 20, 1965, water-stage recorder at present site at datum of 38.85 ft NGVD of 1929. Sept. 20, 1965 to Jan. 19, 1976, water-stage recorder at present site at datum of 36.51 ft NGVD of 1929. Jan. 20, 1976 to Nov. 8, 1976, water-stage recorder at site 1,200 ft downstream at datum of 21.07 ft NGVD of 1929. Nov. 9, 1976, to Mar. 31, 1979, water-stage recorder at site 0.5 mi downstream at datum of 23.85 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 1,100 ft<sup>3</sup>/s and extended above on basis of slope-area measurements at 5,700 ft<sup>3</sup>/s.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated. Some regulation by Lake Barcroft, formerly Alexandria Reservoir, on Holmes Run 3.6 mi upstream, usable capacity approximately 2,092 acre-ft.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1953	May 5, 1953	11.90 <sup>1</sup>		1982	May 30, 1982	5.95	3,720
1956	July 20, 1956	8.62 <sup>1</sup>	3,950	1983	June 21, 1983	9.03	5,710
1957	April 5, 1957	5.50 <sup>1</sup>	865	1984	March 29, 1984	6.95	4,460
1958	July 8, 1958	7.93 <sup>1</sup>	2,600	1985	November 5, 1984	6.40	3,950
1959	June 12, 1959	7.93 <sup>1</sup>	2,900	1986	August 2, 1986	6.04	3,630
1960	April 5, 1960	5.68 <sup>1</sup>	1,300	1987	December 24, 1986	6.84	3,890
1961	August 26, 1961	7.35 <sup>1</sup>	3,820	1988	May 18, 1988	5.33	2,980
1962	March 12, 1962	4.84 <sup>1</sup>	1,230	1989	May 6, 1989	9.50	6,960
1963	August 20, 1963	10.48 <sup>1</sup>	6,480	1990	July 5, 1990	5.67	3,510
1964	May 13, 1964	5.78 <sup>1,2</sup>	2,550	1991	October 23, 1990	7.34	4,800
1965	March 5, 1965	6.92 <sup>1</sup>	3,330	1992	July 24, 1992	6.15	3,570
1966	September 14, 1966	14.14 <sup>1</sup>	9,300	1993	November 23, 1992	4.94	2,650
1967	August 25, 1967	12.72 <sup>1</sup>	6,950	1994	November 28, 1993	8.50	5,900
1968	September 10, 1968	10.65 <sup>1</sup>	4,780	1995	January 20, 1995	5.02	2,130
1969	September 8, 1969	9.66 <sup>1</sup>	4,030	1996	January 19, 1996	8.73	5,870
1970	July 9, 1970	13.11 <sup>1</sup>	6,910	1997	November 8, 1996	6.82	3,760
1971	August 27, 1971	9.32 <sup>1</sup>	4,320	1998	February 17, 1998	6.28	3,230
1972	June 22, 1972	18.14 <sup>1</sup>	19,900 <sup>3</sup>	1999	September 16, 1999	5.83	2,820
1973	July 10, 1973	9.94 <sup>1</sup>	4,730	2000	July 28, 2000	9.64	7,020
1974	August 30, 1974	8.39 <sup>1</sup>	3,860	2001	December 17, 2000	8.34	5,410
1975	September 26, 1975	16.73 <sup>1</sup>	14,900	2002	June 19, 2002	4.07	1,420
1976	December 31, 1975	8.10 <sup>1</sup>	3,700	2003	September 23, 2003	11.29	9,330
1977	July 12, 1977	8.20 <sup>1</sup>	5,040	2004	November 19, 2003	7.27	4,220
1978	January 26, 1978	8.93 <sup>1</sup>	6,200	2005	March 28, 2005	7.78	4,770
1979	February 25, 1979	7.30 <sup>1</sup>	4,300	2006	June 25, 2006	15.52	16,500

1980	March 13, 1980	4.74	1,900	2007	November 16, 2006	7.72	4,700
1981	July 4, 1981	8.45	6,920				

---

<sup>1</sup>Gage height at different site and (or) datum.

<sup>2</sup>Gage height is not the maximum for the year.

<sup>3</sup>Discharge is affected to unknown degree by regulation or diversion.

**Table 112.** 01653210 Pike Branch at Alexandria, Va.

LOCATION.--Latitude 38°47'35", Longitude 077°05'02", NAD27, Fairfax County, Hydrologic Unit 02070010, on right bank 50 ft upstream from Telegraph Road, 0.5 mi south of Alexandria.

DRAINAGE AREA.--2.59 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 33.17 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 150 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--6 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1960	May 30, 1960	6.42	770	1963	June 29, 1963	5.83	676
1961	July 13, 1961	7.50	970	1964	May 13, 1964	4.41	411
1962	May 31, 1962	4.41	348				

**Table 113. 01653447 Penn Daw Outfall at Alexandria, Va.**

(Formerly published as 01653600.)

LOCATION.--Latitude 38°47'19", Longitude 077°03'54", NAD27, Fairfax County, Hydrologic Unit 02070010, on left bank at Huntington Avenue, 0.35 mi upstream from Hunting Creek and 0.5 mi southwest of Alexandria.

DRAINAGE AREA.--0.79 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 13.54 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 110 ft<sup>3</sup>/s and extended above on basis of slope-area measurement at 340 ft<sup>3</sup>/s.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1961	July 13, 1961	6.02	406 <sup>1</sup>	1966	September 14, 1966	5.61	340
1963	August 20, 1963	4.57	188	1967	July 8, 1967	4.46	175
1964	April 30, 1964	4.04	122	1968	June 27, 1968	5.38	304
1965	August 26, 1965	5.13	266				

<sup>1</sup>Discharge is a historic peak.

**Table 114.** 01653700 Little Hunting Creek at Gum Springs, Va.

LOCATION.--Latitude 38°44'21", Longitude 077°05'20", NAD27, Fairfax County, Hydrologic Unit 02070010, on right bank 50 ft downstream from U.S. Highway 1 at Gum Springs, 1.0 mi upstream from North Branch, and 2.3 mi upstream from mouth.

DRAINAGE AREA.--1.97 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 7.17 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 65 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--5 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1961	September 26, 1961	2.58	90.0	1963	May 12, 1963	3.10	166
1962	May 31, 1962	2.69	90.0				

**Table 115. 01653800 Dogue Creek near Accotink, Va.**

LOCATION.--Latitude 38°43'08", Longitude 077°07'44", NAD27, Fairfax County, Hydrologic Unit 02070010, at bridge at U.S. Highway 1, 1.8 mi northeast of Accotink.

DRAINAGE AREA.--10.8 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 2.67 ft NGVD of 1929. Prior to Mar. 8, 1961, water-stage recorder at present site and datum of 2.44 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 300 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1961	April 13, 1961	6.87	305	1963	March 12, 1963	7.53	385
1962	March 13, 1962	5.23	139				

**Table 116. 01653900 Accotink Creek at Fairfax, Va.**

LOCATION.--Latitude 38°51'39", Longitude 077°16'17", NAD27, Fairfax County, Hydrologic Unit 02070010, at bridge at Pickett Street in Fairfax.

DRAINAGE AREA.--6.86 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 278.72 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 415 ft<sup>3</sup>/s and extended above on basis of step-backwater computation.

BANKFULL STAGE.--6 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1961	August 26, 1961	6.77	772	1966	September 14, 1966	7.69	1,720
1962	June 23, 1962	5.45	475	1967	August 24, 1967	8.98	3,900
1963	June 30, 1963	7.53	1,350	1968	September 10, 1968	7.64	1,480
1964	May 13, 1964	7.74	1,600	1969	July 22, 1969	9.90	6,350
1965	March 5, 1965	6.74	816	1970	July 9, 1970	6.75	660

**Table 117. 01653925 Bear Branch near Vienna, Va.**

LOCATION.--Latitude 38°51'54", Longitude 077°15'20", NAD27, Fairfax County, Hydrologic Unit 02070010, at Arlington Boulevard, 1.1 mi south of Vienna.

DRAINAGE AREA.--2.07 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 276.18 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Not fully developed.

BANKFULL STAGE.--5 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Insufficient field data to develop lower portion of stage-discharge rating.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1961	August 26, 1961	3.70		1967	August 24, 1967	5.38	1,660
1962	June 5, 1962	3.36		1968	September 10, 1968	3.55	
1963	June 29, 1963	3.95		1969	July 22, 1969	6.90	3,500
1964	September 30, 1964	3.22		1970	April 14, 1970	3.56	
1965	August 18, 1965	3.24		1971	July 30, 1971	3.75	
1966	September 14, 1966	3.58					

**Table 118. 01653950 Long Branch at Vienna, Va.**

LOCATION.--Latitude 38°52'23", Longitude 077°14'34", NAD27, Fairfax County, Hydrologic Unit 02070010, on right bank 50 ft at Lee Highway, 0.5 mi upstream from Arlington Boulevard, and 0.5 mi southeast of Vienna.

DRAINAGE AREA.--1.21 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 300.06 ft NGVD of 1929. Water-stage recorder from August 30, 1963 to September 9, 1968 at present site and datum. Datum of float tape is 272.38 ft NGVD of 1929. Datum of outside staff is 299.74 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 55 ft<sup>3</sup>/s and extended above on basis of computation of peak flow through culvert at 1,000 ft<sup>3</sup>/s, 1,150 ft<sup>3</sup>/s, and 1,650 ft<sup>3</sup>/s.

BANKFULL STAGE.--6 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1961	August 26, 1961	4.19		1966	September 14, 1966	5.11	1,160
1962	June 5, 1962	1.91		1967	August 24, 1967	5.18	1,640
1963	June 29, 1963	5.06	744	1968	September 10, 1968	5.45	1,130
1964	May 13, 1964	4.02	700 <sup>1</sup>	1969	July 22, 1969	10.30	2,000
1965	August 18, 1965	4.43	700 <sup>1</sup>	1972	June 21, 1972	5.85	1,280 <sup>2</sup>

<sup>1</sup>Discharge is less than indicated value, which is minimum recordable discharge at this site.

<sup>2</sup>Discharge is a historic peak.

**Table 119. 01654000 Accotink Creek near Annandale, Va.**

LOCATION.--Latitude 38°48'46", Longitude 077°13'43", NAD27, Fairfax County, Hydrologic Unit 02070010, on left bank 800 ft upstream from bridge on State Highway 620, 0.2 mi upstream from Long Branch, and 2.3 mi southwest of Annandale.

DRAINAGE AREA.--23.9 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 191.24 ft NGVD of 1929 (levels by Stone and Webster Engineering Corporation). Prior to May 12, 1949, nonrecording gage at site 800 ft downstream at datum of 190.91 ft NGVD of 1929. May 12, 1949, to June 4, 1970, water-stage recorder at present site at datum of 190.91 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 6,600 ft<sup>3</sup>/s and extended above on basis of contracted-opening and flow-off-road measurement at 12,000 ft<sup>3</sup>/s.

BANKFULL STAGE.--7.5 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Subsequent to June 30, 1957, records were provided by the Virginia Department of Environmental Quality - Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1947	June 8, 1947	9.90 <sup>1</sup>	3,950	1977	October 26, 1976	8.91	2,020
1948	June 20, 1948	5.20 <sup>1</sup>	780	1978	January 26, 1978	9.98	2,900
1949	December 4, 1948	5.80 <sup>1,2</sup>	940	1979	September 6, 1979	11.54	4,480
1950	September 11, 1950	5.74 <sup>1</sup>	910	1980	October 1, 1979	10.23	3,100
1951	December 4, 1950	6.73 <sup>1</sup>	1,300	1981	August 12, 1981	10.27	3,170
1952	September 1, 1952	9.10 <sup>1</sup>	2,560	1982	June 13, 1982	7.41	1,190
1953	May 5, 1953	8.41 <sup>1</sup>	2,120	1983	June 21, 1983	10.22	3,120
1954	December 14, 1953	4.20 <sup>1</sup>	584	1984	August 13, 1984	11.31	4,250
1955	August 13, 1955	9.05 <sup>1</sup>	2,500	1985	February 12, 1985	9.03	2,100
1956	September 27, 1956	7.05 <sup>1</sup>	1,270	1986	April 16, 1986	6.49	777
1957	April 5, 1957	6.12 <sup>1</sup>	990	1987	December 24, 1986	9.81	2,710
1958	December 21, 1957	5.69 <sup>1</sup>	865	1988	May 19, 1988	8.08	1,520
1959	September 2, 1959	5.99 <sup>1</sup>	965	1989	May 6, 1989	14.40	8,820
1960	February 19, 1960	6.62 <sup>1</sup>	1,140	1991	October 23, 1990	11.75	4,780
1961	August 26, 1961	7.77 <sup>1</sup>	1,600	1992	April 22, 1992	9.11	2,160
1962	March 12, 1962	5.81 <sup>1</sup>	915	1993	April 16, 1993	9.26	2,270
1963	June 30, 1963	8.82 <sup>1</sup>	2,240	1994	November 28, 1993	11.13	4,040
1964	May 13, 1964	7.86 <sup>1</sup>	1,650	1995	January 15, 1995	6.76	853
1965	March 5, 1965	7.58 <sup>1</sup>	1,500	1996	September 4, 1996	12.09	5,230
1966	September 14, 1966	9.74 <sup>1</sup>	3,400	1997	May 26, 1997	11.18	4,100
1967	August 24, 1967	11.84 <sup>1</sup>	7,870	1998	March 21, 1998	9.73	2,670
1968	September 10, 1968	9.46 <sup>1</sup>	3,500	1999	September 16, 1999	9.31	2,320
1969	July 22, 1969	11.85 <sup>1</sup>	7,870	2000	July 14, 2000	9.77	2,710
1970	April 14, 1970	7.10 <sup>1,2</sup>	1,300	2001	August 11, 2001	12.56	5,880
1971	July 30, 1971	9.20	2,380	2002	June 19, 2002	8.33	1,610
1972	June 22, 1972	15.96	12,000	2003	September 23, 2003	11.40	4,380

1973	July 10, 1973	10.69	3,270	2004	December 11, 2003	11.31	4,280
1974	August 30, 1974	8.79	1,890	2005	January 14, 2005	10.56	3,460
1975	September 26, 1975	12.90	6,420	2006	June 26, 2006	13.72	7,660
1976	January 1, 1976	9.14	2,180	2007	November 16, 2006	11.44	4,430

---

<sup>1</sup>Gage height at different site and (or) datum.

<sup>2</sup>Gage datum changed during this year.

**Table 120. 01654500 Long Branch near Annandale, Va.**

LOCATION.--Latitude 38°48'39", Longitude 077°14'07", NAD27, Fairfax County, Hydrologic Unit 02070010, on left bank at downstream side of bridge on State Highway 620, 0.3 mi upstream from mouth, and 2.5 mi southwest of Annandale.

DRAINAGE AREA.--3.72 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 198.05 ft NGVD of 1929. Prior to Oct. 15, 1947, staff gage at present site and datum of 198.21 ft NGVD of 1929. Oct. 15, 1947, to May 27, 1949, staff gage 150 ft downstream at datum of 196.69 ft NGVD of 1929. May 28, 1949, to May 10, 1957, staff gage, crest-stage gage, and V-notch weir at downstream side of bridge at datum of 198.15 ft NGVD of 1929. Aug. 3, 1959, to June 15, 1970, water-stage recorder at present site and datum of 198.05 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 500 ft<sup>3</sup>/s and extended above on basis of computation of peak flow through culvert at 1,250 ft<sup>3</sup>/s, 2,300 ft<sup>3</sup>/s, and 3,300 ft<sup>3</sup>/s.

BANKFULL STAGE.--6 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1947	June 8, 1947	7.70 <sup>1</sup>	1,100	1959	September 2, 1959	4.54	523
1948	May 30, 1948	4.60 <sup>1</sup>	328	1960	February 18, 1960	2.88	161
1949	May 15, 1949	4.00 <sup>1</sup>	250	1961	August 26, 1961	5.68	732
1950	September 11, 1950	3.48 <sup>1</sup>	310	1962	March 12, 1962	3.16	222
1951	June 13, 1951	5.20 <sup>1</sup>	680	1963	August 20, 1963	4.84	581
1952	September 1, 1952	4.80 <sup>1</sup>	590	1964	May 13, 1964	3.12	186
1953	May 5, 1953	4.40 <sup>1</sup>	510	1965	March 5, 1965	3.83	382
1954	June 15, 1954	2.67 <sup>1</sup>	85.0	1966	September 14, 1966	5.10	2,330
1955	August 18, 1955	3.41 <sup>1</sup>	288	1967	August 24, 1967	6.30	3,300
1956	July 21, 1956	3.50 <sup>1</sup>	310	1968	September 10, 1968	4.50	500
1957	April 5, 1957	3.22 <sup>1</sup>	230	1969	July 20, 1969	6.00	3,100

<sup>1</sup>Gage height at different site and (or) datum.

**Table 121. 01655000 Accotink Creek near Accotink Station, Va.**

LOCATION.--Latitude 38°45'15", Longitude 077°12'09", NAD27, Fairfax County, Hydrologic Unit 02070010, at bridge 1.4 mi northwest of Accotink Station.

DRAINAGE AREA.--37.1 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 119.48 ft NGVD of 1929. Prior to July 29, 1960, water-stage recorder at present site and datum of 125.35 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 900 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated. Occasional regulation by reservoir 4 miles above gage, usable capacity approximately 736 acre-ft.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1949	May 16, 1949	8.89 <sup>1</sup>	875	1954	May 4, 1954	9.84 <sup>1</sup>	1,220
1950	March 23, 1950	9.33 <sup>1</sup>	1,000	1955	August 13, 1955	14.21 <sup>1</sup>	3,120
1951	June 14, 1951	10.32 <sup>1</sup>	1,320	1957	April 6, 1957	10.22 <sup>1</sup>	1,380 <sup>2</sup>
1952	September 1, 1952	12.74 <sup>1</sup>	2,060	1961	August 26, 1961	11.83	1,830 <sup>2</sup>
1953	May 6, 1953	11.87 <sup>1</sup>	1,760				

<sup>1</sup>Gage height at different site and (or) datum.

<sup>2</sup>Discharge is a historic peak.

**Table 122.** 01655160 Long Branch at Newington Road near Accotink, Va.

LOCATION.--Latitude 38°44'03", Longitude 077°11'02", NAD27, Fairfax County, Hydrologic Unit 02070010, on left downstream wingwall of bridge on Newington Road, 900 ft upstream from Fort Belvoir Military Railroad, and 2.2 mi northwest of Accotink.

DRAINAGE AREA.—4.26 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 76.10 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Not developed.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1961	August 26, 1961	1.41		1967	August 24, 1967	1.48	
1962	March 12, 1962	1.47		1968	September 10, 1968	1.63	
1963	March 12, 1963	0.920		1969	September 8, 1969	1.64	
1964	May 13, 1964	2.74		1970	April 14, 1970	1.77	
1965	August 18, 1965	1.43		1971	July 30, 1971	1.52	
1966	February 13, 1966	1.86					

**Table 123.** 01655310 Rabbit Branch near Burke, Va.

LOCATION.--Latitude 38°48'06", Longitude 077°17'19", NAD27, Fairfax County, Hydrologic Unit 02070010, at bridge on Guinea Road, 1.1 mi northwest of Burke.

DRAINAGE AREA.—3.82 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 267.66 ft NGVD of 1929. Prior to Sept. 13, 1962, water-stage recorder at present site and datum of 267.86 ft NGVD of 1929. July 17, 1964, to June 24, 1966, water-stage recorder at present site and datum. June 25, 1966, to July 24, 1967, water-stage recorder at present site and datum of 267.76 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 90 ft<sup>3</sup>/s and extended above on basis of contracted-opening measurements at 400 ft<sup>3</sup>/s and 2,500 ft<sup>3</sup>/s.

BANKFULL STAGE.--2 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1961	August 26, 1961	6.07 <sup>1</sup>	586	1966	September 14, 1966	5.97 <sup>1</sup>	494
1962	March 12, 1962	4.29 <sup>1</sup>	175	1967	August 24, 1967	7.70	2,500
1964	May 13, 1964	5.29	291	1968	September 10, 1968	6.03	480
1965	March 5, 1965	5.75	390				

<sup>1</sup>Gage height at different site and (or) datum.

**Table 124.** 01655330 Sideburn Branch near Fairfax Station, Va.

LOCATION.--Latitude 38°47'46", Longitude 077°18'07", NAD27, Fairfax County, Hydrologic Unit 02070010, on left bank 20 ft downstream from New Cut Road, 1.3 mi east of Fairfax Station.

DRAINAGE AREA.--2.79 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 287.68 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 60 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--5 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1961	August 26, 1961	5.78	346	1962	March 12, 1962	3.75	121

**Table 125. 01655340 Pohick Creek tributary near Burke, Va.**

LOCATION.--Latitude 38°46'24", Longitude 077°15'07", NAD27, Fairfax County, Hydrologic Unit 02070010, at gaging station on Keene Mill Road, 1.8 mi southeast of Burke.

DRAINAGE AREA.--0.33 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is not determined.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 30 ft<sup>3</sup>/s and extended above on basis of computation of peak flow through culvert at 70 ft<sup>3</sup>/s, 180 ft<sup>3</sup>/s, and 420 ft<sup>3</sup>/s.

BANKFULL STAGE.--4 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1964	May 13, 1964	6.06	70.0	1966	September 14, 1966	7.26	175
1965	March 5, 1965	5.16	36.0	1967	August 24, 1967	8.00	400

**Table 126.** 01655350 Pohick Creek near Springfield, Va.

LOCATION.--Latitude 38°45'26", Longitude 077°13'37", NAD27, Fairfax County, Hydrologic Unit 02070010, at bridge on Hooes Road, 2.9 mi southwest of Springfield.

DRAINAGE AREA.--15.2 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 164.14 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 1,250 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--6 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1961	August 26, 1961	7.52	1,320	1966	September 14, 1966	6.74	1,000
1962	March 11, 1962	4.99	615	1967	August 25, 1967	10.36	3,510
1963	March 12, 1963	5.97	750	1968	January 14, 1968	5.93	744
1964	May 13, 1964	5.02	514	1969	July 21, 1969	7.22	1,200
1965	March 5, 1965	6.07	781	1970	July 9, 1970	5.93	740

**Table 127.** 01655370 Middle Run near Lorton, Va.

LOCATION.--Latitude 38°45'01", Longitude 077°14'03", NAD27, Fairfax County, Hydrologic Unit 02070010, at bridge 0.7 mi upstream from mouth, 3.2 mi north of Lorton.

DRAINAGE AREA.--3.64 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 169.55 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 140 ft<sup>3</sup>/s and extended above on basis of contracted-opening measurements at 1,100 ft<sup>3</sup>/s and 1,500 ft<sup>3</sup>/s.

BANKFULL STAGE.--3 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1961	August 26, 1961	4.47	798	1965	March 5, 1965	3.40	430
1962	March 12, 1962	1.85	139	1966	September 14, 1966	5.22	1,100
1963	March 12, 1963	3.45	470	1967	August 24, 1967	5.70	1,430
1964	May 12, 1964	3.08	350	1968	June 27, 1968	3.40	412

**Table 128. 01655380 South Run near Lorton, Va.**

LOCATION.--Latitude 38°44'11", Longitude 077°15'10", NAD27, Fairfax County, Hydrologic Unit 02070010, on left bank at bridge at Hooes Road, 0.8 mi upstream from telephone line, and 2.7 mi northwest of Lorton.

DRAINAGE AREA.--6.30 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 189.48 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 110 ft<sup>3</sup>/s and extended above on basis of contracted-opening measurements at 1,300 ft<sup>3</sup>/s.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1961	August 26, 1961	4.53	666	1965	March 5, 1965	3.60	397
1962	March 12, 1962	2.50	173	1966	September 14, 1966	6.03	1,300
1963	March 12, 1963	4.05	501	1967	August 24, 1967	5.92	1,240
1964	May 13, 1964	2.86	239	1968	January 14, 1968	3.38	333

**Table 129. 01655390 Pohick Creek at Lorton, Va.**

LOCATION.--Latitude 38°42'14", Longitude 077°12'52", NAD27, Fairfax County, Hydrologic Unit 02070010, at bridge on Telegraph Road, 0.6 mi east of Lorton.

DRAINAGE AREA.--31.3 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 26.42 ft NGVD of 1929. Aug. 26, 1961, to Oct. 30, 1967 water-stage recorder (float-tape gage) at present site and datum of 23.74 NGVD of 1929. Prior to Aug. 26, 1961 water-stage recorder at present site and datum of 23.84 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 1,000 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1961	August 26, 1961	4.85 <sup>1</sup>	1,420	1965	March 5, 1965	4.36 <sup>1</sup>	1,200
1962	March 12, 1962	3.45 <sup>1</sup>	820	1966	September 14, 1966	6.15 <sup>1</sup>	2,340
1963	March 12, 1963	4.82 <sup>1</sup>	1,420	1967	August 25, 1967	9.10 <sup>1</sup>	5,500
1964	March 13, 1964	3.81 <sup>1</sup>	964	1968	January 14, 1968	6.50	2,600

<sup>1</sup>Gage height at different site and (or) datum.

**Table 130. 01655500 Cedar Run near Warrenton, Va.**

LOCATION.--Latitude 38°44'25", Longitude 077°47'16", NAD27, Fauquier County, Hydrologic Unit 02070010, on right bank at downstream side of bridge on State Highway 672, 1.9 mi north of Warrenton, and 14.5 mi upstream from Licking Run.

DRAINAGE AREA.--13.1 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 419.40 ft NGVD of 1929. Prior to June 1, 1987, water-stage recorder at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 513 ft<sup>3</sup>/s and extended above on basis of contracted-opening measurements at 2,200 ft<sup>3</sup>/s.

BANKFULL STAGE.--5 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Subsequent to June 30, 1957, records were provided by the Virginia Department of Environmental Quality - Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1942	October 1942	13.00		1973	August 21, 1973	6.63	462
1951	December 4, 1950	8.42	1,800	1974	December 21, 1973	5.85	304
1952	September 1, 1952	7.00	560	1975	December 1, 1974	8.48	1,900
1953	November 21, 1952	8.11	1,500	1976	April 1, 1976	7.30	720
1954	August 20, 1954	5.74	302	1977	October 9, 1976	10.93	4,770
1955	June 8, 1955	9.59	3,100	1978	January 26, 1978	8.20	1,600
1956	July 20, 1956	8.84	2,200	1979	September 21, 1979	10.06	3,730
1957	November 1, 1956	7.67	1,050	1980	March 21, 1980	6.37	508
1958	January 14, 1958	7.32	720	1981	August 30, 1981	8.22	1,620
1959	June 2, 1959	5.10	184	1982	June 13, 1982	5.72	371
1960	September 12, 1960	9.16	2,580	1983	April 10, 1983	8.88	2,280
1961	September 8, 1961	8.57	1,950	1984	February 14, 1984	7.97	1,370
1962	March 12, 1962	7.06	580	1985	February 12, 1985	8.01	1,410
1963	March 12, 1963	6.42	400	1986	March 14, 1986	4.11	144
1964	April 29, 1964	8.03	1,450	1987	September 8, 1987	6.62	576
1965	March 5, 1965	8.12	1,500	1988	November 29, 1987	6.88	643
1966	February 13, 1966	7.14	580	1989	May 5, 1989	8.26	1,660
1967	August 24, 1967	9.29	2,760	1990	May 29, 1990	5.61	365
1968	January 14, 1968	7.97	1,350	1991	October 23, 1990	5.73	386
1969	August 2, 1969	5.37	232	1992	June 5, 1992	4.76	230
1970	July 9, 1970	7.00	560	1993	December 10, 1992	9.00	2,400
1971	February 13, 1971	7.62	1,000	1994	August 17, 1994	8.77	2,170
1972	June 21, 1972	12.87	7,840	1995	January 15, 1995	4.95	258

**Table 131. 01656000 Cedar Run near Catlett, Va.**

LOCATION.--Latitude 38°38'12", Longitude 077°37'31", NAD27, Fauquier County, Hydrologic Unit 02070010, on right bank 100 ft downstream from bridge on State Highway 806, 0.9 mi downstream from Licking Run, and 1.4 mi southeast of Catlett.

DRAINAGE AREA.--93.4 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 199.15 ft NGVD of 1929. January 1, 1987 to September 1989, nonrecording gage at present site and datum. Prior to January 1, 1987, water-stage recorder at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 6,540 ft<sup>3</sup>/s and extended above on basis of contracted-opening measurements at 36,800 ft<sup>3</sup>/s.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Records were provided by the Virginia Department of Environmental Quality - Water Division from June 30, 1957, to Dec. 31, 1986, and subsequent to Sept. 30, 1989.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1943	October 15, 1942	22.00		1979	February 26, 1979	14.72	6,520
1951	December 4, 1950	14.60	5,570	1980	October 1, 1979	16.14	7,960
1952	April 27, 1952	9.22	2,170	1981	August 30, 1981	13.38	5,280
1953	November 21, 1952	14.17	5,290	1982	February 3, 1982	11.29	3,620
1954	December 14, 1953	7.13	1,180	1983	April 15, 1983	12.85	4,840
1955	June 8, 1955	17.25	7,300	1984	February 14, 1984	13.63	5,510
1956	July 21, 1956	16.50	6,700	1985	February 12, 1985	10.64	3,170
1957	April 5, 1957	9.32	2,060	1986	March 15, 1986	7.64	1,420
1958	December 20, 1957	10.45	2,570	1987	September 8, 1987	11.79	3,990
1959	March 6, 1959	7.46	1,320	1988	November 29, 1987	12.78	4,780
1960	February 19, 1960	11.35	3,290	1989	May 5, 1989	16.45	8,380
1961	February 19, 1961	10.93	2,990	1990	May 29, 1990	9.14	2,170
1962	March 12, 1962	12.40	3,890	1991	January 12, 1991	10.00	2,720
1963	March 12, 1963	10.73	2,870	1992	July 27, 1992	9.43	2,340
1964	January 9, 1964	10.35	2,690	1993	December 11, 1992	17.58	9,740
1965	February 8, 1965	13.12	4,310	1994	November 28, 1993	14.03	5,870
1966	February 14, 1966	11.25	3,170	1995	January 15, 1995	9.18	2,150
1967	March 7, 1967	13.28	4,430	1996	September 6, 1996	14.34	6,450
1968	January 14, 1968	12.40	3,780	1997	October 19, 1996	11.78	3,970
1969	August 4, 1969	5.84	758	1998	March 21, 1998	13.98	6,060
1970	July 10, 1970	8.93	1,850	1999	September 30, 1999	10.04	2,680
1971	February 14, 1971	11.20	3,020	2000	December 14, 1999	8.06	1,600
1972	June 22, 1972	27.66	38,600	2001	March 30, 2001	9.75	2,490
1973	April 27, 1973	10.30	2,550	2002	April 29, 2002	6.57	1,010
1974	December 21, 1973	10.59	2,700	2003	May 16, 2003	12.98	5,040
1975	September 25, 1975	14.38	5,400	2004	December 11, 2003	14.28	6,380
1976	January 1, 1976	12.73	3,990	2005	January 14, 2005	11.17	3,490

1977	October 9, 1976	17.06	8,270	2006	June 28, 2006	11.01	3,370
1978	January 26, 1978	14.80	6,620	2007	April 15, 2007	10.06	2,700

---

**Table 132. 01656100 Cedar Run near Aden, Va.**

LOCATION.--Latitude 38°36'58", Longitude 077°33'16", NAD27, Prince William County, Hydrologic Unit 02070010, on left bank at upstream side of bridge on State Highway 611, 0.5 mi downstream from Darrels Run, 0.8 mi downstream from Town Run, and 3.0 mi southwest of Aden.

DRAINAGE AREA.--155 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 166.27 ft NGVD of 1929. From October 1972 to November 1987, water-stage recorder at site 800 ft downstream at present datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 6,510 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Records were provided by the Virginia Department of Environmental Quality - Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1973	April 27, 1973	12.60 <sup>1</sup>	7,320	1982	February 3, 1982	12.98 <sup>1</sup>	8,120
1974	December 21, 1973	12.18 <sup>1</sup>	6,530	1983	April 16, 1983	13.40 <sup>1</sup>	9,100
1975	December 2, 1974	14.43 <sup>1</sup>	11,900	1984	March 29, 1984	13.90 <sup>1</sup>	10,400
1976	January 1, 1976	13.50 <sup>1</sup>	9,350	1985	February 12, 1985	12.49 <sup>1</sup>	7,090
1977	October 9, 1976	14.00 <sup>1</sup>	10,700	1986	November 4, 1985	10.21 <sup>1</sup>	2,600
1978	January 26, 1978	14.77 <sup>1</sup>	13,100	1987	December 25, 1986	12.41 <sup>1</sup>	6,920
1979	February 26, 1979	14.90 <sup>1</sup>	13,400	1997	October 19, 1996	14.89	5,070
1980	October 1, 1979	15.29 <sup>1</sup>	14,900	1998	March 21, 1998	14.43	6,770
1981	August 30, 1981	13.25 <sup>1</sup>	8,730				

<sup>1</sup>Gage height at different site and (or) datum.

**Table 133.** 01656120 Cedar Run at Route 646 near Aden, Va.

LOCATION.--Latitude 38°38'29", Longitude 077°30'46", NAD27, Prince William County, Hydrologic unit 02070010, on left bank at upstream side of bridge on State Highway 646, 2.0 miles southeast of Aden.

DRAINAGE AREA.--175 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 160 ft NGVD of 1929, from topographic map.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1997	October 19, 1996	16.61	5,230	1999	September 30, 1999	12.38	3,220
1998	March 21, 1998	16.17	7,000				

**Table 134. 01656200 Broad Run near Warrenton, Va.**

LOCATION.--Latitude 38°48'25", Longitude 077°48'47", NAD27, Fauquier County, Hydrologic Unit 02070010, on left downstream wingwall of culvert on State Highway 17, 7 mi north of Warrenton, and 8.6 mi upstream from Mill Run.

DRAINAGE AREA.--2.55 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 610 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 22 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--4 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1950	July 16, 1950	5.12	70.0	1971	February 13, 1971	6.12	145
1951	December 1950	5.73	97.0 <sup>1</sup>	1972	June 21, 1972	7.86	276
1952	September 1, 1952	4.92	63.0	1973	October 5, 1972	5.50	112
1953	November 21, 1952	5.92	105	1974	December 21, 1973	5.29	103
1954	April 17, 1954	3.10	15.0	1975	December 1, 1974	5.05	93.0
1955	June 8, 1955	6.68	150	1976	March 31, 1976	5.89	132
1956	July 20, 1956	6.46	135	1977	October 9, 1976	4.78	82.0
1957	November 2, 1956	5.80	100	1978	August 12, 1978	3.39	35.0
1958	January 14, 1958	4.47	48.0	1983	April 10, 1983	5.19	99.0 <sup>2</sup>
1959	June 2, 1959	4.34	44.0	1984	February 14, 1984	4.58	74.0
1960	August 15, 1960	5.44	100	1985	February 12, 1985	2.59 <sup>3</sup>	24.0 <sup>4</sup>
1961	August 26, 1961	6.61	175	1986	March 14, 1986	2.82	28.0
1962	July 21, 1962	5.94	135	1987	April 17, 1987	3.54	42.0
1963	March 12, 1963	4.73	82.0	1988	May 6, 1988	4.49	71.0
1964	April 29, 1964	5.68	121	1989	May 6, 1989	4.03	54.0
1965	March 5, 1965	5.50	111	1990	July 30, 1990	3.41	
1966	September 14, 1966	5.13	96.0	1991	March 23, 1991	3.83	
1967	August 24, 1967	6.99	200	1992	June 5, 1992	3.60	
1968	March 12, 1968	5.65	120	1993	December 10, 1992	4.36	67.0
1969	September 18, 1969	4.30	64.0	1994	August 17, 1994	4.33	
1970	December 11, 1969	5.00	91.0	1995	June 27, 1995	3.78	

<sup>1</sup>Month or day of occurrence is unknown or not exact.

<sup>2</sup>Discharge is a maximum daily average.

<sup>3</sup>Gage height below minimum recordable elevation.

<sup>4</sup>Discharge is less than indicated value, which is minimum recordable discharge at this site.

**Table 135. 01656500 Broad Run at Buckland, Va.**

LOCATION.--Latitude 38°46'50", Longitude 077°40'22", NAD27, Prince William County, Hydrologic Unit 02070010, on right bank at downstream side of bridge on U.S. Highway 29 at Buckland, 1.1 mi upstream from South Run.

DRAINAGE AREA.--50.2 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 284.58 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 3,130 ft<sup>3</sup>/s and extended above on basis of slope-area measurements at 11,600 ft<sup>3</sup>/s and 17,100 ft<sup>3</sup>/s.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Subsequent to June 30, 1957, records were provided by the Virginia Department of Environmental Quality - Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1951	December 4, 1950	8.97	3,750	1969	September 8, 1969	5.12	1,000
1952	April 28, 1952	5.95	1,700	1970	July 9, 1970	6.17	1,600
1953	November 21, 1952	7.28	2,400	1971	February 13, 1971	5.85	1,390
1954	July 18, 1954	3.05	348	1972	June 21, 1972	13.92	16,800
1955	August 18, 1955	7.95	2,750	1973	August 21, 1973	6.46	1,780
1956	July 20, 1956	13.08	11,600	1974	December 21, 1973	6.06	1,510
1957	November 2, 1956	4.39	750	1975	December 1, 1974	11.12	6,400
1958	January 14, 1958	6.12	1,680	1976	January 1, 1976	6.74	1,900
1959	June 2, 1959	4.20	650	1977	October 9, 1976	11.58	7,400
1960	April 5, 1960	5.87	1,360	1978	January 26, 1978		2,100 <sup>1,2</sup>
1961	February 19, 1961	5.70	1,310	1979	February 26, 1979	7.85	2,630
1962	March 12, 1962	5.94	1,450	1981	August 30, 1981	4.57	746
1963	March 12, 1963	5.27	1,080	1982	June 13, 1982	5.59	1,250
1964	January 9, 1964	6.68	1,900	1983	April 10, 1983	8.10	2,850
1965	March 5, 1965	6.86	2,020	1984	February 14, 1984	7.54	2,450
1966	February 13, 1966	5.35	1,120	1985	February 12, 1985	6.99	2,070
1967	August 25, 1967	8.43	3,090	1986	November 4, 1985	4.45	692
1968	January 14, 1968	7.53	2,420				

<sup>1</sup>Discharge is a maximum daily average.

<sup>2</sup>Month or day of occurrence is unknown or not exact.

**Table 136. 01656600 Broad Run tributary at Buckland, Va.**

LOCATION.--Latitude 38°46'50", Longitude 077°40'15", NAD27, Prince William County, Hydrologic Unit 02070010, at culvert on U.S. Highway 29, 0.2 mi east of Buckland.

DRAINAGE AREA.--0.83 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 288.03 ft NGVD of 1929. Prior to May 3, 1972, flood-hydrograph recorder at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--5 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1966	September 14, 1966	5.84	95.0	1971	February 13, 1971	5.62	88.0
1967	August 24, 1967	6.80	150	1972	June 21, 1972	16.20	575
1968	June 12, 1968	9.10	310	1973	April 27, 1973	5.07	61.0
1969	August 2, 1969	4.75	48.0	1974	December 21, 1973	5.14	64.0
1970	July 9, 1970	5.70	92.0	1975	December 1, 1974	14.34	515

**Table 137. 01656650 Broad Run near Bristow, Va.**

LOCATION.--Latitude 38°44'56", Longitude 077°33'50", NAD27, Prince William County, Hydrologic Unit 02070010, on left bank 50 ft downstream from bridge on State Highway 619, 0.2 mi upstream from Dawkins Branch, 1.9 mi downstream from Rocky Branch, and 2.3 mi northwest of Bristow.

DRAINAGE AREA.--89.6 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 185 ft NGVD of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 4,020 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered regulated, Flow regulated by Lake Manassas. Usable capacity estimated at 20,000 acre-ft.

REMARKS.--Records were provided by the Virginia Department of Environmental Quality - Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1975	December 1, 1974	16.08	7,780 <sup>1</sup>	1981	August 31, 1981	4.55	374 <sup>1</sup>
1976	January 27, 1976	8.38	1,900 <sup>1</sup>	1982	February 3, 1982	9.57	2,380 <sup>1</sup>
1977	October 9, 1976	16.11	7,800 <sup>1</sup>	1983	April 10, 1983	12.08	3,750 <sup>1</sup>
1978	January 26, 1978	12.05	3,700 <sup>1</sup>	1984	March 29, 1984	12.05	3,730 <sup>1</sup>
1979	September 6, 1979	13.15	4,570 <sup>1</sup>	1985	February 12, 1985	9.64	2,410 <sup>1</sup>
1980	October 1, 1979	15.50	6,960 <sup>1</sup>	1986	November 4, 1985		750 <sup>1,2</sup>

<sup>1</sup>Discharge affected by regulation or diversion.

<sup>2</sup>Discharge is a maximum daily average.

**Table 138. 01656700 Occoquan River near Manassas, Va.**

LOCATION.--Latitude 38°42'19", Longitude 077°26'46", NAD27, Prince William County, Hydrologic Unit 02070010, on right bank 200 ft downstream from bridge on State Highway 234 at Lake Jackson, 3.3 mi southeast of Manassas, and 3.7 mi upstream from Bull Run.

DRAINAGE AREA.--343 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 119.53 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 54,700 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered regulated. Some attenuation of flood peaks and diurnal fluctuation caused by Lake Jackson Dam 650 ft upstream from station, usable capacity approximately 26,250 acre-ft, and by Lake Manassas, usable capacity estimated at 20,000 acre-ft.

REMARKS.--Records were provided by the Virginia Department of Environmental Quality - Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1969	January 22, 1969	8.07	3,220 <sup>1</sup>	1976	January 1, 1976	17.68	12,000 <sup>1</sup>
1970	February 10, 1970	12.32	9,650 <sup>1</sup>	1977	October 10, 1976	18.17	12,500 <sup>1</sup>
1971	February 14, 1971	14.64	16,900 <sup>1</sup>	1978	January 26, 1978	20.84	15,200 <sup>1</sup>
1972	June 22, 1972	40.31	57,600 <sup>1</sup>	1979	February 26, 1979	22.66	17,600 <sup>1</sup>
1973	April 27, 1973	15.04	9,440 <sup>1</sup>	1980	October 1, 1979	20.89	15,300 <sup>1</sup>
1974	December 21, 1973	13.24	7,820 <sup>1</sup>	1981	February 21, 1981	5.49	1,520 <sup>1</sup>
1975	September 26, 1975	25.57	22,400 <sup>1</sup>				

<sup>1</sup>Discharge affected by regulation or diversion.

**Table 139. 01656725 Bull Run near Catharpin, Va.**

LOCATION.--Latitude 38°53'21", Longitude 077°34'14", NAD27, Prince William County, Hydrologic Unit 02070010, on right bank 20 ft downstream from bridge on State Highway 705, 0.7 mi downstream from Chestnut Lick, 2.5 mi north of Catharpin, and 6.7 mi northeast of Gainesville.

DRAINAGE AREA.--25.7 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 237.78 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 4,230 ft<sup>3</sup>/s and extended above on basis of slope-area measurements at 39,600 ft<sup>3</sup>/s.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Records were provided by the Virginia Department of Environmental Quality - Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1970	April 14, 1970	6.81	1,530	1979	September 5, 1979	7.61	2,500
1971	February 7, 1971	6.88	1,600	1980	October 1, 1979	8.21	2,980
1972	June 22, 1972	18.92	39,400	1981	February 11, 1981	4.55	638
1973	May 28, 1973	7.04	1,700	1982	August 6, 1982	7.17	2,190
1974	December 21, 1973	6.35	2,400	1983	April 10, 1983	8.16	2,940
1975	December 1, 1974	8.63	3,410	1984	August 14, 1984	8.61	4,380
1976	January 1, 1976	7.33	2,280	1985	November 28, 1984	5.83	1,200
1977	October 9, 1976	8.62	3,410	1986	March 15, 1986	5.81	1,190
1978	January 26, 1978	7.09	2,140				

**Table 140. 01656800 Cub Run near Chantilly, Va.**

LOCATION.--Latitude 38°54'30", Longitude 077°28'01", NAD27, Fairfax County, Hydrologic Unit 02070010, on left bank at downstream side of bridge on U.S. Highway 50, 0.2 mi upstream from unnamed tributary, and 2.2 mi northwest of Chantilly.

DRAINAGE AREA.--7.75 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 239.60 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 1,200 ft<sup>3</sup>/s and extended above on basis of step-backwater computation.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1963	June 5, 1963	5.50	335	1968	December 28, 1967	5.19	320
1964	November 7, 1963	5.40	328	1970	July 10, 1970	4.85	275
1965	March 5, 1965	5.53	370	1971	November 5, 1970	5.27	390
1966	September 14, 1966	5.76	365	1972	June 22, 1972	10.68	
1967	August 24, 1967	6.22	443				

**Table 141.** 01656850 Cain Branch near Chantilly, Va.

LOCATION.--Latitude 38°54'08", Longitude 077°27'06", NAD27, Fairfax County, Hydrologic Unit 02070010, at Jackson Memorial Highway (State Highway 50), 1.2 mi west of Chantilly.

DRAINAGE AREA.--1.51 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is not determined. November 1964 to June 1966, fragmentary record from flood-hydrograph recorder at present site and datum. Datum lost when culvert rebuilt in 1969-70.

STAGE-DISCHARGE RELATION.--Not developed.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1966	September 14, 1966	2.95		1968	September 10, 1968	2.59	
1967	August 24, 1967	3.50		1972	June 21, 1972	266.51 <sup>1</sup>	2,200

<sup>1</sup>Gage height at different site and (or) datum.

**Table 142. 01656940 Cub Run near Centreville, Va.**

LOCATION.--Latitude 38°49'59", Longitude 077°27'50", NAD27, Fairfax County, Hydrologic Unit 02070010, at bridge on U.S. Highway 29 and 211, 0.4 mi upstream from Big Rocky Run, and 1.9 mi west of Centreville.

DRAINAGE AREA.--39.6 mi<sup>2</sup>.

GAGE.-- Nonrecording gage (crest-stage gage). Datum of gage is 197.42 ft NGVD of 1929. June 1970 to June 1972, recording gage at present site and datum. After April 1973, recording gage at present site and datum of 201.34 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 3,440 ft<sup>3</sup>/s and extended above on basis of step-backwater computation.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1961	February 19, 1961	17.03 <sup>1</sup>		1968	September 10, 1968	16.13 <sup>1</sup>	
1962	June 20, 1962	17.04 <sup>1</sup>		1969	August 10, 1969	16.29 <sup>1</sup>	
1963	March 12, 1963	16.14 <sup>1</sup>		1970	July 10, 1970	16.81 <sup>1</sup>	
1964	September 30, 1964	16.80 <sup>1</sup>		1971	May 31, 1971	17.60 <sup>1</sup>	
1965	March 5, 1965	16.84 <sup>1</sup>		1972	June 22, 1972	23.90 <sup>1</sup>	
1966	September 14, 1966	17.13 <sup>1</sup>		1973	April 27, 1973	8.39	
1967	August 24, 1967	18.03 <sup>1</sup>					

<sup>1</sup>Gage height at different site and (or) datum.

**Table 143.** 01656960 Cub Run near Bull Run, Va.

LOCATION.--Latitude 38°49'16", Longitude 077°27'57", NAD27, Fairfax County, Hydrologic Unit 02070010, on right bank 20 ft downstream from bridge on State Highway 658, 0.6 mi downstream from Big Rocky Run, 1.2 mi southeast of Bull Run, and 2.3 mi upstream from mouth.

DRAINAGE AREA.--49.7 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 151.54 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 4,060 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Records were provided by the Virginia Department of Environmental Quality - Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1973	April 27, 1973	11.94	3,080	1980	October 1, 1979	16.43	10,600
1974	December 21, 1973	10.70	2,400	1981	May 2, 1981	6.37	578
1975	September 26, 1975	15.63	8,980	1982	June 13, 1982	11.82	3,110
1976	January 1, 1976	13.20	4,770	1983	April 15, 1983	12.23	3,570
1977	October 9, 1976	10.94	2,270	1984	March 29, 1984	11.66	2,950
1978	January 26, 1978	13.34	4,910	1985	February 12, 1985	11.92	3,210
1979	September 6, 1979	13.03	4,490	1986	April 16, 1986	7.45	890

**Table 144. 01657000 Bull Run near Manassas, Va.**

LOCATION.--Latitude 38°47'52", Longitude 077°27'28", NAD27, Fairfax County, Hydrologic Unit 02070010, on left bank at upstream side of bridge on State Highway 616, 0.5 mi downstream from Cub Run, and 3.2 mi north of Manassas.

DRAINAGE AREA.--146 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 138.76 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 10,100 ft<sup>3</sup>/s and extended above on basis of contracted-opening measurements at 12,200 ft<sup>3</sup>/s and slope-area measurement at 76,000 ft<sup>3</sup>/s.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Subsequent to June 30, 1957, records were provided by the Virginia Department of Environmental Quality - Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1951	December 4, 1950	15.12	8,600	1967	August 25, 1967	19.27	13,000
1952	April 26, 1952	12.25	4,620	1968	January 14, 1968		5,300 <sup>1</sup>
1953	November 22, 1952	16.37	11,200	1969	September 8, 1969	11.55	4,140
1954	December 14, 1953	9.02	1,960	1970	April 14, 1970	13.10	5,610
1955	August 13, 1955	16.23	10,900	1971	February 14, 1971	13.88	6,490
1956	July 5, 1956	16.45	11,200	1972	June 22, 1972	37.80	76,100
1957	April 5, 1957	11.34	3,670	1973	April 27, 1973	15.06	7,870
1958	December 21, 1957	15.10	8,600	1974	December 21, 1973	14.08	6,700
1959	September 2, 1959	13.53	6,120	1975	September 26, 1975	19.58	13,800
1960	April 5, 1960	13.51	6,150	1976	January 1, 1976	16.70	9,840
1961	February 20, 1961	13.78	6,540	1977	October 9, 1976	15.93	8,880
1962	March 12, 1962	14.28	7,310	1978	January 26, 1978	17.24	10,400
1963	March 12, 1963	12.16	4,620	1979	February 26, 1979	17.09	9,840
1964	January 9, 1964	13.58	6,280	1980	October 1, 1979	20.22	14,900
1965	March 5, 1965	14.98	8,500	1981	February 11, 1981	7.31	1,650
1966	September 15, 1966	12.51	4,950				

<sup>1</sup>Discharge is an estimate.

**Table 145. 01657020 Bull Run near Manassas Park, Va.**

LOCATION.--Latitude 38°48'12", Longitude 077°26'59", NAD27, Fairfax County, Hydrologic Unit 02070010, on left bank 34 ft upstream from bridge on State Highway 28, 1.2 mi upstream from Little Rucky Run, 1.5 mi downstream from Cub Run, and 1.5 mi northeast of Manassas.

DRAINAGE AREA.--147 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 135 ft NGVD of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 2,830 ft<sup>3</sup>/s and extended above on basis of slope-area measurement at 76,000 ft<sup>3</sup>/s.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Records were provided by the Virginia Department of Environmental Quality - Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1972	June 1972	44.80	76,000 <sup>1</sup>	1986	August 6, 1986	11.37	3,520
1985	February 12, 1985	15.80	6,800	1987	December 25, 1986	15.05	6,050

<sup>1</sup>Month or day of occurrence is unknown or not exact.

**Table 146.** 01657300 Popes Head Creek near Fairfax, Va.

LOCATION.--Latitude 38°48'57", Longitude 077°20'16", NAD27, Fairfax County, Hydrologic Unit 02070010, at Popes Head Road, 2.0 mi southwest of Fairfax.

DRAINAGE AREA.--3.59 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is not determined. From November 1964 to June 1966, flood-hydrograph recorder at present site and datum.

STAGE-DISCHARGE RELATION.--Not developed. Flood peak of August 1967 determined from contracted-opening measurement.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1961		20.18		1964	May 13, 1964	21.82	
1962	June 20, 1962	20.83		1967	August 24, 1967	22.96	1,900
1963	June 30, 1963	20.75					

**Table 147. 01657415 Bull Run near Clifton, Va.**

LOCATION.--Latitude 38°45'59", Longitude 077°24'52", NAD27, Fairfax County, Hydrologic Unit 02070010, on left bank 0.6 mi downstream from Popes Head Road Creek, 1.6 mi upstream from Buckhall Branch, and 1.8 mi southwest of Clifton.

DRAINAGE AREA.--185 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 120.24 ft NGVD of 1929. September 1972 to June 1978, at site 500 ft upstream at datum of 123.83 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 498 ft<sup>3</sup>/s and extended above on basis of runoff comparison with upstream station near Manassas.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Records were provided by the Virginia Department of Environmental Quality - Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1972	June 1972	35.0 <sup>1</sup>	80,000 <sup>2</sup>	1979	February 26, 1979	18.13	12,700
1973	April 27, 1973	12.06 <sup>1</sup>	8,910	1980	October 1, 1979	19.50	14,600
1974	December 21, 1973	9.88 <sup>1</sup>	6,490	1981	February 11, 1981	7.84	1,360
1975	September 26, 1975	19.52 <sup>1</sup>	22,000	1982	June 14, 1982	13.00 <sup>3</sup>	6,300 <sup>4</sup>
1976	January 1, 1976	13.60 <sup>1</sup>	11,000	1983	April 16, 1983	15.80	9,700
1977	October 9, 1976	12.07 <sup>1</sup>	8,910	1984	March 29, 1984	16.98	11,300
1978	January 26, 1978	14.44 <sup>1</sup>	12,200				

<sup>1</sup>Gage height at different site and (or) datum.

<sup>2</sup>Month or day of occurrence is unknown or not exact.

<sup>3</sup>Gage height is an estimate.

<sup>4</sup>Discharge is affected to unknown degree by regulation or diversion.

**Table 148. 01657500 Occoquan River near Occoquan, Va.**

LOCATION.--Latitude 38°42'20", Longitude 077°19'35", NAD27, Prince William County, Hydrologic Unit 02070010, on left bank 1.6 mi upstream from Sandy Run, 4.8 mi upstream from Occoquan, and 5.9 mi downstream from Bull Run.

DRAINAGE AREA.--570 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 76.21 ft NGVD of 1929. Prior to Apr. 27, 1913, nonrecording gage at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 15,000 ft<sup>3</sup>/s and extended above by logarithmic plotting.

BANKFULL STAGE.--15 ft.

REGULATION.--High-flow conditions at this site are considered regulated between 1937 and 1949, with occasional regulation after 1949.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1914	January 4, 1914	13.80	9,540	1944	November 9, 1943	20.42	18,200 <sup>1</sup>
1915	February 2, 1915	17.67	15,200	1945	September 19, 1945	21.10	19,600 <sup>1</sup>
1916	March 28, 1916	15.51	11,900	1946	May 28, 1946	21.34	20,000 <sup>1</sup>
1921	May 13, 1921	14.11	9,970	1947	June 15, 1947	11.79	5,940 <sup>1</sup>
1922	February 20, 1922	11.30	6,330	1948	May 14, 1948	15.61	10,500 <sup>1</sup>
1923	March 17, 1923	11.46	6,520	1949	December 4, 1948	20.34	18,000 <sup>1</sup>
1937	April 26, 1937	24.87	29,200 <sup>1</sup>	1950	March 23, 1950	17.82	13,600 <sup>2</sup>
1938	October 23, 1937	15.43	10,100 <sup>1</sup>	1951	December 5, 1950	19.47	16,400 <sup>2</sup>
1939	January 31, 1939	16.78	12,100 <sup>1</sup>	1952	April 26, 1952	16.41	11,600 <sup>2</sup>
1940	April 20, 1940	15.37	10,100 <sup>1</sup>	1953	November 22, 1952	21.47	20,500 <sup>2</sup>
1941	April 6, 1941	15.36	10,100 <sup>1</sup>	1954	December 14, 1953	11.31	5,400 <sup>2</sup>
1942	August 9, 1942	18.56	14,900 <sup>1</sup>	1955	August 13, 1955	21.34	19,700 <sup>2</sup>
1943	October 16, 1942	27.60	37,000 <sup>1</sup>				

<sup>1</sup>Discharge affected by regulation or diversion.

<sup>2</sup>Discharge affected to unknown degree by regulation or diversion.

**Table 149.** 01657600 Sandy Run near Fairfax Station, Va.

LOCATION.--Latitude 38°44'53", Longitude 077°19'23", NAD27, Fairfax County, Hydrologic Unit 02070010, at bridge on Henderson Road, 3.5 mi upstream from mouth, and 3.7 mi south of Fairfax Station.

DRAINAGE AREA.--2.35 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is not determined. May 12 to Dec. 14, 1965, flood-hydrograph recorder at present site and datum. Aug. 9, 1966 to Sept. 15, 1970, water-stage recorder at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 108 ft<sup>3</sup>/s and extended above on basis of indirect measurement at 1,700 ft<sup>3</sup>/s.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1966	September 14, 1966	19.42	320	1969	June 15, 1969	18.78	185
1967	August 24, 1967	21.37	1,700	1970	April 14, 1970	18.71	175
1968	May 28, 1968	18.60	159				

**Table 150.** 01657655 Hooes Run near Occoquan, Va.

LOCATION.--Latitude 38°40'48", Longitude 077°17'25", NAD27, Prince William County, Hydrologic Unit 02070010, on left bank 900 ft upstream from bridge on State Highway 641, 0.9 mi downstream from Lake Omiscol, and 1.6 mi west of Occoquan.

DRAINAGE AREA.--3.92 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 122.74 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 80 ft<sup>3</sup>/s and extended above on basis of velocity-area study.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Records were provided by the Virginia Department of Environmental Quality - Water Division.

<b>Water year</b>	<b>Date</b>	<b>Gage height (ft)</b>	<b>Discharge (ft<sup>3</sup>/s)</b>	<b>Water year</b>	<b>Date</b>	<b>Gage height (ft)</b>	<b>Discharge (ft<sup>3</sup>/s)</b>
Annual maximum stages and discharges							
1975	September 26, 1975	8.18	1,280	1979	September 5, 1979	7.41	1,040
1976	December 31, 1975	4.40	353	1980	October 1, 1979	4.88	440
1977	May 6, 1977	3.86	270	1981	July 26, 1981	4.16	312
1978	January 26, 1978	6.34	752	1982	August 8, 1982	7.38	1,030

**Table 151. 01657800 Giles Run near Woodbridge, Va.**

LOCATION.--Latitude 38°40'48", Longitude 077°13'36", NAD27, Prince William County, Hydrologic Unit 02070010, at upstream side of culvert on U.S. Highway 1, 1.5 mi northeast of Woodbridge.

DRAINAGE AREA.--4.52 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 21.68 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 72.7 ft<sup>3</sup>/s and extended above on basis of indirect measurement at 840 ft<sup>3</sup>/s.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1965	March 5, 1965	4.02	367	1968	January 14, 1968	4.20	405
1966	September 14, 1966	6.70	942	1969	August 3, 1969	4.07	377
1967	August 27, 1967	6.40	876	1970	July 9, 1970	4.88	548

**Table 152.** 01658480 Quantico Creek near Dumfries, Va.

LOCATION.--Latitude 38°34'22", Longitude 077°20'51", NAD27, Prince William County, Hydrologic Unit 02070011, on left bank at upstream side of bridge on pyrite mine trail in Prince William Forest Park, 50 ft upstream from South Fork Quantico Creek, and 0.7 mi west of Dumfries.

DRAINAGE AREA.--6.89 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is not determined.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 250 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1984	March 29, 1984	6.85	430	1985	February 12, 1985	4.19	221

**Table 153. 01658500 South Fork Quantico Creek near Independent Hill, Va.**

LOCATION.--Latitude 38°35'14", Longitude 077°25'44", NAD27, Prince William County, Hydrologic Unit 02070011, on left bank at upstream side of bridge on State Highway 619, 3.4 mi south of Independent Hill, 5.6 mi west of Dumfries, and 6.5 mi upstream from mouth.

DRAINAGE AREA.--7.62 mi<sup>2</sup>.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 238.88 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 755 ft<sup>3</sup>/s and extended above on basis of contracted-opening measurement at 3,830 ft<sup>3</sup>/s and 3,910 ft<sup>3</sup>/s.

BANKFULL STAGE.--5 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1952	September 1, 1952	7.98	870	1980	October 1, 1979	7.29	570
1953	November 21, 1952	7.76	800	1981	May 11, 1981	2.96	35.0
1954	December 14, 1953	4.80	183	1982	June 13, 1982	5.05	190
1955	May 23, 1955	7.49	692	1983	April 15, 1983	7.67	699
1956	July 5, 1956	7.42	660	1984	March 29, 1984	7.39	599
1957	April 5, 1957	7.12	495	1985	February 12, 1985	6.40	350
1958	August 25, 1958	8.31	1,000	1986	November 4, 1985	4.81	170
1959	March 6, 1959	4.46	141	1987	December 24, 1986	6.69	400
1960	June 14, 1960	7.84	775	1988	January 20, 1988	6.38	347
1961	September 7, 1961	7.01	450	1989	May 6, 1989	11.62	4,160
1962	March 12, 1962	5.44	225	1990	January 1, 1990	6.39	386
1963	March 12, 1963	7.41	584	1991	October 23, 1990	8.63	1,180
1964	January 9, 1964	5.82	262	1992	September 3, 1992	7.62	713
1965	March 5, 1965	7.03	465	1993	May 5, 1993	7.79	778
1966	September 14, 1966	6.91	425	1994	November 28, 1993	8.82	1,290
1967	August 25, 1967	7.18	504	1995	January 20, 1995	5.16	208
1968	January 14, 1968	7.27	528	1996	January 19, 1996	7.71	991
1969	August 3, 1969	8.40	1,040	1997	November 8, 1996	7.10	760
1970	December 11, 1969	6.17	292	1998	March 21, 1998	7.21	799
1971	February 13, 1971	7.07	462	1999	September 30, 1999	5.97	462
1972	June 21, 1972	11.35	3,940	2000	April 17, 2000	5.02	283
1973	April 27, 1973	7.35	556	2001	July 26, 2001	7.28	824
1974	May 12, 1974	6.03	281	2002	April 28, 2002	3.35	93
1975	September 26, 1975	10.88	3,070	2003	February 22, 2003	8.19	1,180
1976	January 1, 1976	6.81	418	2004	December 11, 2003	8.00	1,080
1977	October 26, 1976	7.36	597	2005	January 14, 2005	7.38	806
1978	January 26, 1978	7.64	681	2006	October 8, 2005	6.10	437

1979	September 5, 1979	8.43	1,080	2007	November 16, 2006	7.15	727
------	-------------------	------	-------	------	-------------------	------	-----

---

**Table 154.** 01658550 South Fork Quantico Creek at Camp 5 near Joplin, Va.

LOCATION.--Latitude 38°34'38", Longitude 077°24'36", NAD27, Prince William County, Hydrologic Unit 02070011, on right bank 100 ft downstream from footbridge in Happyland Camp No. 5 in Prince William Forest Park, 300 ft downstream from Camp 5 Lake, and 1.6 mi northwest of Joplin.

DRAINAGE AREA.--9.57 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is not determined.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 200 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1984	March 29, 1984	4.05	527	1985	February 12, 1985	3.24	297

**Table 155.** 01658650 South Fork Quantico Creek near Dumfries, Va.

LOCATION.--Latitude 38°34'18", Longitude 077°20'57", NAD27, Prince William County, Hydrologic Unit 02070011, on left bank 50 ft downstream from footbridge in Prince William Forest Park, 500 ft upstream from mouth, and 0.7 mi west of Dumfries.

DRAINAGE AREA.--16.7 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is not determined.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 600 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1984	March 29, 1984	6.74	910	1985	February 12, 1985	4.66	571

**Table 156. 01659000 North Branch Chopawamsic Creek near Independent Hill, Va.**

LOCATION.--Latitude 38°33'54", Longitude 077°25'34", NAD27, Prince William County, Hydrologic Unit 02070011, on left bank 1.0 mi upstream from Chopawamsic Creek, 4.8 mi south of Independent Hill, and 5.5 mi west of Dumfries.

DRAINAGE AREA.--5.69 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 216.43 ft NGVD of 1929, from topographic map. May 1951 to June 1957, water-stage recorder at site 1,000 ft upstream at present datum. (A Bureau of Yards and Docks bench mark).

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 274 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1952	December 21, 1951	7.31 <sup>1</sup>	248	1990	January 1, 1990	5.86 <sup>1</sup>	
1953	November 21, 1952	8.04 <sup>1</sup>	298	2001	March 21, 2001	6.63	240
1954	December 14, 1953	4.95 <sup>1</sup>	110	2002	April 28, 2002	4.35	38
1955	August 13, 1955	7.74 <sup>1</sup>	279	2003	February 22, 2003	7.90	415
1956	July 5, 1956	6.08 <sup>1</sup>	174				

<sup>1</sup>Gage height at different site and (or) datum.

**Table 157. 01659500 Middle Branch Chopawamsic Creek near Garrisonville, Va.**

LOCATION.--Latitude 38°33'26", Longitude 077°25'32", NAD27, Stafford County, Hydrologic Unit 02070011, on left bank 300 ft upstream from highway culvert, 0.4 mi upstream from confluence with North Branch Chopawamsic Creek, and 5.6 mi north of Garrisonville.

DRAINAGE AREA.--4.46 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 192.97 ft NGVD of 1929 (Bureau of Yards and Docks bench mark). October 1989 to October 1995 and January 1960 to June 1965 nonrecording gage at present site and datum of 192.48 ft NGVD of 1929. May 1951 to June 1957, water-stage recorder at present site and datum of 192.48 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 190 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1952	December 21, 1951	4.48 <sup>1</sup>	149	1992	January 5, 1992	4.33 <sup>1</sup>	
1953	November 21, 1952	5.11 <sup>1</sup>	235	1993	March 4, 1993	5.30 <sup>1</sup>	265
1954	December 14, 1953	3.39 <sup>1</sup>	47.0	1994	November 27, 1993	8.61 <sup>1</sup>	
1955	August 13, 1955	5.80 <sup>1</sup>	340	1995	March 8, 1995	7.13 <sup>1</sup>	
1956	February 6, 1956	3.54 <sup>1</sup>	58.0	2002	May 18, 2002	2.22	10
1990	January 1, 1990	3.81 <sup>1</sup>	80.0	2003	February 22, 2003	4.51	512
1991	October 23, 1990	8.63 <sup>1</sup>					

<sup>1</sup>Gage height at different site and (or) datum.

**Table 158. 01660000 South Branch Chopawamsic Creek near Garrisonville, Va.**

LOCATION.--Latitude 38°32'22", Longitude 077°25'30", NAD27, Stafford County, Hydrologic Unit 02070011, on left bank 1.8 mi upstream from mouth, 4.3 mi north of Garrisonville.

DRAINAGE AREA.--2.46 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 207.01 ft NGVD of 1929 (Bureau of Yards and Docks bench mark). Prior to October 1992, at site 200 ft downstream and datum of 206.03 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 143 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--6 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1952	September 1, 1952	6.50 <sup>1</sup>	261	1991	October 23, 1990	7.73 <sup>1</sup>	
1953	March 15, 1953	7.07 <sup>1</sup>	320	1992	September 3, 1992	8.69 <sup>1</sup>	
1954	May 29, 1954	5.00 <sup>1</sup>	126	2001	July 26, 2001	6.77	438
1955	August 18, 1955	4.72 <sup>1</sup>	106	2002	April 22, 2002	3.54	16
1956	July 4, 1956	6.09 <sup>1</sup>	225	2003	February 22, 2003	6.28	309
1990	May 10, 1990	6.52 <sup>1</sup>					

<sup>1</sup>Gage height at different site and (or) datum.

**Table 159.** 01660100 Chopawamsic Creek at Russell Road near Joplin, Va.

LOCATION.--Latitude 38°31'23", Longitude 077°22'26", NAD27, NAD83, Prince William County, Hydrologic unit 02070011, on left bank at upstream side of Russell Road, 4.5 miles southwest of Dumfries, and 2.6 miles upstream from mouth.

DRAINAGE AREA.--22.1 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 30 ft NGVD of 1929, from topographic map.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

<b>Water year</b>	<b>Date</b>	<b>Gage height (ft)</b>	<b>Discharge (ft<sup>3</sup>/s)</b>	<b>Water year</b>	<b>Date</b>	<b>Gage height (ft)</b>	<b>Discharge (ft<sup>3</sup>/s)</b>
Annual maximum stages and discharges							
1997	September 11, 1997	5.81	692	2000	August 4, 2000	5.74	602
1998	February 5, 1998	6.55	851	2001	March 21, 2001	5.35	492
1999	March 15, 1999	4.37	250				

**Table 160. 01660400 Aquia Creek near Garrisonville, Va.**

LOCATION.--Latitude 38°29'25", Longitude 077°26'02", NAD27, Stafford County, Hydrologic Unit 02070011, on right bank at bridge on State Highway 641, 1.1 mi northwest of Garrisonville, and 3.0 mi upstream from Beaverdam Run.

DRAINAGE AREA.--35.0 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 120 ft NGVD of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 1,520 ft<sup>3</sup>/s and extended above on basis of contracted-opening measurement at 11,600 ft<sup>3</sup>/s.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Records were provided by the Virginia Department of Environmental Quality - Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1972	June 22, 1972	16.32	11,600	1989	May 6, 1989	11.40	6,240
1973	April 27, 1973	6.09	1,740	1990	May 29, 1990	4.33	879
1974	December 21, 1973	4.60	970	1991	October 23, 1990	5.86	1,600
1975	September 26, 1975	12.08	6,980	1992	September 3, 1992	5.21	1,280
1976	December 31, 1975	5.23	1,270	1993	March 4, 1993	6.41	1,920
1977	October 20, 1976	4.66	995	1994	November 28, 1993	8.76	3,750
1978	January 26, 1978	6.34	1,850	1995	March 9, 1995	3.90	692
1979	February 26, 1979	6.46	1,970	1996	January 19, 1996	6.72	2,070
1980	October 2, 1979	6.50	1,970	1997	October 19, 1996	5.15	1,210
1981	August 30, 1981	6.36	1,890	2001	March 21, 2001	4.58	944
1982	February 3, 1982	4.00	734	2002	May 28, 2002	3.39	492
1983	April 15, 1983	6.13	1,750	2003	February 22, 2003	6.09	1,690
1984	March 29, 1984	6.18	1,780	2004	December 11, 2003	6.51	1,940
1985	February 12, 1985	4.42	919	2005	January 14, 2005	5.49	1,370
1986	November 28, 1985	4.61	1,010	2006	October 8, 2005	4.16	769
1987	April 16, 1987	5.17	1,260	2007	November 16, 2006	5.02	1,160
1988	January 20, 1988	4.50	956				

**Table 161. 01660500 Beaverdam Run near Garrisonville, Va.**

LOCATION.--Latitude 38°30'25", Longitude 077°25'38", NAD27, Stafford County, Hydrologic Unit 02070011, on left bank 2.2 mi north of Garrisonville, 3.4 mi upstream from mouth.

DRAINAGE AREA.--13.2 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 150.43 ft NGVD of 1929 (Bureau of Yards and Docks bench mark.) May 1951 to June 1957 water-stage recorder at site 500 ft upstream at present datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 800 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered regulated after 1957. Flow regulated by Lunga Reservoir 2.5 mi upstream, usable capacity approximately 5,000 acre-ft.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1952	December 21, 1951	4.96 <sup>1</sup>	408	1997	July 2, 1997	1.57	86 <sup>2</sup>
1953	November 21, 1952	6.34 <sup>1</sup>	975	1998	February 5, 1998	2.74	276 <sup>2</sup>
1954	December 14, 1953	3.70 <sup>1</sup>	123	1999	September 30, 1999	1.33	58 <sup>2</sup>
1955	August 15, 1955	7.03 <sup>1</sup>	1,370	2000	September 3, 2000	2.48	229 <sup>2</sup>
1956	March 14, 1956	3.98 <sup>1</sup>	178	2001	March 21, 2001	1.77	115 <sup>2</sup>
1990	July 16, 1990	3.47	110 <sup>2</sup>	2002	May 27, 2002	1.16	38 <sup>2</sup>
1991	October 23, 1990	4.07	196 <sup>2</sup>	2003	February 23, 2003	2.50	232 <sup>2</sup>
1992	September 3, 1992	4.18	218 <sup>2</sup>				

<sup>1</sup>Gage height at different site and (or) datum.

<sup>2</sup>Discharge affected by regulation or diversion.

## North Atlantic Slope Basin: Great Wicomico River Basin

**Table 162.** 01661600 Great Wicomico River near Horse Head, Va.

LOCATION.--Latitude 37°53'15", Longitude 076°27'00", NAD27, Northumberland County, Hydrologic Unit 02080102, on right upstream wingwall of culvert on State Highway 604, 1.5 mi upstream from Bush Mill Stream, and 1.7 mi west of Horse Head.

DRAINAGE AREA.--7.03 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is not determined. Prior to May 25, 1978, flood-hydrograph recorder at present site and datum.

STAGE-DISCHARGE RELATION.--Determined by computation of flow through culvert.

BANKFULL STAGE.--4 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1969	August 20, 1969	7.00	1,250	1984	May 30, 1984	5.22	755
1970	October 2, 1969	4.50	600	1985	September 26, 1985	5.04	710
1971	September 21, 1971	4.80	660	1986	October 21, 1985	6.41	1,070
1972	June 21, 1972	4.80	660	1987	February 23, 1987	5.12	730
1973	October 6, 1972	5.10	725	1988	May 6, 1988	5.03	708
1977	October 2, 1976	4.73	646	1989	August 18, 1989	4.61	622
1978	August 1, 1978	5.84	910	1990	October 19, 1989	4.81	662
1979	June 3, 1979	8.88	1,950	1991	September 27, 1991	5.52	830
1980	November 11, 1979	4.56	612	1992	December 2, 1991	5.45	812
1981	October 25, 1980	4.97	694	1993	March 4, 1993	5.38	795
1982	August 7, 1982	4.98	696	1994	March 3, 1994	6.46	1,090
1983	April 16, 1983	5.24	760	1995	July 22, 1995	4.92	684

**Table 163. 01661800 Bush Mill Stream near Heathsville, Va.**

LOCATION.--Latitude 37°52'36", Longitude 076°29'42", NAD27, Northumberland County, Hydrologic Unit 02080102, on right bank 12 ft upstream from bridge on State Highway 601, 2.2 mi northwest of Howland, and 3.0 mi southwest of Heathsville.

DRAINAGE AREA.--6.77 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 23.78 ft NGVD of 1929. October 1963 to March 1969, water-stage recorder 52 ft downstream at datum of 23.04 ft NGVD 1929. October 1969 to December 1986, water-stage recorder at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 800 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--5 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Prior to Jan. 1, 1986, records were provided by the Virginia Department of Environmental Quality - Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1964	February 16, 1964	3.63 <sup>1</sup>	106	1986	July 28, 1986	4.99	77.0
1965	July 12, 1965	4.36 <sup>1</sup>	164	1987	February 23, 1987	5.29	107
1966	May 27, 1966	4.83 <sup>1</sup>	220	1988	February 12, 1988	5.25	98.0
1967	October 19, 1966	4.61 <sup>1</sup>	189	1989	April 7, 1989	5.98	186
1968	June 20, 1968	5.25 <sup>1</sup>	276	1990	May 29, 1990	6.34	258
1969	August 20, 1969	6.13 <sup>1</sup>	450 <sup>2</sup>	1991	January 12, 1991	6.20	220
1970	July 30, 1970	4.98	122	1992	August 15, 1992	5.37	108
1971	May 16, 1971	4.47	82.0	1993	March 4, 1993	6.11	207
1972	June 22, 1972	5.42	165	1994	March 3, 1994	8.10	625
1973	August 21, 1973	6.12	139	1995	June 26, 1995	5.34	106
1974	August 7, 1974	5.62	119	1996	July 13, 1996	6.33	256
1975	July 15, 1975	6.24	267	1997	October 8, 1996	5.65	136
1976	November 13, 1975	5.38	142	1998	February 5, 1998	7.36	485
1977	October 3, 1976	6.56	327	1999	September 16, 1999	11.50	1,390
1978	March 10, 1978	6.53	327	2000	September 26, 2000	5.25	98.0
1979	July 30, 1979	8.52	714	2001	June 1, 2001	5.46	116
1980	November 11, 1979	5.03	108	2002	April 22, 2002	3.46	21.8
1981	May 19, 1981	3.74	39.0	2003	May 26, 2003	6.11	212
1982	August 7, 1982	4.51	73.0	2004	November 6, 2003	5.78	152
1983	April 16, 1983	6.88	366	2005	July 8, 2005	5.30	100
1984	May 30, 1984	6.08	206	2006	September 1, 2006	7.27	462
1985	September 27, 1985	6.52	294				

<sup>1</sup>Gage height at different site and (or) datum.

<sup>2</sup>Discharge is an estimate.

## North Atlantic Slope Basin: Rappahannock River Basin

**Table 164.** 01661900 Carter Run near Marshall, Va.

LOCATION.--Latitude 38°47'58", Longitude 077°52'09", NAD27, Fauquier County, Hydrologic Unit 02080103, on left bank 50 ft upstream from farm road, 1.2 mi downstream from Horner Run, 4.7 mi south of Marshall, 6.7 mi southwest of The Plains, and 9 mi upstream from mouth.

DRAINAGE AREA.--20.4 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 390.00 ft NGVD of 1929. Prior to September 1982, water-stage recorder at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 190 ft<sup>3</sup>/s and extended above on basis of slope-area measurement at 10.4 ft<sup>3</sup>/s.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Records for 1982 water year were provided by the Virginia Department of Environmental Quality - Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1977	October 9, 1976	10.40	7,100	1987	September 8, 1987	6.29	1,020
1978	January 26, 1978	7.01	1,610	1988	May 23, 1988	7.95	2,620
1979	September 5, 1979	7.47	2,070	1989	May 6, 1989	6.56	1,220
1980	October 5, 1979	5.98	826	1990	May 10, 1990	6.13	919
1981	February 11, 1981	5.43	543	1991	March 23, 1991	7.51	2,110
1982	June 13, 1982	5.85	751	1992	June 5, 1992	6.82	1,440
1983	April 10, 1983	7.04	1,640	1993	December 10, 1992	8.64	3,580
1984	February 14, 1984	5.95	808	1994	August 17, 1994	8.84	3,900
1985	February 12, 1985	6.21	970	1995	June 26, 1995	7.77	2,400
1986	November 4, 1985	4.92	366				

**Table 165. 01662000 Rappahannock River near Warrenton, Va.**

LOCATION.--Latitude 38°41'05", Longitude 077°54'15", NAD27, Fauquier County, Hydrologic Unit 02080103, on left bank 50 ft downstream from westbound bridge on U.S. Highway 211, 0.9 mi downstream from Carter Run, 6.2 mi southwest of Warrenton, and 15 mi upstream from Hazel River.

DRAINAGE AREA.--195 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 312.57 ft NGVD of 1929. Oct. 8, 1942, to Dec. 17, 1944, nonrecording gage 50 ft upstream at present datum. Prior to Sept. 30, 1986, water-stage recorder at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 24,000 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1943	October 15, 1942	23.50 <sup>1</sup>	32,000	1970	February 2, 1970	7.16	1,980
1944	January 4, 1944	11.00 <sup>1</sup>	4,520	1971	February 14, 1971	11.83	5,020
1945	September 18, 1945	12.30	6,050	1972	June 22, 1972	20.87	21,900
1946	August 2, 1946	10.80	4,320	1973	May 28, 1973	11.04	4,390
1947	June 14, 1947	6.44	1,600	1974	December 21, 1973	10.06	3,650
1948	April 1, 1948	8.94	2,900	1975	September 26, 1975	15.16	8,460
1949	May 15, 1949	9.88	3,540	1976	January 1, 1976	11.66	3,910
1950	September 13, 1950	9.24	3,080	1977	October 9, 1976	22.00	18,000
1951	December 4, 1950	18.31	14,200	1978	January 26, 1978	15.81	6,480
1952	March 11, 1952	9.85	3,470	1979	September 6, 1979	16.89	7,850
1953	November 22, 1952	14.49	7,640	1980	March 21, 1980	12.13	4,180
1954	March 1, 1954	5.91	1,350	1981	February 11, 1981	7.51	1,880
1955	August 18, 1955	16.56	10,500	1982	June 13, 1982	8.29	2,230
1956	July 21, 1956	13.05	6,050	1983	April 10, 1983	15.01	5,940
1957	October 27, 1956	6.53	1,650	1984	February 14, 1984	18.83	10,600
1958	January 14, 1958	10.00	3,610	1985	February 12, 1985	13.25	4,840
1959	June 2, 1959	8.96	2,960	1986	November 4, 1985	14.47	5,600
1960	June 14, 1960	10.77	4,200	1987	September 8, 1987	10.12	3,110
1961	May 13, 1961	11.69	4,920	1988	May 6, 1988	11.51	3,830
1962	March 13, 1962	10.16	3,750	1989	May 6, 1989	10.62	3,360
1963	November 10, 1962	7.46	2,150	1990	May 10, 1990	8.68	2,410
1964	April 29, 1964	9.98	3,610	1991	October 23, 1990	12.08	4,150
1965	March 5, 1965	11.30	4,600	1992	April 22, 1992	12.83	4,580
1966	February 13, 1966	8.79	2,840	1993	March 4, 1993	20.03	13,200
1967	March 7, 1967	13.02	6,070	1994	August 17, 1994	15.71	6,400
1968	January 14, 1968	11.34	4,630	1995	June 27, 1995	16.96	7,560
1969	January 22, 1969	4.75	808	1996	January 19, 1996	18.88	10,600

<sup>1</sup>Gage height at different site and (or) datum.

**Table 166.** 01662300 Thornton River tributary near Thornton Gap, Va.

LOCATION.--Latitude 38°40'08", Longitude 078°17'30", NAD27, Rappahannock County, Hydrologic Unit 02080103, at culvert on U.S. Highway 211, 1.8 mi east of Thornton Gap.

DRAINAGE AREA.--1.37 mi<sup>2</sup>.

GAGE.--Water-stage recorder (flood-hydrograph recorder). Datum of gage is 1,393.85 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--9 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1967	August 24, 1967	7.98	50.0	1972	June 21, 1972	9.90	140
1968	May 28, 1968	7.52	32.0	1973	October 5, 1972	8.52	71.0
1969	September 20, 1969	7.20	21.0	1974	October 29, 1973	8.60	75.0
1970	December 30, 1969	7.70	38.0	1975	March 19, 1975	9.62	126
1971	September 12, 1971	8.34	64.0	1976	September 15, 1976	7.63	35.0

**Table 167. 01662500 Rush River at Washington, Va.**

LOCATION.--Latitude 38°42'50", Longitude 078°09'05", NAD27, Rappahannock County, Hydrologic Unit 02080103, on left bank 20 ft upstream from bridge on old U.S. Highways 211 and 522, 0.5 mi east of Washington, and 1.6 mi upstream from Big Branch.

DRAINAGE AREA.--14.6 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 597.97 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 1,260 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--5 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Subsequent to June 30, 1957, records were provided by the Virginia Department of Environmental Quality - Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1954	March 1, 1954	4.30	610	1966	February 13, 1966	3.11	278
1955	August 18, 1955	8.14	2,500	1967	March 7, 1967	3.59	402
1956	July 20, 1956	4.05	525	1968	September 10, 1968	3.70	429
1957	May 14, 1957	3.13	282	1969	September 8, 1969	2.78	207
1958	July 14, 1958	3.64	416	1970	February 2, 1970	3.58	402
1959	September 30, 1959	5.26	935	1971	November 12, 1970	4.32	600
1960	May 21, 1960	5.43	1,020	1972	June 22, 1972	6.44	1,460
1961	May 12, 1961	3.73	442	1973	May 28, 1973	3.39	350
1962	June 20, 1962	3.97	496	1974	May 12, 1974	3.32	325
1963	November 10, 1962	3.52	375	1975	March 19, 1975	5.19	1,670
1964	July 12, 1964	4.26	585	1976	October 18, 1975	2.78	295
1965	March 5, 1965	3.89	483	1977	October 9, 1976	6.42	2,880

**Table 168.** 01662600 Rush River tributary near Washington, Va.

LOCATION.--Latitude 38°41'40", Longitude 078°10'10", NAD27, Rappahannock County, Hydrologic Unit 02080103, at culvert on U.S. Highways 211 and 522, 1.2 mi southwest of Washington.

DRAINAGE AREA.--0.057 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 676.44 ft NGVD of 1929. Prior to Nov. 14, 1973, flood-hydrograph recorder at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--6 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1966	September 14, 1966	3.30	12.0	1972	October 25, 1971	3.25	10.0
1967	August 24, 1967	3.55	18.0	1973	April 27, 1973	3.23	9.60
1968	September 11, 1968	3.70	22.0	1974	May 12, 1974	3.41	13.0
1970	December 31, 1969	3.45	14.0	1975	March 19, 1975	3.50	15.0
1971	November 12, 1970	3.80	24.0				

**Table 169. 01662800 Battle Run near Laurel Mills, Va.**

LOCATION.--Latitude 38°39'20", Longitude 078°04'27", NAD27, Rappahannock County, Hydrologic Unit 02080103, on left bank just upstream from bridge on State Highway 729, 0.8 mi upstream from mouth, and 1.0 mi northeast of Laurel Mills.

DRAINAGE AREA.--25.8 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 374.62 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 2,450 ft<sup>3</sup>/s and extended above on basis of velocity-area study.

BANKFULL STAGE.--4 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Records were provided by the Virginia Department of Environmental Quality - Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1959	September 30, 1959	10.71	885	1983	April 3, 1983	9.18	1,830
1960	May 21, 1960	11.37	1,120	1984	February 14, 1984	9.97	2,310
1961	May 12, 1961	10.10	740	1985	February 12, 1985	8.08	1,300
1962	June 20, 1962	9.91	700	1986	November 4, 1985	12.46	5,060
1963	March 19, 1963	8.75	500	1987	September 8, 1987	7.55	1,030
1964	April 29, 1964	11.16	1,050	1988	May 20, 1988	12.02	4,340
1965	March 5, 1965	10.37	810	1989	May 1, 1989	6.11	615
1966	February 13, 1966	9.65	620	1990	May 10, 1990	5.29	410
1967	August 24, 1967	10.63	810	1991	October 13, 1990	10.15	2,430
1968	January 14, 1968	10.34	785	1992	April 21, 1992	7.76	1,150
1969	July 11, 1969	9.36	600	1993	November 22, 1992	11.90	4,170
1970	February 2, 1970	9.32	740	1994	August 11, 1994	10.14	2,430
1971	August 4, 1971	10.16	680	1995	June 27, 1995	14.40	9,120
1972	June 22, 1972	11.53 <sup>1</sup>	2,850	1998	January 8, 1998	10.73	1,630
1973	August 18, 1973	8.02	1,270	1999	September 30, 1999	11.95	5,740
1974	May 12, 1974	6.54	760	2000	September 19, 2000	6.88	725
1975	March 19, 1975	10.57	2,760	2001	March 21, 2001	6.71	691
1976	January 1, 1976	6.69	820	2002	May 26, 2002	9.78	1,380
1977	October 9, 1976	13.90	9,120	2003	September 23, 2003	12.20	7,130
1978	January 26, 1978	10.62	2,760	2004	September 28, 2004	12.09	6,490
1979	August 24, 1979	11.52	3,650	2005	July 8, 2005	10.08	1,500
1980	March 21, 1980	10.25	2,470	2006	November 29, 2005	9.09	1,210
1981	February 11, 1981	5.28	419	2007	March 2, 2007	5.50	473
1982	June 5, 1982	6.08	634				

<sup>1</sup>Gage height is not the maximum for the year.

**Table 170. 01663000 Thornton River near Laurel Mills, Va.**

LOCATION.--Latitude 38°37'41", Longitude 078°03'47", NAD27, Rappahannock County, Hydrologic Unit 02080103, near left bank on downstream side of bridge on State Highway 729, 2 mi southeast of Laurel Mills, 3 mi downstream from Battle Run, and 4.5 mi upstream from mouth.

DRAINAGE AREA.--139 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 342.43 ft NGVD of 1929. Prior to Nov. 21, 1950, nonrecording gage at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 2,600 ft<sup>3</sup>/s and extended above on basis of slope-area measurement at 26,000 ft<sup>3</sup>/s.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1943	October 15, 1942	26.80	40,000 <sup>1</sup>	1950	September 12, 1950	10.60	4,030
1944	September 18, 1944	8.00	2,110	1951	December 4, 1950	17.22	13,000
1945	September 18, 1945	11.30	4,640	1952	August 6, 1952	15.70	10,000
1946	May 28, 1946	9.08	2,840	1953	November 21, 1952	14.00	7,450
1947	August 18, 1947	8.20	2,250	1954	March 2, 1954	10.18	3,950
1948	November 3, 1947	14.00	7,500	1955	August 18, 1955	21.50	26,500
1949	April 13, 1949	12.90	6,240	1956	July 20, 1956	10.30	4,500

<sup>1</sup>Discharge is an estimate.

**Table 171. 01663500 Hazel River at Rixeyville, Va.**

LOCATION.--Latitude 38°35'30", Longitude 077°57'55", NAD27, Culpeper County, Hydrologic Unit 02080103, on right bank at downstream side of bridge on State Highway 229, 0.4 mi upstream from Waterford Run, 1.1. mi northeast of Rixeyville, 2.8 mi downstream from Thornton River, and 9.1 mi upstream from mouth.

DRAINAGE AREA.--285 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 288.30 ft NGVD of 1929. Prior to September 30, 1992, water-stage recorder at site on right downstream side of bridge at present datum. Beginning October 1, 2001, water-stage recorder at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 27,000 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--13 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Subsequent to Sept. 30, 1989, records were provided by the Virginia Department of Environmental Quality - Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1937	April 26, 1937	28.40	43,500 <sup>1</sup>	1970	December 11, 1969	12.59	4,750
1942	August 9, 1942	13.75	5,420	1971	November 13, 1970	15.55	7,490
1943	October 15, 1942	31.80	60,000	1972	June 22, 1972	23.40	25,000
1944	September 19, 1944	9.49	2,720	1973	May 28, 1973	16.01	8,140
1945	September 18, 1945	15.85	7,840	1974	December 21, 1973	14.29	6,010
1946	May 28, 1946	13.70	5,330	1975	March 19, 1975	20.84	17,900
1947	August 18, 1947	12.50	4,440	1976	January 1, 1976	14.18	5,910
1948	November 4, 1947	19.77	15,300	1977	October 9, 1976	24.00	26,900
1949	April 14, 1949	18.40	12,300	1978	January 26, 1978	19.62	14,900
1950	September 13, 1950	15.30	7,160	1979	August 29, 1979	24.57	28,800
1951	December 4, 1950	21.36	19,300	1980	March 21, 1980	16.37	8,960
1952	March 11, 1952	15.50	7,420	1981	February 20, 1981	9.57	2,710
1953	November 22, 1952	18.60	12,700	1982	June 13, 1982	12.22	4,420
1954	March 1, 1954	12.80	4,650	1983	April 10, 1983	18.03	11,600
1955	August 18, 1955	25.97	33,700	1984	February 14, 1984	22.31	21,700
1956	July 21, 1956	12.95	4,790	1985	February 12, 1985	16.10	8,270
1957	October 27, 1956	10.70	3,360	1986	November 4, 1985	24.79	29,500
1958	January 14, 1958	12.88	4,720	1987	April 16, 1987	16.60	9,060
1959	June 2, 1959	14.46	6,140	1988	November 29, 1987	15.59	7,550
1960	October 1, 1959	14.21	5,800	1989	May 6, 1989	12.29	4,460
1961	April 13, 1961	15.00	6,770	1990	May 10, 1990	9.66	2,870
1962	March 12, 1962	12.67	4,820	1991	October 13, 1990	21.98	20,800
1963	March 20, 1963	12.18	4,240	1992	April 22, 1992	18.78	13,000
1964	April 29, 1964	13.65	5,430	2002	May 27, 2002	8.92	2,670
1965	March 5, 1965	16.42	8,720	2003	September 23, 2003	19.42	11,400
1966	September 21, 1966	13.57	5,430	2004	September 29, 2004	19.61	11,600

1967	March 7, 1967	15.43	7,330	2005	April 3, 2005	15.96	8,060
1968	January 14, 1968	13.91	5,680	2006	November 30, 2005	18.45	9,080
1969	July 29, 1969	13.83	5,590	2007	November 16, 2006	11.76	4,600

---

<sup>1</sup>Discharge is a historic peak.

**Table 172. 01664000 Rappahannock River at Remington, Va.**

LOCATION.--Latitude 38°31'50", Longitude 077°48'50", NAD27, Fauquier County, Hydrologic Unit 02080103, on left bank 80 ft upstream from bridge on alternate U.S. Highway 29, at Remington, 0.3 mi upstream from Tinpot Run, 0.4 mi downstream from Ruffans Run, and 2.5 mi downstream from Hazel River.

DRAINAGE AREA.--619 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 252.53 ft NGVD of 1929. Prior to Nov. 21, 1951, nonrecording gage at bridge 80 ft downstream at present datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 43,000 ft<sup>3</sup>/s and extended above on basis of slope-area measurement at 90,000 ft<sup>3</sup>/s.

BANKFULL STAGE.--13 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Flood peak of October 1942 is maximum known since at least 1828 from information by local resident.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1943	October 16, 1942	30.00 <sup>1</sup>	90,000	1975	March 20, 1975	18.70	22,400
1944	November 8, 1943	12.60 <sup>1</sup>	7,480	1976	January 1, 1976	15.10	11,200
1945	July 31, 1945	16.20 <sup>1</sup>	13,500	1977	October 10, 1976	21.97	36,800
1946	August 2, 1946	15.45 <sup>1</sup>	12,000	1978	January 27, 1978	18.52	21,800
1947	March 14, 1947	8.20 <sup>1</sup>	3,450	1979	September 6, 1979	18.84	23,000
1948	November 4, 1947	14.70 <sup>1</sup>	10,300	1980	March 22, 1980	14.98	11,000
1949	December 4, 1948	14.90 <sup>1</sup>	10,600	1981	August 31, 1981	9.93	4,970
1950	September 13, 1950	14.80 <sup>1</sup>	10,500	1982	August 6, 1982	13.86	9,230
1951	December 5, 1950	19.42 <sup>1</sup>	27,200	1983	April 10, 1983	17.39	17,700
1952	March 12, 1952	14.60	9,600	1984	February 15, 1984	21.21	33,000
1953	November 22, 1952	17.81	18,800	1985	February 13, 1985	14.80	10,800
1954	March 2, 1954	10.41	5,130	1986	November 4, 1985	19.73	26,400
1955	August 18, 1955	23.52	45,100	1987	April 17, 1987	15.53	12,300
1956	July 21, 1956	14.14	9,400	1988	November 30, 1987	15.25	11,700
1957	October 27, 1956	11.26	6,200	1989	May 6, 1989	16.35	14,500
1958	January 15, 1958	13.42	8,480	1990	May 11, 1990	11.38	6,280
1959	June 3, 1959	14.23	9,550	1991	October 14, 1990	17.15	16,900
1960	April 5, 1960	14.58	10,200	1992	April 22, 1992	15.65	12,600
1961	April 13, 1961	15.36	12,000	1993	March 5, 1993	21.96	36,600
1962	March 13, 1962	14.95	11,000	1994	November 28, 1993	18.50	21,600
1963	March 20, 1963	13.49	8,600	1995	June 28, 1995	20.06	27,800
1964	April 29, 1964	13.69	8,860	1996	September 7, 1996	24.04	35,300
1965	February 8, 1965	16.30	14,400	1997	December 13, 1996	12.11	6,820
1966	February 14, 1966	14.20	9,550	1998	March 21, 1998	18.84	17,600
1967	March 7, 1967	16.25	14,200	1999	September 30, 1999	19.11	18,200
1968	January 14, 1968	15.43	12,100	2000	June 18, 2000	8.95	4,110
1969	July 29, 1969	13.01	8,010	2001	March 22, 2001	13.51	8,870

1970	February 10, 1970	10.54	5,490	2002	May 27, 2002	7.07	2,670
1971	February 14, 1971	15.46	12,200	2003	September 24, 2003	17.93	15,900
1972	June 22, 1972	24.82	52,900	2004	December 11, 2003	18.76	19,700
1973	May 29, 1973	15.12	11,300	2006	November 30, 2005	15.80	13,400
1974	December 21, 1973	15.09	11,200	2007	March 2, 2007	12.11	7,300

---

<sup>1</sup>Gage height at different site and (or) datum.

**Table 173. 01664500 Rappahannock River at Kellys Ford, Va.**

LOCATION.--Latitude 38°28'38", Longitude 077°46'53", NAD27, Culpeper County, Hydrologic Unit 02080103, on right bank 50 ft upstream from highway bridge at Kelly Ford, 2.6 mi upstream from Mountain Run, 4.3 mi southeast of Remington, and at mile 30.9.

DRAINAGE AREA.--641 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 208.91 ft NGVD of 1929. Prior to Oct. 30, 1934, water-stage recorder at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 10,000 ft<sup>3</sup>/s and extended above on basis of slope-area measurement of peak flow.

BANKFULL STAGE.--15 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Flood peak of October 1942 is highest known since at least 1828, from information by local resident.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1886	October 1885	22.90	34,500 <sup>1,2</sup>	1938	October 20, 1937	18.04	16,000
1889	June 1889	26.70	50,000 <sup>1,2</sup>	1939	January 30, 1939	12.22	7,080
1924	May 1924	21.80	29,700 <sup>1,2</sup>	1940	May 27, 1940	12.04	6,920
1925	February 12, 1925	11.63	7,730	1941	April 5, 1941	12.83	7,550
1926	September 24, 1926	16.35	12,300	1942	August 9, 1942	14.66	9,060
1927	November 17, 1926	19.90	22,100	1943	October 16, 1942	32.60	90,000
1928	August 12, 1928	16.37	12,300	1944	November 9, 1943	12.88	7,630
1929	April 17, 1929	13.90	8,420	1945	July 31, 1945	18.10	13,300
1930	October 23, 1929	20.65	24,900	1946	May 29, 1946	16.00	11,500
1931	August 10, 1931	7.00	3,050	1947	March 14, 1947	8.41	3,740
1932	May 13, 1932	16.00	11,500	1948	April 1, 1948	14.45	8,880
1933	November 10, 1932	18.65	17,800	1949	December 4, 1948	16.00	11,500
1934	September 17, 1934	18.00	16,000	1950	September 14, 1950	14.62	9,130
1935	December 2, 1934	16.00	11,500	1951	December 5, 1950	20.50	24,500
1936	March 18, 1936	18.55	17,800	1952	April 28, 1952	13.88	8,370
1937	April 26, 1937	29.22	69,800				

<sup>1</sup>Discharge is a historic peak.

<sup>2</sup>Month or day of occurrence is unknown or not exact.

**Table 174.** 01664700 Browns Run near Bealeton, Va.

LOCATION.--Latitude 38°32'37", Longitude 077°43'52", NAD27, Fauquier County, Hydrologic Unit 02080103, at State Highway 17, 2.9 mi southeast of Bealeton.

DRAINAGE AREA.--7.75 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 264.91 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 600 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--5.0 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1955	June 8, 1955	5.38	680	1958	July 23, 1958	5.50	730
1956	February 6, 1956	5.07	550	1959	June 2, 1959	5.20	610
1957	April 5, 1957	5.15	570	1960	June 13, 1960	5.52	740

**Table 175. 01664800 Harpers Run near Morrisville, Va.**

LOCATION.--Latitude 38°31'00", Longitude 077°43'05", NAD27, Fauquier County, Hydrologic Unit 02080103, at culvert on U.S. Highway 17, 1.7 mi northwest of Morrisville.

DRAINAGE AREA.--2.32 mi<sup>2</sup>.

GAGE.--Water-stage recorder (flood-hydrograph recorder). Datum of gage is 287.56 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1966	May 19, 1966	4.80	320	1971	February 13, 1971	4.35	280
1967	March 7, 1967	4.45	240	1972	June 21, 1972	12.53	1,900
1968	January 14, 1968	4.89	330	1973	April 27, 1973	4.10	204
1969	July 28, 1969	5.65	460	1974	May 12, 1974	2.40	40.0
1970	September 18, 1970	3.95	150	1975	March 19, 1975	2.90	73.0

**Table 176. 01665000 Mountain Run near Culpeper, Va.**

LOCATION.--Latitude 38°28'41", Longitude 078°02'56", NAD27, Culpeper County, Hydrologic Unit 02080103, on left bank 30 ft upstream from bridge on State Highway 641, 2.4 mi upstream from Bond Branch, and 3.0 mi west of Culpeper.

DRAINAGE AREA.--16.1 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 389.46 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 910 ft<sup>3</sup>/s and extended above on basis of slope-area measurement at 6,840 ft<sup>3</sup>/s.

BANKFULL STAGE.--6 ft.

REGULATION.--High-flow conditions at this site are considered regulated after 1958 by two reservoirs, combined flood storage, 2,240 acre-ft; 531 acre-ft additional storage used for low-water regulation for municipal supply for town of Culpeper.

REMARKS.--Subsequent to June 30, 1957, records were provided by the Virginia Department of Environmental Quality - Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1950	September 13, 1950	10.65	2,650	1974	December 21, 1973	5.46	378 <sup>1</sup>
1951	December 4, 1950	11.20	3,250	1975	May 23, 1975	6.66	632 <sup>1</sup>
1952	September 1, 1952	8.54	1,150	1976	December 31, 1975	5.62	404 <sup>1</sup>
1953	November 21, 1952	10.52	2,550	1977	October 9, 1976	9.22	2,110 <sup>1</sup>
1954	June 9, 1954	5.55	265	1978	January 26, 1978	6.48	595 <sup>1</sup>
1955	August 18, 1955	11.00	5,440	1979	September 22, 1979	8.74	1,610 <sup>1</sup>
1956	July 21, 1956	6.06	470	1980	March 21, 1980	6.22	520 <sup>1</sup>
1957	October 27, 1956	6.75	660	1981	February 11, 1981	4.26	207 <sup>1</sup>
1958	August 14, 1958	9.20	2,110	1982	August 6, 1982	5.25	346 <sup>1</sup>
1959	July 27, 1959	6.32	520 <sup>1</sup>	1983	April 10, 1983	6.50	645 <sup>1</sup>
1960	September 10, 1960	5.80	438 <sup>1</sup>	1984	February 14, 1984	6.51	648 <sup>1</sup>
1961	September 7, 1961	5.93	465 <sup>1</sup>	1985	February 12, 1985	5.30	408 <sup>1</sup>
1962	May 1, 1962	5.38	370 <sup>1</sup>	1986	November 3, 1985	6.04	548 <sup>1</sup>
1963	March 12, 1963	4.75	266 <sup>1</sup>	1987	September 8, 1987	9.28	2,210 <sup>1</sup>
1964	January 9, 1964	4.73	266 <sup>1</sup>	1988	November 29, 1987	5.85	510 <sup>1</sup>
1965	February 7, 1965	5.90	455 <sup>1</sup>	1989	May 5, 1989	8.10	1,240 <sup>1</sup>
1966	February 13, 1966	5.18	330 <sup>1</sup>	1990	July 14, 1990	7.28	873 <sup>1</sup>
1967	March 7, 1967	6.00	475 <sup>1</sup>	1991	October 18, 1990	6.64	678 <sup>1</sup>
1968	January 14, 1968	5.42	370 <sup>1</sup>	1992	July 27, 1992	5.91	500 <sup>1</sup>
1969	July 28, 1969	9.18	2,110 <sup>1</sup>	1993	May 5, 1993	11.87	4,510 <sup>1</sup>
1970	August 8, 1970	4.77	266 <sup>1</sup>	1994	July 27, 1994	8.41	1,570 <sup>1</sup>
1971	November 12, 1970	7.11	760 <sup>1</sup>	1995	July 24, 1995	7.32	1,010 <sup>1</sup>
1972	June 21, 1972	9.86	3,040 <sup>1</sup>	1996	September 6, 1996	8.27	1,490 <sup>1</sup>
1973	October 5, 1972	5.51	387 <sup>1</sup>	1997	December 1, 1996	4.00	205 <sup>1</sup>

<sup>1</sup>Discharge affected by regulation or diversion.

**Table 177. 01665050 Pony Mountain Branch near Culpeper, Va.**

LOCATION.--Latitude 38°27'04", Longitude 077°57'24", NAD27, Culpeper County, Hydrologic Unit 02080103, at culvert on State Highway 3, 0.3 mi upstream from mouth, and 2.7 mi southeast of Culpeper.

DRAINAGE AREA.--0.28 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 335 ft NGVD of 1929, from topographic map. Prior to Dec. 5, 1969, flood-hydrograph recorder at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by indirect methods.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Prior to 1970, records were provided by the U.S. Department of Agriculture, Soil Conservation Service.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1958	June 24, 1958	2.29	91.0	1983	April 10, 1983	1.59	52.0
1959	June 2, 1959	1.65	55.0	1984	August 10, 1984	2.69	116
1960	September 19, 1960	1.81	64.0	1985	June 20, 1985	2.28	92.0
1961	April 13, 1961	1.22	29.0	1986	July 23, 1986	2.99	134
1962	March 12, 1962	0.98	13.0	1987	September 8, 1987	1.86	67.0
1963	March 12, 1963	1.28	34.0	1988	July 21, 1988	1.39	40.0
1964	April 29, 1964	1.32	36.0	1989	May 5, 1989	5.78	
1965	February 7, 1965	1.64	54.0	1990	July 14, 1990	3.38	158
1966	May 19, 1966	2.00	76.0	1991	October 23, 1990	1.51	48.0
1967	March 7, 1967	1.33	37.0	1992	June 5, 1992	1.49	46.0
1968	July 2, 1968	0.98	13.0	1993	March 4, 1993	1.82	64.0
1969	January 21, 1969	0.74	5.70	1994	August 17, 1994	2.17	85.0
1970	August 16, 1970	4.02	196	1995	January 16, 1995	1.49	46.0
1971	May 30, 1971	1.81	64.0	1996	September 6, 1996	2.02	76.0
1972	June 21, 1972	3.94	191	1997	December 1, 1996	1.18	26
1973	November 14, 1972	1.89	68.0	1998	January 8, 1998	1.92	71
1974	September 3, 1974	1.52	48.0	1999	September 30, 1999	2.09	80
1975	March 19, 1975	1.62	53.0	2000	December 14, 1999	1.41	42
1976	June 20, 1976	2.35	96.0	2001	December 17, 2000	1.57	50
1977	October 9, 1976	3.98	194	2002	July 14, 2002	1.03	16
1978	June 27, 1978	2.72	118	2003	February 22, 2003	5.80	312
1980	March 21, 1980	1.46	45.0	2004	September 29, 2004	7.22	407
1981	August 30, 1981	1.71	58.0	2005	January 14, 2005	5.87	317
1982	June 13, 1982	3.74	179				

**Table 178. 01665200 Rock Run tributary 2 near Goldvein, Va.**

LOCATION.--Latitude 38°27'45", Longitude 077°40'10", NAD27, Fauquier County, Hydrologic Unit 02080103, at culvert on U.S. Highway 17, 1.5 mi northwest of Goldvein.

DRAINAGE AREA.--1.02 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 279.76 ft NGVD of 1929. Prior to Oct. 30, 1974, flood-hydrograph recorder at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1966	September 14, 1966	4.20	84.0	1971	May 30, 1971	3.25	65.0
1967	August 24, 1967	4.70	200	1972	June 21, 1972	7.37	536
1968	January 14, 1968	4.00	100	1973	April 27, 1973	5.10	232
1969		3.00 <sup>1</sup>	50.0 <sup>2,3</sup>	1974	December 21, 1973	3.20	62.0
1970	July 23, 1970	2.74	40.0 <sup>2</sup>	1975	September 26, 1975	2.75	38.0

<sup>1</sup>Gage height below minimum recordable elevation.

<sup>2</sup>Discharge is less than indicated value, which is minimum recordable discharge at this site.

<sup>3</sup>Month or day of occurrence is unknown or not exact.

**Table 179. 01665300 Rapidan River near Stanardsville, Va.**

LOCATION.--Latitude 38°21'13", Longitude 078°22'29", NAD27, Madison County, Hydrologic Unit 02080103, at bridge on State Highway 230, 5.3 mi northeast of Stanardsville.

DRAINAGE AREA.--37.6 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is not determined.

STAGE-DISCHARGE RELATION.--Not developed.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Insufficient field data available to develop stage-discharge rating.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1967		17.03 <sup>1</sup>		1972	June 21, 1972	18.28	
1968		17.03 <sup>1</sup>		1973	October 5, 1972	19.20	
1969		17.03 <sup>1</sup>		1974		17.09 <sup>1</sup>	
1970		17.03 <sup>1</sup>		1975		17.09 <sup>1</sup>	
1971		17.03 <sup>1</sup>					

<sup>1</sup>Gage height below minimum recordable elevation.

**Table 180. 01665400 Conway River near Stanardsville, Va.**

LOCATION.--Latitude 38°19'58", Longitude 078°23'53", NAD27, Madison County, Hydrologic Unit 02080103, at bridge on State Highway 230, 3.4 mi northeast of Stanardsville.

DRAINAGE AREA.--26.0 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 569.83 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Not developed.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Insufficient field data available to develop stage-discharge rating.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1967		18.04 <sup>1</sup>		1972	June 21, 1972	20.43	
1968		18.04 <sup>1</sup>		1973	October 5, 1972	20.55	
1969		15.00		1974		16.28 <sup>1</sup>	
1970		18.04 <sup>1</sup>		1975	March 19, 1975	18.17	
1971	May 30, 1971	17.33					

<sup>1</sup>Gage height below minimum recordable elevation.

**Table 181. 01665450 South River near Stanardsville, Va.**

LOCATION.--Latitude 38°18'50", Longitude 078°25'45", NAD27, Greene County, Hydrologic Unit 02080103, at bridge on State Highway 230, 1.3 mi north of Stanardsville.

DRAINAGE AREA.--19.0 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 600.38 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Not developed.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Insufficient field data available to develop stage-discharge rating.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1967		9.88 <sup>1</sup>		1972	June 21, 1972	12.31	
1968		9.88 <sup>1</sup>		1973	October 5, 1972	12.79	
1969		9.88 <sup>1</sup>		1974		9.88 <sup>1</sup>	
1970		9.88 <sup>1</sup>		1975	March 19, 1975	10.57	
1971		9.88 <sup>1</sup>					

<sup>1</sup>Gage height below minimum recordable elevation.

**Table 182. 01665500 Rapidan River near Ruckersville, Va.**

LOCATION.--Latitude 38°16'50", Longitude 078°20'25", NAD27, Madison County, Hydrologic Unit 02080103, on left bank 250 ft downstream from bridge on U.S. Highway 29, 0.2 mi downstream from Elk Run, 1.7 mi upstream from White Run, 3.6 mi northeast of Ruckersville, and at mile 63.5.

DRAINAGE AREA.--115 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 439.44 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 12,000 ft<sup>3</sup>/s and extended above on basis of slope-area measurement at 21,500 ft<sup>3</sup>/s.

BANKFULL STAGE.--9 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Subsequent to Sept. 30, 1989, records were provided by the Virginia Department of Environmental Quality - Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1943	October 15, 1942	20.80	30,700	1974	December 21, 1973	7.00	3,150
1944	September 19, 1944	10.36	4,910	1975	March 19, 1975	11.89	7,960
1945	July 31, 1945	11.80	6,290	1976	January 27, 1976	6.37	2,710
1946	June 4, 1946	3.56	735	1977	October 9, 1976	12.56	8,880
1947	June 14, 1947	7.00	2,500	1978	January 26, 1978	10.30	6,030
1948	April 1, 1948	9.45	4,520	1979	September 6, 1979	15.29	13,800
1949	August 15, 1949	13.28	8,160	1980	March 21, 1980	11.11	6,960
1950	May 31, 1950	5.96	1,880	1981	July 2, 1981	6.06	2,490
1951	December 4, 1950	14.10	9,490	1983	April 3, 1983	10.18	5,970
1952	March 11, 1952	8.83	3,630	1984	February 14, 1984	11.63	7,630
1953	March 25, 1953	9.34	4,000	1985	February 12, 1985	6.93	3,110
1954	March 1, 1954	7.95	3,070	1986	November 5, 1985	14.72	12,600
1955	August 18, 1955	17.78	20,100	1987	September 8, 1987	11.48	7,430
1956	July 21, 1956	5.16	1,450	1988	May 6, 1988	5.01	1,760
1957	February 26, 1957	5.91	1,450	1989	July 31, 1989	7.33	3,420
1958	December 26, 1957	6.04	1,490	1990	July 11, 1990	8.22	4,140
1959	September 30, 1959	11.14	5,310	1991	October 18, 1990	11.86	7,930
1960	February 18, 1960	8.02	3,000	1992	April 21, 1992	12.16	8,350
1961	August 5, 1961	16.10	14,700	1993	November 23, 1992	11.94	8,040
1962	May 27, 1962	8.15	3,120	1994	November 28, 1993	8.94	4,760
1963	March 12, 1963	6.62	2,180	1995	June 27, 1995	31.30	106,000
1964	January 9, 1964	4.52	1,130	1999	September 30, 1999	14.63	24,700
1965	February 7, 1965	10.30	4,570	2000	September 4, 2000	6.11	3,010
1966	February 13, 1966	9.10	3,670	2001	August 12, 2001	10.28	11,500
1967	August 25, 1967	9.79	4,150	2002	April 22, 2002	4.07	880
1968	December 10, 1967	5.56	1,600	2003	September 19, 2003	13.26	20,100
1969	July 12, 1969	7.57	2,710	2004	September 9, 2004	9.59	9,740

1970	April 2, 1970	5.64	1,670	2005	December 23, 2004	8.04	5,300
1971	May 30, 1971	9.98	4,290	2006	November 29, 2005	13.28	15,000
1972	June 21, 1972	16.87	17,600	2007	August 26, 2007	6.32	2,580
1973	October 5, 1972	19.41	25,800				

---

**Table 183. 01666500 Robinson River near Locust Dale, Va.**

(Formerly published as Robertson River near Locust Dale.)

LOCATION.--Latitude 38°19'30", Longitude 078°05'45", NAD27, Madison County, Hydrologic Unit 02080103, on right bank 100 ft upstream from bridge on State Highway 614, 1.1 mi upstream from Great Run, 1.7 mi upstream from mouth, 2.0 mi southeast of Locust Dale and 3.4 mi downstream of Crooked Run.

DRAINAGE AREA.--179 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 283.70 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 9,100 ft<sup>3</sup>/s and extended above on basis of slope-area measurement at 17,200 ft<sup>3</sup>/s and records for other stations in Rappahannock River basin.

BANKFULL STAGE.--12 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Subsequent to Sept. 30, 1989, records were provided by the Virginia Department of Environmental Quality - Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1943	October 15, 1942	23.90 <sup>1</sup>	44,000 <sup>2</sup>	1976	January 27, 1976	12.30	3,980
1944	September 19, 1944	13.26	4,940	1977	October 9, 1976	18.49	15,500
1945	September 18, 1945	13.60	4,830	1978	January 26, 1978	16.42	9,690
1946	July 22, 1946	6.11	1,530	1979	September 6, 1979	18.75	16,300
1947	August 4, 1947	7.17	1,950	1980	March 21, 1980	15.39	7,620
1948	November 4, 1947	16.46	9,900	1981	February 11, 1981	7.26	1,550
1949	December 4, 1948	13.90 <sup>1</sup>	4,500	1982	June 13, 1982	13.40	4,140
1950	September 13, 1950	15.10	6,960	1983	April 10, 1983	15.80	6,110
1951	December 4, 1950	16.20	9,140	1984	February 14, 1984	17.36	9,200
1952	February 4, 1952	11.19	3,620	1985	February 12, 1985	15.63	8,110
1953	November 21, 1952	13.39	4,720	1986	November 5, 1985	20.17	17,200
1954	March 1, 1954	9.63	2,900	1987	September 8, 1987	19.16	9,550
1955	August 18, 1955	19.49	18,600	1988	November 29, 1987	14.40	6,020
1956	July 22, 1956	7.40	2,010	1989	May 6, 1989	17.13	9,900
1957	October 27, 1956	9.84	2,720	1990	May 10, 1990	10.89	3,190
1958	December 26, 1957	8.11	2,060	1991	October 23, 1990	17.08	9,820
1959	June 2, 1959	12.24	3,920	1992	April 22, 1992	16.79	9,340
1960	September 20, 1960	13.36	4,790	1993	March 4, 1993	18.24	12,000
1961	April 13, 1961	11.51	3,530	1994	November 28, 1993	16.81	9,370
1962	March 12, 1962	12.20	3,920	1995	June 27, 1995	22.93	25,400
1963	March 12, 1963	10.92	3,220	1996	September 6, 1996	23.92	22,100
1964	January 9, 1964	7.63	1,880	1997	July 2, 1997	10.49	2,900
1965	February 8, 1965	15.66	8,080	1998	February 17, 1998	19.03	11,600
1966	February 13, 1966	13.51	4,890	1999	September 30, 1999	18.80	13,800
1967	March 7, 1967	14.10	5,540	2000	December 14, 1999	7.07	1,530

1968	January 14, 1968	15.37	7,270	2001	March 21, 2001	12.49	3,900
1969	July 29, 1969	12.48	4,090	2002	April 22, 2002	5.75	1,060
1970	December 11, 1969	7.94	2,000	2003	September 19, 2003	18.85	13,900
1971	May 30, 1971	14.00	5,420	2004	September 29, 2004	18.55	13,200
1972	June 22, 1972	20.92	24,500	2005	January 14, 2005	14.97	6,670
1973	October 6, 1972	19.19	17,600	2006	November 30, 2005	15.79	7,900
1974	December 21, 1973	14.32	5,800	2007	November 12, 2006	8.64	2,130
1975	March 19, 1975	16.42	9,690				

---

<sup>1</sup>Gage height affected by backwater.

<sup>2</sup>Discharge is an estimate.

**Table 184. 01667000 Rapidan River at Rapidan, Va.**

LOCATION.--Latitude 38°18'47", Longitude 078°03'50", NAD27, Culpeper County, Hydrologic Unit 02080103, 1,000 ft downstream from bridge on State Highway 615 at Rapidan, 2 mi downstream from Robinson River.

DRAINAGE AREA.--445 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 266.50 ft NGVD of 1929, operated by the National Weather Service. Prior to 1944, a nonrecording gage 1,000 downstream at a datum 267 ft NGVD of 1929, from a profile by the Corps of Engineers.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 6,300 ft<sup>3</sup>/s and extended above on basis of slope-area measurement at 58,000 ft<sup>3</sup>/s at site 7 mi downstream. Relation at National Weather Service site is essential the same as for the original site.

BANKFULL STAGE.--14 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1901	May 1901	23.40	36,000 <sup>1,2</sup>	1950	September 13, 1950	13.80 <sup>4</sup>	9,550
1924	September 30, 1924	19.90	23,000	1951	December 4, 1950	17.50 <sup>4</sup>	15,800
1925	February 12, 1925	8.50	4,700	1952	February 4, 1952	11.50 <sup>4</sup>	7,350
1926	January 19, 1926	11.00	6,900	1953	November 22, 1952	13.00 <sup>4</sup>	8,750
1927	November 16, 1926	16.80	14,200	1954	March 1, 1954	9.50 <sup>4</sup>	5,560
1928	October 4, 1927	16.00	12,500	1955	August 18, 1955	22.50 <sup>4</sup>	32,000
1929	April 16, 1929	10.00	6,000	1956	September 28, 1956	6.50 <sup>4</sup>	3,060
1930	October 22, 1929	14.50	10,300	1957	October 27, 1956	9.00 <sup>4</sup>	5,130
1931	May 23, 1931		1,600	1958	December 27, 1957	9.00 <sup>4</sup>	5,130
1936	March 18, 1936		20,000 <sup>3</sup>	1959	June 3, 1959	12.30 <sup>4</sup>	8,070
1937	April 26, 1937		48,000 <sup>3</sup>	1960	February 19, 1960	12.20 <sup>4</sup>	7,980
1943	October 16, 1942	27.60	57,000	1961	April 13, 1961	11.00 <sup>4</sup>	6,900
1944	September 19, 1944		9,000 <sup>3</sup>	1962	March 23, 1962	10.10 <sup>4</sup>	6,090
1945	July 31, 1945	9.90 <sup>4</sup>	5,910	1963	March 13, 1963	11.50 <sup>4</sup>	7,350
1946	March 31, 1946	5.20 <sup>4</sup>	2,090	1964	January 9, 1964	8.40 <sup>4</sup>	4,620
1947	March 15, 1947	7.00 <sup>4</sup>	3,460	1965	February 8, 1965	16.50 <sup>4</sup>	13,500
1948	April 1, 1948	13.70 <sup>4</sup>	9,450	1966	February 14, 1966	12.00 <sup>4</sup>	7,800
1949	December 4, 1948	15.50 <sup>4</sup>	11,600				

<sup>1</sup>Discharge is a historic peak.

<sup>2</sup>Month or day of occurrence is unknown or not exact.

<sup>3</sup>Discharge is an estimate.

<sup>4</sup>Gage height at different site and (or) datum.

**Table 185. 01667500 Rapidan River near Culpeper, Va.**

LOCATION.--Latitude 38°21'01", Longitude 077°58'31", NAD27, Culpeper County, Hydrologic Unit 02080103, on left bank 0.7 mi upstream from Cedar Run and bridge on U.S. Highway 522, 8.5 mi south of Culpeper, and at mile 29.6.

DRAINAGE AREA.--468 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 241.36 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 43,000 ft<sup>3</sup>/s and extended above on basis of slope-area measurement at 58,100 ft<sup>3</sup>/s.

BANKFULL STAGE.--12 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Subsequent to Sept. 30, 1989, records were provided by the Virginia Department of Environmental Quality - Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1931	May 23, 1931	4.25	1,760	1970	December 11, 1969	6.44	4,210
1932	March 7, 1932	12.03	6,500	1971	May 31, 1971	12.73	9,560
1933	April 17, 1933	16.00	12,000	1972	June 22, 1972	29.53	55,600
1934	September 17, 1934	19.53	21,900	1973	October 6, 1972	26.23	42,400
1935	September 6, 1935	17.53	15,600	1974	December 21, 1973	13.16	9,360
1936	March 18, 1936	19.25	21,000	1975	March 20, 1975	17.26	14,500
1937	April 26, 1937	28.03	50,000	1976	January 1, 1976	11.42	7,840
1938	October 20, 1937	19.41	21,600	1977	October 10, 1976	17.50	15,000
1939	February 4, 1939	9.69	4,540	1978	January 26, 1978	17.47	14,900
1940	August 17, 1940	15.36	10,400	1979	September 6, 1979	18.79	17,600
1941	April 5, 1941	9.56	4,500	1980	October 2, 1979	14.78	11,100
1942	August 9, 1942	15.58	11,200	1981	February 20, 1981	5.06	3,240
1943	October 16, 1942	30.30	58,100	1982	June 13, 1982	11.72	8,120
1944	September 19, 1944	14.56	10,800	1983	April 10, 1983	13.78	10,000
1945	September 18, 1945	13.80	9,950	1984	February 15, 1984	18.24	16,400
1946	December 31, 1945	5.73	3,390	1985	February 12, 1985	12.09	8,430
1947	March 14, 1947	5.76	3,460	1986	November 5, 1985	22.52	28,500
1948	November 4, 1947	14.10	10,200	1987	September 9, 1987	17.77	15,500
1949	December 4, 1948	15.62	12,000	1988	November 29, 1987	12.79	9,020
1950	September 13, 1950	13.94	10,000	1989	May 6, 1989	18.19	16,300
1951	December 5, 1950	17.10	14,600	1990	May 10, 1990	9.19	6,130
1952	February 4, 1952	10.61	7,130	1991	October 23, 1990	14.40	10,700
1953	November 22, 1952	12.69	8,880	1992	April 22, 1992	13.65	9,880
1954	March 1, 1954	8.02	5,100	1993	March 5, 1993	18.91	17,800
1955	August 18, 1955	24.31	33,800	1994	November 28, 1993	14.58	10,900
1956	July 22, 1956	4.86	2,830	1995	June 28, 1995	30.40	59,300
1957	April 5, 1957	7.46	4,720	1996	September 7, 1996	27.49	47,800

1958	December 26, 1957	7.82	4,950	1997	July 2, 1997	13.57	12,400
1959	June 3, 1959	11.33	7,690	1998	February 18, 1998	17.15	18,700
1960	February 19, 1960	11.73	8,010	1999	September 30, 1999	17.53	19,200
1961	April 13, 1961	10.42	6,970	2000	December 14, 1999	5.81	4,300
1962	March 13, 1962	12.27	8,520	2001	March 21, 2001	9.38	8,230
1963	March 12, 1963	10.42	6,970	2002	April 22, 2002	3.35	1,990
1964	January 9, 1964	6.70	4,390	2003	September 19, 2003	18.51	20,700
1965	February 8, 1965	15.15	11,600	2004	September 29, 2004	14.06	14,300
1966	February 14, 1966	11.76	8,090	2005	January 14, 2005	13.63	13,700
1967	March 7, 1967	12.06	8,300	2006	October 8, 2005	12.33	11,900
1968	January 14, 1968	10.86	7,380	2007	November 12, 2006	7.50	6,080
1969	July 29, 1969	9.00	5,900				

---

**Table 186.** 01667600 Cedar Run tributary near Culpeper, Va.

LOCATION.--Latitude 38°23'50", Longitude 078°00'25", NAD27, Culpeper County, Hydrologic Unit 02080103, at culvert on U.S. Highway 522, 5 mi south of Culpeper.

DRAINAGE AREA.--0.67 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 326.16 ft NGVD of 1929. Prior to May 3, 1972, flood-hydrograph recorder at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1966	May 19, 1966	6.43	117	1971	May 30, 1971	6.14	106
1967	March 7, 1967	5.46	79.0	1972	June 21, 1972	6.63	125
1968	June 27, 1968	6.02	100	1973	April 27, 1973	5.01	62.0
1969	July 29, 1969	5.14	66.0	1974	September 3, 1974	4.46	46.0
1970	December 30, 1969	3.90	29.0	1975	March 19, 1975	5.33	73.0

**Table 187. 01667870 Mountain Run near Burr Hill, Va.**

LOCATION.--Latitude 38°21'13", Longitude 077°53'38", NAD27, Orange County, Hydrologic Unit 02080103, in center of downstream side of bridge on State Highway 611, 2.4 mi west of Burr Hill, and 4.4 mi upstream from mouth.

DRAINAGE AREA.--28.8 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 620 ft NGVD of 1929, from topographic map.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

<b>Water year</b>	<b>Date</b>	<b>Gage height (ft)</b>	<b>Discharge (ft<sup>3</sup>/s)</b>	<b>Water year</b>	<b>Date</b>	<b>Gage height (ft)</b>	<b>Discharge (ft<sup>3</sup>/s)</b>
Annual maximum stages and discharges							
1990	January 1, 1990	5.96	849	1993	December 10, 1992	9.43	3,130
1991	November 10, 1990	5.85	815	1994	November 28, 1993	10.30	3,990
1992	June 5, 1992	4.85	425	1995	June 27, 1995	14.41	9,500

**Table 188. 01668000 Rappahannock River near Fredericksburg, Va.**

LOCATION.--Latitude 38°18'30", Longitude 077°31'46", NAD27, Spotsylvania County, Hydrologic Unit 02080104, on right bank 1.6 mi upstream from dam of Virginia Power, 2.2 mi downstream from Motts Run, and 3.8 mi upstream from Fredericksburg.

DRAINAGE AREA.--1,595 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 70 ft NGVD of 1929. Prior to Jan. 15, 1922, nonrecording gage at site 1.5 mi downstream at datum of 56.18 ft NGVD of 1929. Jan. 15, 1922, to Aug. 2, 1966, water-stage recorder at site 1.5 mi downstream at datum of 56.18 ft NGVD of 1929. Aug. 2, 1966 to Oct. 17, 2000, water-stage recorder at present site and datum of 55.18 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 76,000 ft<sup>3</sup>/s and extended above on basis of flow-over-dam and slope-area measurement at 134,000 ft<sup>3</sup>/s and 140,000 ft<sup>3</sup>/s.

BANKFULL STAGE.--11 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Flood of Oct. 16, 1942, was probably several feet higher than the flood of June 1889, which was the highest known at that time.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1908	January 13, 1908	10.00 <sup>1</sup>	30,100	1958	January 15, 1958	7.81 <sup>1</sup>	18,600
1909	April 14, 1909	7.50 <sup>1</sup>	17,800	1959	June 3, 1959	8.06 <sup>1</sup>	20,000
1910	July 4, 1910	7.30 <sup>1</sup>	17,000	1960	April 5, 1960	9.48 <sup>1</sup>	27,200
1911	January 4, 1911	6.40 <sup>1</sup>	13,200	1961	February 19, 1961	9.58 <sup>1</sup>	27,800
1912	September 25, 1912	10.10 <sup>1</sup>	31,400	1962	March 13, 1962	10.31 <sup>1</sup>	31,800
1913	April 13, 1913	10.50 <sup>1</sup>	33,600	1963	March 13, 1963	9.13 <sup>1</sup>	25,000
1914	January 4, 1914	9.10 <sup>1</sup>	25,700	1964	January 10, 1964	7.94 <sup>1</sup>	19,000
1915	January 13, 1915	11.00 <sup>1</sup>	36,300	1965	February 8, 1965	10.55 <sup>1</sup>	33,600
1916	June 17, 1916	11.20 <sup>1</sup>	37,400	1966	February 14, 1966	9.52 <sup>1</sup>	27,200
1917	March 5, 1917	8.50 <sup>1</sup>	23,100	1967	March 8, 1967	10.84 <sup>1</sup>	29,100
1918	April 10, 1918	13.00 <sup>1</sup>	47,700	1968	January 15, 1968	11.06 <sup>1</sup>	30,400
1919	January 3, 1919	7.60 <sup>1</sup>	18,200	1969	July 29, 1969	8.13 <sup>1</sup>	15,600
1920	July 13, 1920	5.40 <sup>1</sup>	9,220	1970	February 10, 1970	7.85 <sup>1</sup>	14,400
1921	May 13, 1921	7.40 <sup>1</sup>	17,700	1971	May 31, 1971	10.81 <sup>1</sup>	29,000
1922	June 5, 1922	9.30 <sup>1</sup>	27,200	1972	June 22, 1972	22.56 <sup>1</sup>	107,000
1923	August 1, 1923	6.50 <sup>1</sup>	13,700	1973	October 7, 1972	12.50 <sup>1</sup>	39,000
1924	May 13, 1924	16.50 <sup>1</sup>	66,900	1974	December 22, 1973	10.99 <sup>1</sup>	29,900
1925	October 1, 1924	15.10 <sup>1</sup>	58,800	1975	March 20, 1975	13.37 <sup>1</sup>	44,200
1926	September 24, 1926	7.93 <sup>1</sup>	20,100	1976	January 1, 1976	11.03 <sup>1</sup>	29,800
1927	November 17, 1926	11.94 <sup>1</sup>	40,400	1977	October 10, 1976	14.38 <sup>1</sup>	50,700
1928	August 12, 1928	11.66 <sup>1</sup>	39,400	1978	January 27, 1978	13.44 <sup>1</sup>	44,700
1929	April 17, 1929	8.47 <sup>1</sup>	22,200	1979	February 27, 1979	14.72 <sup>1</sup>	52,900
1930	October 23, 1929	12.68 <sup>1</sup>	44,800	1980	October 2, 1979	12.83 <sup>1</sup>	40,900
1931	May 23, 1931	3.77 <sup>1</sup>	4,190	1981	February 20, 1981	7.04 <sup>1</sup>	11,000
1932	May 13, 1932	8.78 <sup>1</sup>	23,800	1982	February 4, 1982	10.20 <sup>1</sup>	25,500

1933	November 10, 1932	11.84 <sup>1</sup>	39,900	1983	April 10, 1983	11.63 <sup>1</sup>	33,500
1934	September 17, 1934	11.07 <sup>1</sup>	36,000	1984	February 15, 1984	14.79 <sup>1</sup>	53,000
1935	September 6, 1935	10.65 <sup>1</sup>	33,300	1985	February 13, 1985	10.24 <sup>1</sup>	25,700
1936	March 18, 1936	12.33 <sup>1</sup>	42,600	1986	November 6, 1985	14.33 <sup>1</sup>	50,200
1937	April 26, 1937	25.14 <sup>1,2</sup>	134,000	1987	April 17, 1987	11.35 <sup>1</sup>	31,900
1938	October 20, 1937	11.90 <sup>1</sup>	40,800	1988	November 30, 1987	11.09 <sup>1</sup>	30,400
1939	February 4, 1939	7.84 <sup>1</sup>	19,700	1989	May 6, 1989	15.03 <sup>1</sup>	54,600
1940	September 1, 1940	7.75 <sup>1,3</sup>	18,700	1990	May 11, 1990	8.68 <sup>1</sup>	17,900
1941	April 6, 1941	8.03 <sup>1</sup>	20,600	1991	October 24, 1990	10.27 <sup>1</sup>	25,900
1942	August 9, 1942	9.78 <sup>1</sup>	29,000	1992	April 23, 1992	10.14 <sup>1</sup>	25,200
1943	October 16, 1942	25.90 <sup>1</sup>	140,000	1993	March 5, 1993	15.54 <sup>1</sup>	57,800
1944	November 9, 1943	8.90 <sup>1</sup>	24,300	1994	November 28, 1993	13.22 <sup>1</sup>	43,100
1945	July 31, 1945	9.20 <sup>1</sup>	25,800	1995	June 28, 1995	17.14 <sup>1</sup>	68,600
1946	May 27, 1946	8.23 <sup>1</sup>	20,900	1996	September 7, 1996	17.97 <sup>1</sup>	74,100
1947	March 15, 1947	5.96 <sup>1</sup>	11,600	1997	October 19, 1996	9.56 <sup>1</sup>	22,200
1948	April 2, 1948	9.42 <sup>1</sup>	26,900	1998	February 5, 1998	13.20 <sup>1</sup>	43,000
1949	December 4, 1948	11.34 <sup>1</sup>	37,400	1999	January 25, 1999	7.78 <sup>1</sup>	14,000
1950	September 14, 1950	9.21 <sup>1</sup>	25,800	2000	October 1, 1999	11.97 <sup>1</sup>	35,600
1951	December 5, 1950	12.16 <sup>1</sup>	42,800	2001	March 22, 2001	8.98	22,300
1952	April 28, 1952	8.29 <sup>1</sup>	21,400	2002	April 23, 2002	4.15	5,730
1953	November 22, 1952	11.12 <sup>1</sup>	36,300	2003	September 20, 2003	12.53	38,300
1954	March 2, 1954	6.36 <sup>1</sup>	12,600	2004	December 11, 2003	12.69	39,100
1955	August 19, 1955	17.00 <sup>1</sup>	74,500	2005	January 15, 2005	11.73	34,400
1956	July 21, 1956	6.35 <sup>1</sup>	12,600	2006	October 9, 2005	10.96	30,800
1957	April 5, 1957	8.31 <sup>1</sup>	21,000	2007	April 16, 2007	8.98	22,300

<sup>1</sup>Gage height at different site and (or) datum.

<sup>2</sup>Gage height affected by backwater from ice.

<sup>3</sup>Gage height is not the maximum for the year.

**Table 189.** 01668200 Gingoteague Run near Port Royal, Va.

LOCATION.--Latitude 38°12'40", Longitude 077°09'10", NAD27, King George County, Hydrologic Unit 02080104, at culvert on State Highway 623, 3.5 mi northeast of Port Royal.

DRAINAGE AREA.--2.80 mi<sup>2</sup>.

GAGE.--Water-stage recorder (flood-hydrograph recorder). Datum of gage is not determined.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 10 ft<sup>3</sup>/s and extended above on basis of computation of flow through culvert.

BANKFULL STAGE.--6 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1966	September 21, 1966	8.28	110	1971	August 27, 1971	7.47	77.0
1967	June 25, 1967	5.54	51.0	1972	June 22, 1972	9.94	388
1968	July 3, 1968	4.79	36.0	1973	October 28, 1972	4.87	37.0
1969	August 20, 1969	8.40	130	1974	July 26, 1974	6.95	72.0
1970	December 10, 1969	4.52	30.0				

**Table 190. 01668300 Farmers Hall Creek near Champlain, Va.**

LOCATION.--Latitude 38°00'05", Longitude 076°58'40", NAD27, Essex County, Hydrologic Unit 02080104, at culvert on U.S. Highway 17, 1.2 mi southeast of Champlain.

DRAINAGE AREA.--2.18 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 42.10 ft NGVD of 1929. Prior to May 25, 1978, flood-hydrograph recorder at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--4 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1966	September 21, 1966	5.21	87.7	1987	December 24, 1986	6.61	145
1967	June 19, 1967	4.85	73.7	1988	February 12, 1988	4.09	46.7
1968	May 13, 1968	4.58	63.2	1989	July 16, 1989	7.31	180
1969	August 20, 1969	19.20	611	1990	August 9, 1990	4.09	46.7
1970	July 23, 1970	4.20	50.1	1991	January 12, 1991	3.67	34.8
1971	May 30, 1971	5.17	86.2	1992	August 15, 1992	4.69	67.4
1972	June 22, 1972	15.72	488	1993	May 19, 1993	5.39 <sup>1</sup>	94.5
1973	February 2, 1973	5.07	82.5	1994	March 3, 1994	6.89	159
1974	July 26, 1974	4.80	71.7	1995	June 26, 1995	7.24	177
1975	September 26, 1975	7.26	178	1996	January 19, 1996	9.64	280
1976	January 27, 1976	3.50	30.5	1997	October 8, 1996	5.76	110
1977	April 5, 1977	4.55	62.1	1998	February 5, 1998	5.49	98.5
1978	January 26, 1978	5.23	88.4	1999	September 16, 1999	6.67	148
1979	February 25, 1979	7.09	169	2000	March 21, 2000	4.18	49.5
1980	July 23, 1980	3.50	30.5	2001	June 2, 2001	3.88	40.5
1981	May 19, 1981	3.35	27.1	2002	April 22, 2002	3.06	21.1
1982	August 9, 1982	3.62	33.5	2003	September 19, 2003	6.75	152
1983	April 15, 1983	3.94	42.2	2004	August 30, 2004	6.85	157
1984	March 29, 1984	6.51	140	2005	April 2, 2005	3.78	38
1985	August 18, 1985	6.71	150	2006	September 1, 2006	4.92	76.6
1986	August 12, 1986	3.86	39.9	2007	October 6, 2006	5.44	96.5

<sup>1</sup>Gage height affected by backwater.

**Table 191. 01668500 Cat Point Creek near Montross, Va.**

LOCATION.--Latitude 38°02'23", Longitude 076°49'38", NAD27, Richmond County, Hydrologic Unit 02080104, on right bank 200 ft upstream from bridge on State Highway 637, 1.7 mi west of Farmers Fork, 3.8 mi south of Montross, and 11.4 mi upstream from mouth.

DRAINAGE AREA.--45.6 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 2.93 ft NGVD of 1929. Prior to Aug. 19, 1953, nonrecording gage near right bank at downstream side of highway bridge at present datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 1,920 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--5 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Subsequent to June 30, 1957, records were provided by the Virginia Department of Environmental Quality - Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1935	September 1935	9.30		1972	June 22, 1972	9.33	4,200
1944	January 5, 1944	5.50	267	1973	February 3, 1973	6.28	660
1945	July 18, 1945	7.10	1,540	1974	August 7, 1974	6.96	1,100
1946	August 7, 1946	5.36	280	1975	September 26, 1975	6.98	1,140
1947	July 21, 1947	4.86	188	1976	January 28, 1976	6.15	570
1948	August 5, 1948	6.40	800	1977	October 3, 1976	5.85	408
1949	December 4, 1948	5.72	290	1978	January 26, 1978	6.52	780
1950	October 31, 1949	6.14	495	1979	September 6, 1979	9.41	3,310
1951	July 29, 1951	6.60	980	1980	October 1, 1979	6.23	618
1952	April 27, 1952	5.95	495	1981	May 16, 1981	5.67	335
1953	November 22, 1952	5.34	280	1982	August 8, 1982	6.34	684
1954	July 20, 1954	5.33	280	1983	April 16, 1983	6.86	1,030
1955	August 13, 1955	7.56	2,350	1984	March 29, 1984	6.99	1,130
1956	July 23, 1956	4.73	179	1985	September 27, 1985	8.03	1,870
1957	November 2, 1956	5.52	320	1986	December 1, 1985	5.42	238
1958	October 7, 1957	6.80	1,180	1987	December 25, 1986	6.49	714
1959	July 15, 1959	5.83	445	1988	February 12, 1988	5.83	390
1960	April 5, 1960	5.91	470	1989	July 16, 1989	6.40	660
1961	May 13, 1961	6.24	685	1990	May 29, 1990	7.45	1,360
1962	January 7, 1962	6.30	720	1991	January 12, 1991	6.05	492
1963	June 3, 1963	7.03	1,480	1992	September 6, 1992	10.86	5,240
1964	April 9, 1964	5.90	470	1993	March 5, 1993	6.79	894
1965	July 12, 1965	5.67	445	1994	March 3, 1994	7.52	1,430
1966	September 22, 1966	5.99	470	1995	July 2, 1995	6.01	531
1967	July 27, 1967	6.85	1,240	1996	January 20, 1996	6.70	866
1968	June 20, 1968	5.73	400	1997	October 19, 1996	6.17	582

1969	August 20, 1969	10.45	6,820	1998	February 5, 1998	8.80	2,620
1970	December 31, 1969	4.91	198	1999	September 16, 1999	9.76	3,740
1971	May 31, 1971	6.26	645				

---

**Table 192. 01668800 Hoskins Creek near Tappahannock, Va.**

LOCATION.--Latitude 37°55'38", Longitude 076°57'16", NAD27, Essex County, Hydrologic Unit 02080104, at bridge on State Highway 717, 0.4 mi upstream from Criddlin Swamp, and 5.0 mi west of Tappahannock.

DRAINAGE AREA.--15.4 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 34.30 ft NGVD of 1929. Prior to Jan. 1, 1987, water-stage recorder gage at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 286 ft<sup>3</sup>/s and extended above on basis of velocity-area study.

BANKFULL STAGE.--6 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Prior to Jan. 1, 1987, records were provided by the Virginia Department of Environmental Quality - Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1965	March 5, 1965	4.43	75.0	1980	October 1, 1979	4.11	148
1966	September 21, 1966	4.75	76.0	1981	May 19, 1981	3.46	81.0
1967	August 5, 1967	5.01	95.0	1982	June 4, 1982	4.02	136
1968	January 14, 1968	4.31	66.0	1983	April 16, 1983	4.94	315
1969	August 20, 1969	10.23	1,380 <sup>1</sup>	1984	March 29, 1984	4.95	291
1970	June 26, 1970	4.30	131	1985	September 27, 1985	4.91	208
1971	August 4, 1971	4.14	155	1986	October 22, 1985	4.07	98.0
1972	June 22, 1972	5.99	289	1987	September 13, 1987	5.58	415
1973	February 2, 1973	4.52	135	1988	February 12, 1988	4.05	96.0
1974	August 7, 1974	4.33	126	1989	July 16, 1989	5.24	291
1975	September 26, 1975	5.00	174	1990	May 29, 1990	5.27	300
1976	January 27, 1976	4.05	120	1991	January 12, 1991	4.18	107
1977	October 26, 1976	3.22	69.0	1992	March 7, 1992	4.35	124
1978	March 26, 1978	4.37	142	1993	March 4, 1993	4.88	202
1979	February 25, 1979	5.35	425	1994	March 3, 1994	5.40	340

<sup>1</sup>Discharge affected by dam failure.

**Table 193. 01669000 Piscataway Creek near Tappahannock, Va.**

LOCATION.--Latitude 37°52'37", Longitude 076°54'03", NAD27, Essex County, Hydrologic Unit 02080104, on right bank at upstream side of bridge on State Highway 691, 0.6 mi south of Hensley Fork, 2.3 mi downstream from Sturgeon Swamp, and 4.2 mi southwest of Tappahannock.

DRAINAGE AREA.--27.9 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 0.50 ft NGVD of 1929. Prior to May 2, 2001, water-stage recorder at present site and datum of 2.50 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 1,330 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--3 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Subsequent to June 30, 1957, records were provided by the Virginia Department of Environmental Quality - Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1952	March 25, 1952	3.77 <sup>1</sup>	164	1980	November 27, 1979	3.63 <sup>1</sup>	232
1953	November 22, 1952	3.68 <sup>1</sup>	156	1981	May 12, 1981	3.35 <sup>1</sup>	179
1954	January 28, 1954	2.97 <sup>1</sup>	75.0	1982	June 5, 1982	3.30 <sup>1</sup>	168
1955	August 13, 1955	7.07 <sup>1</sup>	1,870	1983	April 16, 1983	4.64 <sup>1</sup>	532
1956	April 7, 1956	3.40 <sup>1</sup>	122	1984	March 29, 1984	4.26 <sup>1</sup>	418
1957	November 2, 1956	4.42 <sup>1</sup>	305	1985	September 27, 1985	4.62 <sup>1</sup>	526
1958	March 20, 1958	4.18 <sup>1</sup>	360	1986	October 22, 1985	3.45 <sup>1</sup>	201
1959	July 15, 1959	4.65 <sup>1</sup>	536	1987	December 25, 1986	4.04 <sup>1</sup>	353
1960	May 28, 1960	4.77 <sup>1</sup>	542	1988	February 12, 1988	3.11 <sup>1</sup>	132
1961	February 24, 1961	3.91 <sup>1</sup>	296	1989	May 2, 1989	3.79 <sup>1</sup>	283
1962	January 7, 1962	4.32 <sup>1</sup>	400	1990	May 29, 1990	4.31 <sup>1</sup>	433
1963	June 3, 1963	5.55 <sup>1</sup>	880	1991	March 30, 1991	3.44 <sup>1</sup>	199
1964	February 16, 1964		133 <sup>2</sup>	1992	March 7, 1992	3.55 <sup>1</sup>	223
1965	June 16, 1965		131 <sup>2</sup>	1993	March 4, 1993	3.84 <sup>1</sup>	297
1966	September 22, 1966	3.95 <sup>1</sup>	316	1994	March 3, 1994	4.70 <sup>1</sup>	548
1967	October 20, 1966	4.37 <sup>1</sup>	352	1995	July 5, 1995	3.68 <sup>1</sup>	301
1968	March 13, 1968	3.74 <sup>1</sup>	205	1996	January 19, 1996	3.74 <sup>1</sup>	269
1969	August 20, 1969	7.52 <sup>1</sup>	2,380	1997	October 19, 1996	4.12 <sup>1</sup>	374
1970	December 11, 1969	3.47 <sup>1</sup>	145	1998	February 5, 1998	5.36 <sup>1</sup>	805
1971	August 5, 1971	3.68 <sup>1</sup>	270	1999	September 16, 1999	6.19 <sup>1</sup>	1,240
1972	June 22, 1972	6.04 <sup>1</sup>	1,090	2000	March 22, 2000	3.24 <sup>1</sup>	108
1973	February 3, 1973	3.98 <sup>1</sup>	245	2001	June 2, 2001	6.08	306
1974	August 7, 1974	4.41 <sup>1</sup>	350	2002	April 23, 2002	4.82 <sup>3</sup>	56
1975	July 18, 1975	5.30 <sup>1</sup>	680	2003	September 18, 2003	7.52	783
1976	January 28, 1976	4.01 <sup>1</sup>	334	2004	August 31, 2004	7.30	652
1977	October 3, 1976	3.24 <sup>1</sup>	107	2005	July 8, 2005	6.38	323
1978	August 1, 1978	4.05 <sup>1</sup>	344	2006	September 2, 2006	7.05	561

---

1979	February 25, 1979	5.17 <sup>1</sup>	720	2007	October 7, 2006	6.87	482
------	-------------------	-------------------	-----	------	-----------------	------	-----

---

<sup>1</sup>Gage height at different site and (or) datum.

<sup>2</sup>Discharge is a maximum daily average.

<sup>3</sup>Gage height is not the maximum for the year.

## North Atlantic Slope Basin: Piankatank River Basin

**Table 194.** 01669300 Yorkers Swamp near Center Cross, Va.

LOCATION.--Latitude 37°47'10", Longitude 076°45'55", NAD27, Essex County, Hydrologic Unit 02080102, at culvert on U.S. Highway 17, 1.5 mi southeast of Center Cross.

DRAINAGE AREA.--1.42 mi<sup>2</sup>.

GAGE.--Water-stage recorder (flood-hydrograph recorder). Datum of gage is 75.11 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--2 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1966	September 21, 1966	3.95	25.0	1971		3.50 <sup>1</sup>	12.0 <sup>2,3</sup>
1967	August 24, 1967	4.45	85.0	1972	June 22, 1972	5.65	142
1968	January 14, 1968	3.95	25.0	1973	February 2, 1973	4.00	28.0
1969	August 20, 1969	4.80	75.0	1974	September 6, 1974	3.80	20.0
1970	June 26, 1970	3.72	17.0	1975	September 26, 1975	4.06	30.0

<sup>1</sup>Gage height below minimum recordable elevation.

<sup>2</sup>Discharge is less than indicated value, which is minimum recordable discharge at this site.

<sup>3</sup>Month or day of occurrence is unknown or not exact.

**Table 195. 01669500 Dragon Swamp near Church View, Va.**

LOCATION.--Latitude 37°41'05", Longitude 076°43'37", NAD27, Middlesex County, Hydrologic Unit 02080102, on left bank at downstream side of bridge on State Highway 602, 0.9 mi upstream from Briery Swamp, 1.8 mi downstream from Tim Branch Swamp, 2.6 mi west of Church View, and 2.9 mi east of Dragonville.

DRAINAGE AREA.--86.0 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 34.00 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 1,640 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--5 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Subsequent to June 30, 1957, records were provided by the Virginia Department of Environmental Quality - Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1935	September 1935	17.00		1963	June 4, 1963	10.00	3,990
1944	March 8, 1944	5.48	449	1964	March 5, 1964		396
1945	July 19, 1945	9.91	3,840	1965	March 8, 1965	5.28	198
1946	December 30, 1945	6.26	656	1966	February 13, 1966	5.38	276
1947	January 17, 1947	4.99	217	1967	August 8, 1967	5.70	310
1948	August 5, 1948	7.35	1,300	1968	March 17, 1968	6.58	750
1949	July 18, 1949	6.35	746	1969	August 23, 1969	6.98	1,000
1950	November 3, 1949	5.53	354	1970	April 3, 1970	5.49	225
1951	August 15, 1951	5.44	364	1971	June 2, 1971	5.64	256
1952	March 26, 1952	6.12	614	1972	June 24, 1972	7.81	1,610
1953	November 23, 1952	5.37	311	1973	February 4, 1973	6.83	908
1954	April 20, 1954	4.79	153	1974	April 1, 1974	5.75	490
1955	August 15, 1955	6.96	972	1975	March 20, 1975	6.72	655
1956	February 8, 1956	5.42	204	1976	January 29, 1976	7.43	1,020
1957	November 4, 1956	7.80	1,610	1977	October 3, 1976	6.27	478
1958	March 21, 1958	7.35	1,250	1978	January 21, 1978	6.80	890
1959	July 16, 1959	7.09	1,070	1979	September 6, 1979	10.66	4,910
1960	September 13, 1960	7.30	1,210	1980	November 28, 1979	6.93	742
1961	February 25, 1961	6.78	860	1981	May 22, 1981	5.69	252
1962	January 8, 1962	7.35	1,250				

**Table 196. 01669520 Dragon Swamp at Mascot, Va.**

LOCATION.--Latitude 37°38'01", Longitude 076°41'48", NAD27, King and Queen County, Hydrologic Unit 02080102, on right bank at upstream side of bridge on State Highway 603, 0.8 mi east of Mascot, 2.1 mi downstream from Church Swamp, and 3.3 mi west of Warner.

DRAINAGE AREA.--109 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 21.60 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 1,330 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Records were provided by the Virginia Department of Environmental Quality - Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1982	March 23, 1982	6.56	622	1995	March 11, 1995	5.89	460
1983	April 17, 1983	8.85	2,530	1996	January 21, 1996	7.16	952
1984	March 27, 1984	7.92	1,470	1997	October 11, 1996	6.68	733
1985	September 28, 1985	8.17	1,720	1998	February 6, 1998	9.39	2,800
1986	October 24, 1985	6.81	745	1999	September 17, 1999	13.21	6,600
1987	April 27, 1987	6.45	601	2000	September 5, 2000	6.63	848
1988	February 14, 1988	6.10	482	2001	August 14, 2001	7.97	1,710
1989	April 9, 1989	6.81	745	2002	April 2, 2002	5.00	147
1990	May 31, 1990	8.14	1,690	2003	September 20, 2003	9.02	2,410
1991	January 14, 1991	6.48	586	2004	July 26, 2004	9.54	2,930
1992	August 18, 1992	6.29	601	2005	April 3, 2005	6.25	603
1993	March 6, 1993	7.47	1,130	2006	September 1, 2006	7.70	1,520
1994	March 4, 1994	9.00	2,750	2007	October 9, 2006	7.64	1,280

**Table 197. 01669800 My Ladys Swamp near Saluda, Va.**

LOCATION.--Latitude 37°34'34", Longitude 076°31'30", NAD27, Middlesex County, Hydrologic Unit 02080102, on left upstream wingwall of culvert on State Highway 629, 1.45 mi upstream from mouth, and 4.4 mi southeast of Saluda.

DRAINAGE AREA.--4.92 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 4.16 ft NGVD of 1929. Prior to May 25, 1978, flood-hydrograph recorder at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--4 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1970		5.00 <sup>1</sup>	135 <sup>2,3</sup>	1985	January 2, 1985	8.38	592
1971	August 28, 1971	4.43	96.0	1986	October 21, 1985	5.01	136
1972	August 13, 1972	4.75	118	1987	January 19, 1987	5.53	183
1973	April 8, 1973	5.52	182	1988	February 12, 1988	4.98	134
1974	September 6, 1974	4.75	118	1989	April 7, 1989	5.84	217
1975	September 26, 1975	5.50	180	1990	May 29, 1990	5.43	174
1976	November 13, 1975	5.53		1991	January 13, 1991	5.07	141
1977	October 2, 1976	10.80		1992	August 15, 1992	5.07	141
1978	April 27, 1978	5.65	196	1993	March 4, 1993	6.07	245
1979	September 5, 1979	6.58	322	1994	March 2, 1994	6.04	241
1980	July 23, 1980	6.14	256	1995	March 8, 1995	6.42	298
1981	October 25, 1980	4.91	129	1996	July 13, 1996	6.85	362
1982	August 8, 1982	5.33	165	1997	October 8, 1996	6.58	322
1983	April 16, 1983	5.36	167	1998	February 5, 1998	8.13	524
1984	July 21, 1984	5.67	199	1999	September 16, 1999	28.4	

<sup>1</sup>Gage height below minimum recordable elevation.

<sup>2</sup>Discharge is less than indicated value, which is minimum recordable discharge at this site.

<sup>3</sup>Month or day of occurrence is unknown or not exact.

## North Atlantic Slope Basin: Ware River Basin

**Table 198.** 01670000 Beaverdam Swamp near Ark, Va.

LOCATION.--Latitude 37°28'14", Longitude 076°33'48", NAD27, Gloucester County, Hydrologic Unit 02080102, on right bank 300 ft downstream from bridge on State Highway 606, 1.4 mi upstream from Beech Swamp, 2.3 mi north of Ark, and 4.3 mi northwest of Gloucester.

DRAINAGE AREA.--7.15 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 36.43 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 263 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--3 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Subsequent to June 30, 1957, records were provided by the Virginia Department of Environmental Quality - Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1950	July 17, 1950	3.26	58.0	1970	April 2, 1970		35.0
1951	July 30, 1951	2.99	42.0	1971	February 8, 1971	3.02 <sup>1</sup>	59.0
1952	January 28, 1952	3.30	61.0	1972	June 22, 1972	3.39	84.0
1953	August 15, 1953	3.42	65.0	1973	June 28, 1973	3.72	114
1954	February 22, 1954	2.95	40.0	1974	June 24, 1974	3.93	137
1955	August 12, 1955	5.72	516	1975	September 1, 1975	4.64	525
1956	September 27, 1956	3.29	60.0	1976	January 27, 1976	3.67	145
1957	March 2, 1957	3.60	92.0	1977	March 13, 1977	3.67	145
1958	March 20, 1958	3.89	132	1978	April 27, 1978	4.23	357
1959	December 30, 1958	4.27	180	1979	September 6, 1979	4.34	383
1960	September 12, 1960	5.88	570	1980	November 12, 1979	3.66	118
1961	May 11, 1961	4.76	270	1981	February 12, 1981	2.43	15.0
1962	January 7, 1962	4.18	167	1982	August 11, 1982	3.93	212
1963	June 3, 1963	5.18	320	1983	April 16, 1983	3.68	123
1964	February 19, 1964	3.18	54.0	1984	April 5, 1984	3.99	236
1965	July 12, 1965	3.90	135	1985	September 27, 1985	4.59	496
1966	February 13, 1966	2.87	46.0	1986	October 4, 1985	3.74	141
1967	August 24, 1967	3.62	106	1987	January 19, 1987	3.80	160
1968	January 14, 1968	3.16	65.0	1988	February 12, 1988	3.38	53.0
1969	August 5, 1969		39.0				

<sup>1</sup>Gage height is not the maximum for the year.

## North Atlantic Slope Basin: York River Basin

**Table 199.** 01670100 Mountain Run tributary near Gordonsville, Va.

LOCATION.--Latitude 38°09'45", Longitude 078°09'45", NAD27, Orange County, Hydrologic Unit 02080106, at culvert on U.S. Highway 15, 2.2 mi northeast of Gordonsville.

DRAINAGE AREA.--0.53 mi<sup>2</sup>.

GAGE.--Water-stage recorder (flood-hydrograph recorder). Datum of gage is 425 ft NGVD of 1929 from topographic map.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1966	February 13, 1966	3.25	16.0	1970	April 14, 1970	3.20	14.0
1967	January 27, 1967	3.37	18.0	1971	August 27, 1971	3.70	24.0
1968	January 14, 1968	3.60	22.0	1972	June 21, 1972	11.13	147
1969	July 22, 1969	8.00	110	1973	October 5, 1972	10.85	144

**Table 200.** 01670180 Pamunkey Creek at Lahore, Va.

LOCATION.--Latitude 38°11'33", Longitude 077°58'09", NAD27, Orange County, Hydrologic Unit 02080106, on right bank 75 ft south of bridge on State Highway 669, 0.45 mi south of Lahore, and 3.8 mi upstream from Lake Anna.

DRAINAGE AREA.--41.9 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 280 ft NGVD of 1929, from topographic map.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1991	November 10, 1990	7.15	2,080	1999	March 15, 1999	6.64	1,150
1992	April 22, 1992	4.68	729	2001	March 30, 2001	6.89	1,060
1993	March 5, 1993	10.43	3,930	2002	April 22, 2002	6.53	997
1994	November 28, 1993	11.81	4,710	2003	September 19, 2003	10.61	2,110
1995	June 27, 1995	17.20	6,900	2004	December 11, 2003	9.10	1,580
1996	January 19, 1996	9.86	3,620	2005	January 14, 2005	8.90	1,520
1997	December 1, 1996	6.89	1,150	2006	September 1, 2006	6.82	1,050
1998	March 21, 1998	9.23	1,670	2007	March 16, 2007	7.16	1,110

**Table 201. 01670300 Contrary Creek near Mineral, Va.**

LOCATION.--Latitude 38°03'53", Longitude 077°52'45", NAD27, Louisa County, Hydrologic Unit 02080106, on left bank 400 ft downstream from bridge on U.S. Highway 522, 4.0 mi northeast of Mineral.

DRAINAGE AREA.--5.58 mi<sup>2</sup>.

GAGE.--Nonrecording gage (peak-stage indicator). Datum of gage is 275 ft NGVD of 1929, from topographic map. October 1975 to December 1986, water-stage recorder at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 310 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Prior to Jan. 1, 1987, records were provided by the Virginia Department of Environmental Quality - Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1976	December 31, 1975	2.88	420	1992	June 5, 1992	2.61	340
1977	October 20, 1976	2.61	294	1993	March 5, 1993	3.41	828
1978	January 26, 1978	3.33	701	1994	November 28, 1993	6.94	7,050
1979	February 25, 1979	3.21	687	1995	March 9, 1995	2.73	400
1980	October 1, 1979	2.89	484	1996	September 6, 1996	3.87	1,210
1981	July 6, 1981	1.80	87.0	1997	December 1, 1996	2.63	350
1982	March 21, 1982	2.34	229	1998	March 21, 1998	3.63	1,000
1983	April 24, 1983	2.82	446	1999	September 29, 1999	2.53	304
1984	February 14, 1984	3.62	996	2000	April 17, 2000	2.30	215
1985	August 18, 1985	4.70	2,280	2001	March 30, 2001	2.56	317
1986	November 4, 1985	2.97	532	2002		1.83 <sup>1</sup>	92 <sup>2,3</sup>
1987	September 8, 1987	4.06	1,400	2003	September 19, 2003	3.37	799
1988	May 21, 1988	2.41	254	2004	September 28, 2004	2.67	370
1989	May 6, 1989	2.84	457	2005	January 14, 2005	2.61	340
1990	May 29, 1990	3.88	1,220	2006	September 1, 2006	2.26	201
1991	July 4, 1991	2.49	286	2007	March 16, 2007	2.55	313

<sup>1</sup>Gage height below minimum recordable elevation.

<sup>2</sup>Discharge is less than indicated value, which is minimum recordable discharge at this site.

<sup>3</sup>Month or day of occurrence is unknown or not exact.

**Table 202.** 01670400 North Anna River near Partlow, Va.

LOCATION.--Latitude 38°00'46", Longitude 077°42'05", NAD27, Spotsylvania County, Hydrologic Unit 02080106, on left downstream side of bridge on State Highway 601, 1.1 mi upstream from Northeast Creek, and 3.8 mi southeast of Partlow.

DRAINAGE AREA.--342 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 168.25 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 7,200 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered regulated. Flow regulated since January 1972 by Lake Anna, capacity 373,000 acre-ft, 0.5 mi upstream.

REMARKS.--Records were provided by the Virginia Department of Environmental Quality - Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1972	June 22, 1972	36.32	22,000 <sup>1,2,3</sup>	1987	April 17, 1987	18.02	6,660 <sup>2</sup>
1979	February 26, 1979	25.30	11,700 <sup>2</sup>	1988	November 30, 1987	14.35	4,810 <sup>2</sup>
1980	October 2, 1979	16.51	6,050 <sup>2</sup>	1989	May 6, 1989	18.06	6,680 <sup>2</sup>
1981	February 11, 1981	4.61	87.0 <sup>2</sup>	1990	May 29, 1990	15.17	5,230 <sup>2</sup>
1982	February 4, 1982		4,080 <sup>2</sup>	1991	January 12, 1991	13.95	4,620 <sup>2</sup>
1983	April 25, 1983	15.19	5,200 <sup>2</sup>	1992	February 26, 1992	8.65	1,970 <sup>2</sup>
1984	March 30, 1984	22.05	9,030 <sup>2</sup>	1993	March 5, 1993	20.72	8,230 <sup>2</sup>
1985	February 2, 1985	9.17	2,240 <sup>2</sup>	1994	November 28, 1993	21.48	8,690 <sup>2</sup>
1986	November 5, 1985	21.48	8,690 <sup>2</sup>	1995	June 27, 1995	26.24	11,700 <sup>2</sup>

<sup>1</sup>Discharge is an estimate.

<sup>2</sup>Discharge is affected by regulation or diversion.

<sup>3</sup>Discharge is a historic peak.

**Table 203. 01671000 North Anna River near Doswell, Va.**

LOCATION.--Latitude 37°53'15", Longitude 077°29'15", NAD27, Caroline County, Hydrologic Unit 02080106, on left bank 1.5 mi upstream from bridge on U.S. Highway 1, 2.5 mi northwest of Doswell, and 4.4 mi upstream from Bull Run.

DRAINAGE AREA.--440 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 55.66 ft NGVD of 1929. Mar. 23, 1926, to Aug. 11, 1928, nonrecording gage at side 10.2 mi upstream at different datum. Mar. 17, 1929 to Nov. 7, 1930, nonrecording gage at present site and datum.

STAGE-DISCHARGE RELATION.--Prior to 1929, defined by current-meter measurements below 2,800 ft<sup>3</sup>/s. Subsequent to 1929, defined by current-meter measurements below 24,600 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--13 ft.

REGULATION.--High-flow conditions at this site are considered regulated after 1971. Flow regulated since January 1972 by Lake Anna, capacity 373,000 acre-ft, 20.5 mi upstream.

REMARKS.--Subsequent to June 30, 1957, records were provided by the Virginia Department of Environmental Quality - Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1927	November 17, 1926	15.73 <sup>1</sup>	6,720	1957	April 7, 1957	12.12	3,910
1928	August 12, 1928	33.70	18,400	1958	March 21, 1958	12.69	4,170
1929	April 17, 1929	11.55	3,830	1959	December 30, 1958	11.86	3,830
1930	October 24, 1929	18.00	6,390	1960	April 7, 1960	15.05	5,270
1931	June 2, 1931	6.16	1,730	1961	February 19, 1961	15.53	5,570
1932	May 14, 1932	15.00	5,830	1962	March 14, 1962	16.46	6,170
1933	January 27, 1933	16.49	6,730	1963	March 14, 1963	16.27	6,050
1934	September 18, 1934	15.79	6,310	1964	January 11, 1964	10.58	2,960
1935	September 7, 1935	21.19	9,660	1965	March 6, 1965	11.86	3,540
1936	January 5, 1936	22.68	10,600	1966	February 15, 1966	12.18	3,690
1937	April 27, 1937	33.58	18,300	1967	October 20, 1966	9.57	2,560
1938	October 21, 1937	13.57	5,020	1968	January 16, 1968	16.44	6,110
1939	February 12, 1939	14.60	5,600	1969	August 21, 1969	32.60	24,800
1940	April 10, 1940	15.65	6,250	1970	April 3, 1970	10.96	3,460
1941	November 16, 1940	12.86	4,630	1971	June 1, 1971	17.45	7,950
1942	August 10, 1942	16.55	5,940	1972	June 22, 1972	31.58	23,300
1943	October 17, 1942	24.54	11,600	1973	April 28, 1973	16.40	7,100 <sup>2</sup>
1944	November 10, 1943	12.06	3,910	1974	September 7, 1974	15.28	6,180 <sup>2</sup>
1945	September 20, 1945	15.40	5,370	1975	September 26, 1975	21.49	11,600 <sup>2</sup>
1946	May 27, 1946	13.60	4,560	1976	January 1, 1976	15.67	6,520 <sup>2</sup>
1947	January 4, 1947	9.03	2,690	1977	October 21, 1976	12.30	4,160 <sup>2</sup>
1948	August 6, 1948	22.39	10,200	1978	January 26, 1978	19.41	9,730 <sup>2</sup>
1949	December 5, 1948	22.68	10,400	1979	February 27, 1979	23.93	13,900 <sup>2</sup>
1950	May 20, 1950	14.53	5,030	1980	October 3, 1979	17.06	7,700 <sup>2</sup>
1951	June 12, 1951	12.94	4,260	1982	February 4, 1982	13.26	4,750 <sup>2</sup>
1952	December 23, 1951	16.80	6,350	1983	April 25, 1983	15.04	5,990 <sup>2</sup>

1953	November 22, 1952	18.10	7,180	1984	March 30, 1984	21.56	11,700 <sup>2</sup>
1954	December 15, 1953	7.85	2,270	1985	August 19, 1985	13.11	4,650 <sup>2</sup>
1955	August 20, 1955	25.58	12,400	1986	November 6, 1985	20.44	10,700 <sup>2</sup>
1956	July 22, 1956	9.50	2,860				

---

<sup>1</sup>Gage height at different site and (or) datum.

<sup>2</sup>Discharge is affected by regulation or diversion.

**Table 204. 01671020 North Anna River at Hart Corner near Doswell, Va.**

LOCATION.--Latitude 37°51'00", Longitude 077°25'41", NAD27, Hanover County, Hydrologic Unit 02080106, on right bank at downstream side of bridge on State Highway 30, 0.3 mi west of Hart Corner, 2.1 mi east of Doswell, and 5.4 mi upstream from confluence with South Anna River.

DRAINAGE AREA.--462 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 43 ft NGVD of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 10,100 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--11 ft.

REGULATION.--High-flow conditions at this site are considered regulated. Flow regulated since January 1972 by Lake Anna, capacity 373,000 acre-ft, 27.5 mi upstream. Since June 1975 diversion for municipal water supply 0.8 mi upstream from station.

REMARKS.--Records were provided by the Virginia Department of Environmental Quality - Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1980	October 3, 1979		7,800 <sup>1,2</sup>	1994	March 29, 1994	21.80	12,000 <sup>2</sup>
1981	May 12, 1981	4.88	397 <sup>2</sup>	1995	June 28, 1995	19.78	8,860 <sup>2</sup>
1982	February 5, 1982		3,650 <sup>1,2</sup>	1996	September 7, 1996	21.60	11,600 <sup>2</sup>
1983	April 26, 1983	17.22	5,820 <sup>2</sup>	1997	October 20, 1996	16.68	5,230 <sup>2</sup>
1984	March 30, 1984	21.28	11,100 <sup>2</sup>	1998	February 6, 1998	20.13	9,350 <sup>2</sup>
1985	August 19, 1985	15.06	3,750 <sup>2</sup>	1999	March 16, 1999	14.70	3,460 <sup>2</sup>
1986	November 6, 1985	20.47	9,980 <sup>2</sup>	2000	April 18, 2000	13.96	2,990 <sup>2</sup>
1987	April 18, 1987	18.98	8,020 <sup>2</sup>	2001	March 31, 2001	15.37	4,000 <sup>2</sup>
1988	November 30, 1987	15.92	4,490 <sup>2</sup>	2002	April 30, 2002	4.22	245 <sup>2</sup>
1989	May 7, 1989	18.00	6,610 <sup>2</sup>	2003	February 24, 2003	20.01	9,150 <sup>2</sup>
1990	May 30, 1990	18.10	6,730 <sup>2</sup>	2004	December 12, 2003	18.18	5,960 <sup>2</sup>
1991	January 13, 1991	16.38	4,930 <sup>2</sup>	2005	January 15, 2005	16.66	5,120 <sup>2</sup>
1992	February 27, 1992	12.48	2,310 <sup>2</sup>	2006	December 17, 2005	12.60	2,520 <sup>2</sup>
1993	March 6, 1993	20.83	10,400 <sup>2</sup>	2007	March 18, 2007	16.88	5,340 <sup>2</sup>

<sup>1</sup>Discharge is a maximum daily average.

<sup>2</sup>Discharge affected by regulation or diversion.

**Table 205. 01671100 Little River near Doswell, Va.**

LOCATION.--Latitude 37°52'21", Longitude 077°30'48", NAD27, Hanover County, Hydrologic Unit 02080106, on left bank at downstream side of bridge on State Highway 685, 0.8 mi southwest of Verdon, 2.9 mi west of Doswell, and 9.6 mi upstream from mouth.

DRAINAGE AREA.--107 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 132.30 ft NGVD of 1929 (levels by La Prade Brothers Engineers).

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 7,600 ft<sup>3</sup>/s and extended above on basis of contracted-opening measurement at 12,000 ft<sup>3</sup>/s.

BANKFULL STAGE.--5 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Records were provided by the Virginia Department of Environmental Quality - Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1962	October 22, 1961	7.70	4,430	1985	August 19, 1985	6.98	3,240
1963	March 13, 1963	5.85	1,840	1986	November 5, 1985	6.21	2,240
1964	February 17, 1964	4.69	850	1987	April 17, 1987	6.29	2,340
1965	March 6, 1965	4.49	730	1988	May 23, 1988	5.07	1,110
1966	February 14, 1966	4.58	790	1989	July 17, 1989	4.94	1,010
1967	March 17, 1967	4.07	515	1990	May 30, 1990	6.50	2,610
1968	January 16, 1968	4.93	1,020	1991	January 13, 1991	4.70	850
1969	August 21, 1969	11.09	12,000	1992	September 3, 1992	4.08	520
1970	January 1, 1970	4.74	880	1993	March 5, 1993	6.79	2,990
1971	May 31, 1971	5.82	1,780	1994	March 29, 1994	7.46	3,910
1972	June 22, 1972	9.88	8,300	1995	March 10, 1995	5.00	1,050
1973	April 28, 1973	6.26	2,290	1996	January 20, 1996	6.18	2,210
1974	December 22, 1973	6.50	2,610	1997	December 8, 1996	4.87	959
1975	September 26, 1975	8.12	4,890	1998	February 5, 1998	7.08	3,380
1976	January 2, 1976	6.42	2,480	1999	March 23, 1999	4.04	466
1977	October 22, 1976	5.05	1,090	2001	March 31, 2001	5.00	1,040
1978	January 27, 1978	7.55	4,120	2002	April 23, 2002	3.09	161
1979	February 26, 1979	7.56	4,120	2003	February 23, 2003	6.58	2,670
1980	January 16, 1980	5.98	2,000	2004	December 12, 2003	5.90	1,870
1981	February 13, 1981	3.13	164	2005	January 15, 2005	5.37	1,340
1982	March 22, 1982	5.52	1,490	2006	June 29, 2006	4.77	873
1983	April 17, 1983	5.38	1,360	2007	March 17, 2007	5.91	1,880
1984	March 30, 1984	7.14	3,470				

**Table 206. 01671500 Bunch Creek near Boswells Tavern, Va.**

(Formerly published as Hudson Creek near Boswells Tavern.)

LOCATION.--Latitude 38°01'54", Longitude 078°11'30", NAD27, Louisa County, Hydrologic Unit 02080106, on right bank at upstream side of bridge on State Highway 15, 2.7 mi south of Boswells Tavern, 4.8 mi north of Zion Crossroads, 5.0 mi upstream from mouth, and 10 mi west of Louisa.

DRAINAGE AREA.--4.34 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 377.14 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 335 ft<sup>3</sup>/s and extended above on basis of contracted-opening measurement at 2,750 ft<sup>3</sup>/s.

BANKFULL STAGE.--5 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Subsequent to June 30, 1957, records were provided by the Virginia Department of Environmental Quality - Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1949	December 4, 1948	6.44	449	1965	February 7, 1965	5.08	244
1950	May 17, 1950	6.82	532	1966	February 13, 1966	4.83	214
1951	June 10, 1951	7.38	680	1967	January 27, 1967	3.88	131
1952	December 21, 1951	5.41	264	1968	January 14, 1968	4.71	199
1953	November 20, 1952	6.15	345	1969	August 20, 1969	10.64	2,750
1954	March 1, 1954	4.93	166	1970	December 10, 1969	4.50	140
1955	August 18, 1955	6.00	315	1971	May 30, 1971	4.55	326
1956	July 20, 1956	4.82	152	1972	June 21, 1972	10.44	2,580
1957	April 5, 1957	4.97	166	1973	October 5, 1972	6.25	705
1958	October 6, 1957	5.02	191	1974	December 21, 1973	3.61	251
1959	July 24, 1959	4.95	186	1975	March 19, 1975	4.10	331
1960	February 18, 1960	4.72	166	1976	March 31, 1976	3.88	299
1961	April 13, 1961	4.30	163	1977	October 20, 1976	4.44	387
1962	May 1, 1962	6.50	450	1978	April 26, 1978	4.43	387
1963	March 12, 1963	4.89	220	1979	September 5, 1979	4.43	387
1964	February 6, 1964	3.26	83.0				

**Table 207. 01671615 Fosters Creek near Ferncliff, Va.**

LOCATION.--Latitude 37°57'35", Longitude 078°11'20", NAD27, Louisa County, Hydrologic Unit 02080106, at culvert on U.S. Highway 250, 1.9 mi southeast of Zion Crossroad, 4.6 mi northwest of Ferncliff, and 5.0 mi upstream from mouth.

DRAINAGE AREA.--0.61 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 424.22 ft NGVD of 1929. Prior to Dec. 4, 1969, recording gage at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by indirect methods.

BANKFULL STAGE.--5 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Prior to 1970, records were provided by the U.S. Department of Agriculture, Soil Conservation Service. The values for all previously published data are revised based on additional analyses.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1961	February 18, 1961	5.17	92.0	1979	September 6, 1979	6.21	144
1962	October 20, 1961	8.89	296	1980	November 26, 1979	4.12	39.0
1963	March 12, 1963	4.35	54.0	1981	July 6, 1981	3.98	32
1964	January 25, 1964	4.04	40.0	1982	June 13, 1982	5.95	130
1965	March 4, 1965	4.99	83.0	1983	April 24, 1983	4.89	78
1966	February 28, 1966	4.21	47.0	1984	February 14, 1984	6.43	154
1967	August 24, 1967	4.03	39.0	1985	August 18, 1985	9.04	308
1968	March 12, 1968	6.32	152	1986	November 4, 1985	5.71	118
1969	August 20, 1969	10.55	1,000	1987	September 8, 1987	9.36	327
1970	March 29, 1970	5.00	83.0	1988	May 21, 1988	4.26	46
1971	May 30, 1971	4.72	69.0	1989	July 6, 1989	7.51	216
1972	June 21, 1972	9.01	306	1990	May 27, 1990	7.15	195
1973	October 5, 1972	9.91	458	1991	July 4, 1991	10.60	1,020
1974	September 7, 1974	5.04	85.0	1992	June 5, 1992	6.53	160
1975	June 25, 1975	6.58	162	1993	March 4, 1993	6.76	171
1976	August 15, 1976	4.60	63.0	1994	November 28, 1993	9.53	
1977	October 20, 1976	6.61	164	1995	June 27, 1995	7.92	405
1978	October 26, 1977	6.17	142				

**Table 208.** 01671650 Waldrop Creek near Louisa, Va.

LOCATION.--Latitude 38°00'08", Longitude 078°04'22", NAD27, Louisa County, Hydrologic Unit 02080106, on left upstream wingwall of culvert on State Highway 632, 2.3 mi upstream from mouth, and 4.2 mi southwest of Louisa.

DRAINAGE AREA.--3.03 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 361.41 ft NGVD of 1929. Prior to Jan. 11, 1979, flood-hydrograph recorder at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1969	August 20, 1969	21.00	2,420	1988	May 21, 1988	6.63	361
1970	December 31, 1969	5.20	230	1989	July 6, 1989	9.51	639
1971	May 13, 1971	6.30	330	1990	May 27, 1990	10.05	702
1972	June 21, 1972	17.71	1,750	1991	July 4, 1991	15.40	1,380
1973	October 5, 1972	13.46	1,130	1992	April 21, 1992	4.01	141
1974	December 20, 1973	4.97	211	1993	March 4, 1993	8.23	503
1975	March 19, 1975	6.80	375	1994	November 28, 1993	14.73	1,280
1976	December 31, 1975	5.85	246	1995	March 9, 1995	5.99	300
1977	October 9, 1976	5.28	236	1996	September 6, 1996	8.37	517
1978	October 26, 1977	7.20	410	1997	December 1, 1996	9.82	674
1979	September 6, 1979	7.53	439	1998	May 8, 1998	6.97	390
1980	August 11, 1980	4.08	145	1999	March 15, 1999	4.40	168
1981	July 6, 1981	3.44	96.7	2000	December 14, 1999	3.48	99.9
1982	February 3, 1982	5.00	213	2001	June 7, 2001	3.67	115
1983	April 24, 1983	5.47	253	2002	April 22, 2002	2.96	57.9
1984	February 14, 1984	6.41	341	2003	September 19, 2003	9.21	606
1985	August 18, 1985	9.01	584	2004	December 11, 2003	6.04	305
1986	November 4, 1985	9.81	673	2007	March 16, 2007	5.78	280 <sup>1</sup>
1987	September 8, 1987	7.14	404				

<sup>1</sup>Discharge is a historic peak.

**Table 209. 01671750 Harris Creek near Trevilians, Va.**

LOCATION.--Latitude 38°01'02", Longitude 078°03'06", NAD27, Louisa County, Hydrologic Unit 02080106, on left upstream wingwall of culvert on State Highway 632, 2.7 mi southeast of Trevilians, and 6 mi upstream from mouth.

DRAINAGE AREA.--3.43 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is not determined. Prior to Aug. 16, 1978, flood-hydrograph recorder gage at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--4 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1969	August 20, 1969	16.70	3,300	1983	April 24, 1983	5.86	529
1970	April 14, 1970	5.20	430	1984	February 14, 1984	6.23	584
1971	May 13, 1971	7.33	766	1985	August 18, 1985	7.07	714
1972	June 21, 1972	14.54	2,310	1986	November 4, 1985	8.64	1,030
1973	October 5, 1972	8.00	900	1987	September 8, 1987	5.85	528
1974	December 20, 1973	4.45	318	1988	November 29, 1987	5.31	446
1975	June 25, 1975	4.50	450	1989	May 6, 1989	5.43	464
1976	December 31, 1975	5.23	310	1990	May 27, 1990	6.34	601
1977	October 9, 1976	4.50	325	1991	July 4, 1991	7.21	742
1978	October 26, 1977	5.90	535	1992	December 29, 1991	3.97	246
1979	September 6, 1979	7.01	702	1993	March 4, 1993	6.51	626
1980	January 18, 1980	4.16	274	1994	November 28, 1993	12.42	1,850
1981	July 6, 1981	3.51	186	1995	June 27, 1995	5.96	544
1982	February 3, 1982	4.67	350				

**Table 210.** 01672400 South Anna River tributary number 6 near Ashland, Va.

LOCATION.--Latitude 37°48'40", Longitude 077°34'20", NAD27, Hanover County, Hydrologic Unit 02080106, at culvert on State Highway 54, 5.5 mi northwest of Ashland.

DRAINAGE AREA.--0.33 mi<sup>2</sup>.

GAGE.--Water-stage recorder (flood-hydrograph recorder). Datum of gage is 180 ft NGVD of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1966	September 21, 1966	5.95	126	1972	June 21, 1972	9.93	414
1967		3.00 <sup>1</sup>	5.00 <sup>2,3</sup>	1973	February 2, 1973	4.80	28.0
1968	January 14, 1968	3.55	35.0	1974	September 6, 1974	3.70	13.0
1969	August 20, 1969	9.30	360	1975	September 26, 1975	5.68	54.0
1970		3.00 <sup>1</sup>	5.00 <sup>2,3</sup>	1976	January 27, 1976	4.88	30.0
1971	August 27, 1971	5.59	56.0				

<sup>1</sup>Gage height below minimum recordable elevation.

<sup>2</sup>Discharge is less than indicated value, which is minimum recordable discharge at this site.

<sup>3</sup>Month or day of occurrence is unknown or not exact.

**Table 211. 01672500 South Anna River near Ashland, Va.**

LOCATION.--Latitude 37°47'48", Longitude 077°32'57", NAD27, Hanover County, Hydrologic Unit 02080106, on right bank at downstream side of bridge on State Highway 54, 4.5 mi northwest of Ashland, and 7.6 mi upstream from Newfound River.

DRAINAGE AREA.--395 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 83.74 ft NGVD of 1929. Prior to June 6, 1997, water-stage recorder at site on right downstream side of old bridge on State Highway 54. January 6, 1997 to September 30, 1997 water-stage recorder at site on right bank, 160 ft downstream, at present datum. June 27, 2003 to current year at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 12,600 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--12 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1928	August 15, 1928	24.00 <sup>1</sup>	14,500 <sup>2,3</sup>	1967	March 16, 1967	9.09 <sup>1</sup>	2,470
1931	May 23, 1931	8.79 <sup>1</sup>	2,200	1968	January 18, 1968	10.17 <sup>1</sup>	2,950
1932	May 15, 1932	10.46 <sup>1</sup>	2,890	1969	August 23, 1969	24.99 <sup>1</sup>	17,100
1933	January 28, 1933	11.30 <sup>1</sup>	3,230	1970	January 3, 1970	8.94 <sup>1</sup>	2,280
1934	March 7, 1934	9.63 <sup>1</sup>	2,520	1971	June 2, 1971	12.63 <sup>1</sup>	4,180
1935	September 6, 1935	19.04 <sup>1</sup>	8,740	1972	June 21, 1972	20.90 <sup>1</sup>	12,600
1936	January 6, 1936	15.50 <sup>1</sup>	5,380	1973	October 9, 1972	19.54 <sup>1</sup>	9,690
1937	April 28, 1937	22.77 <sup>1</sup>	13,700	1974	December 22, 1973	12.00 <sup>1</sup>	3,830
1938	October 20, 1937	13.98 <sup>1</sup>	4,630	1975	September 26, 1975	17.48 <sup>1</sup>	7,640
1939	February 12, 1939	10.95 <sup>1</sup>	3,100	1976	January 27, 1976	11.91 <sup>1</sup>	3,820
1940	April 9, 1940	11.08 <sup>1</sup>	3,230	1977	October 20, 1976	10.39 <sup>1</sup>	3,060
1941	April 8, 1941	9.02 <sup>1</sup>	2,300	1978	January 26, 1978	15.56 <sup>1</sup>	6,190
1942	August 12, 1942	11.97 <sup>1</sup>	3,740	1979	February 26, 1979	17.76 <sup>1</sup>	7,970
1943	October 19, 1942	12.43 <sup>1</sup>	3,990	1980	October 2, 1979	16.13 <sup>1</sup>	6,550
1944	August 2, 1944	11.73 <sup>1</sup>	3,560	1981	February 13, 1981	4.79 <sup>1</sup>	785
1945	July 18, 1945	13.10 <sup>1</sup>	4,450	1982	February 7, 1982	9.94 <sup>1</sup>	2,850
1946	May 27, 1946	12.10 <sup>1</sup>	3,800	1983	April 16, 1983	10.47 <sup>1</sup>	3,100
1947	March 15, 1947	8.71 <sup>1</sup>	2,170	1984	March 29, 1984	14.79 <sup>1</sup>	5,550
1948	August 8, 1948	14.38 <sup>1</sup>	5,420	1985	August 19, 1985	18.55 <sup>1</sup>	8,720
1949	December 7, 1948	16.00 <sup>1</sup>	6,150	1986	November 7, 1985	16.30 <sup>1</sup>	6,690
1950	March 24, 1950	9.40 <sup>1</sup>	2,470	1987	April 20, 1987	13.91 <sup>1</sup>	4,940
1951	June 13, 1951	8.19 <sup>1</sup>	1,970	1988	May 21, 1988	9.80 <sup>1</sup>	2,790
1952	September 1, 1952	13.92 <sup>1</sup>	4,640	1989	July 16, 1989	13.85 <sup>1</sup>	4,910
1953	November 21, 1952	12.95 <sup>1</sup>	4,150	1990	May 30, 1990	16.93 <sup>1</sup>	7,190
1954	March 3, 1954	7.83 <sup>1</sup>	1,860	1991	July 7, 1991	11.76 <sup>1</sup>	3,750
1955	August 18, 1955	17.19 <sup>1</sup>	7,220	1992	September 3, 1992	7.99 <sup>1</sup>	2,000
1956	July 21, 1956	22.22 <sup>1</sup>	12,800	1993	March 7, 1993	15.30 <sup>1</sup>	5,920
1957	November 1, 1956	9.35 <sup>1</sup>	2,480	1994	December 1, 1993	17.41 <sup>1</sup>	7,630

1958	August 25, 1958	11.68 <sup>1</sup>	3,400	1995	July 1, 1995	11.07 <sup>1</sup>	3,400
1959	December 29, 1958	9.72 <sup>1</sup>	2,600	1996	January 22, 1996	12.64 <sup>1</sup>	4,210
1960	April 6, 1960	11.90 <sup>1</sup>	3,480	1997	December 7, 1996	9.74 <sup>1</sup>	2,760
1961	February 23, 1961	11.55 <sup>1</sup>	3,650	2001	March 30, 2001	9.08 <sup>1</sup>	2,460
1962	October 22, 1961	17.47 <sup>1</sup>	7,650	2002	January 7, 2002	8.82 <sup>1</sup>	2,350
1963	March 15, 1963	11.84 <sup>1</sup>	3,750	2004	December 14, 2003	12.47	3,740
1964	February 19, 1964	10.27 <sup>1</sup>	3,010	2005	January 14, 2005	10.09	2,730
1965	March 8, 1965	9.47 <sup>1</sup>	2,650	2006	December 17, 2005	7.99	1,920
1966	September 21, 1966	10.15 <sup>1</sup>	2,960	2007	January 1, 2007	12.39	3,700

---

<sup>1</sup>Gage height at different site and (or) datum.

<sup>2</sup>Discharge is an estimate.

<sup>3</sup>Discharge is a historic peak.

**Table 212.** 01672900 Pamunkey River tributary number 1 near Hanover, Va.

LOCATION.--Latitude 37°48'00", Longitude 077°22'20", NAD27, Caroline County, Hydrologic Unit 02080106, at culvert on U.S. Highway 301, 2.6 mi north of Hanover.

DRAINAGE AREA.--0.82 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is not determined. Prior to Aug. 11, 1971, flood-hydrograph recorder at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--8 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1966	June 10, 1966	3.35	24.0	1970		2.80 <sup>1</sup>	15.0 <sup>2,3</sup>
1967	May 7, 1967	3.20	20.0	1971	May 30, 1971	3.22	20.0
1968	January 14, 1968	3.20	20.0	1972	June 21, 1972	4.19	51.0
1969	August 20, 1969	8.45	175	1973	February 2, 1973	3.60	31.0

<sup>1</sup>Gage height below minimum recordable elevation.

<sup>2</sup>Discharge is less than indicated value, which is minimum recordable discharge at this site.

<sup>3</sup>Month or day of occurrence is unknown or not exact.

**Table 213. 01673000 Pamunkey River near Hanover, Va.**

LOCATION.--Latitude 37°46'03", Longitude 077°19'57", NAD27, Hanover County, Hydrologic Unit 02080106, on right bank 100 ft downstream from bridge on State Highway 614, 0.3 mi upstream from Mechumps Creek, 2.0 mi east of Hanover, and 7.0 mi upstream from Millpond Creek.

DRAINAGE AREA.--1,078 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 14.72 ft NGVD of 1929. Prior to Oct. 15, 1976, nonrecording gage at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 22,000 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--14 ft.

REGULATION.--High-flow conditions at this site are considered regulated. Flow regulated since January 1972 by Lake Anna, capacity 373,000 acre-ft, 42.4 mi upstream.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1928	August 1928	32.60		1974	December 24, 1973	21.00	9,030 <sup>1</sup>
1942	August 11, 1942	20.29	8,660	1975	September 27, 1975	25.20	17,600 <sup>1</sup>
1943	October 18, 1942	23.07	15,200	1976	January 29, 1976	21.30	9,350 <sup>1</sup>
1944	August 4, 1944	16.37	4,260	1977	October 23, 1976	19.62	7,340 <sup>1</sup>
1945	July 19, 1945	21.30	10,700	1978	January 28, 1978	23.36	13,200 <sup>1</sup>
1946	May 29, 1946	19.08	6,900	1979	February 27, 1979	25.63	18,800 <sup>1</sup>
1947	March 17, 1947	16.88	4,610	1980	October 4, 1979	22.72	11,900 <sup>1</sup>
1948	August 7, 1948	21.73	11,600	1981	July 4, 1981	9.07	1,790 <sup>1</sup>
1949	December 6, 1948	24.20	16,300	1982	March 23, 1982	18.92	6,700 <sup>1</sup>
1950	March 25, 1950	19.53	7,360	1983	April 18, 1983	20.49	8,420 <sup>1</sup>
1951	March 22, 1951	16.30	4,700	1984	March 31, 1984	24.16	15,000 <sup>1</sup>
1952	December 23, 1951	21.60	11,200	1985	August 21, 1985	22.84	12,100 <sup>1</sup>
1953	November 23, 1952	21.90	11,800	1986	November 7, 1985	23.62	13,800 <sup>1</sup>
1954	December 16, 1953	14.15	3,310	1987	April 19, 1987	22.24	11,000 <sup>1</sup>
1955	August 20, 1955	26.12	20,900	1988	January 22, 1988	19.26	7,010 <sup>1</sup>
1956	July 21, 1956	17.70	6,280	1989	May 9, 1989	20.60	8,570 <sup>1</sup>
1957	March 1, 1957	17.58	5,800	1990	May 31, 1990	23.43	13,300 <sup>1</sup>
1958	March 22, 1958	19.60	7,740	1991	January 14, 1991	19.66	7,390 <sup>1</sup>
1959	January 1, 1959	20.01	8,220	1992	February 28, 1992	15.17	4,180 <sup>1</sup>
1960	April 7, 1960	21.46	10,600	1994	March 31, 1994	25.16	21,200 <sup>1</sup>
1961	February 21, 1961	21.94	11,400	1995	June 30, 1995	20.34	9,510 <sup>1</sup>
1962	October 23, 1961	24.32	16,500	1996	September 8, 1996	22.98	14,800 <sup>1</sup>
1963	March 15, 1963	21.25	10,100	1997	December 9, 1996	19.82	8,780 <sup>1</sup>
1964	February 21, 1964	18.28	6,360	1998	February 7, 1998	23.70	16,800 <sup>1</sup>
1965	March 8, 1965	18.70	6,760	1999	March 18, 1999	17.93	6,640 <sup>1</sup>
1966	February 16, 1966	18.71	6,760	2000	April 19, 2000	16.61	5,620 <sup>1</sup>

1967	October 21, 1966	16.50	4,790	2001	April 1, 2001	19.55	8,450 <sup>1</sup>
1968	January 17, 1968	20.25	8,570	2002	August 30, 2002	10.44	2,050 <sup>1</sup>
1969	August 23, 1969	31.12	40,300	2003	February 25, 2003	23.06	15,000 <sup>1</sup>
1970	January 3, 1970	18.80	5,940	2004	August 31, 2004	21.50	10,400 <sup>1</sup>
1971	June 2, 1971	22.22	10,900	2005	January 16, 2005	21.32	9,920 <sup>1</sup>
1972	June 23, 1972	29.22	29,900 <sup>1</sup>	2006	December 18, 2005	17.27	4,530 <sup>1</sup>
1973	April 29, 1973	22.18	10,800 <sup>1</sup>	2007	March 18, 2007	21.19	9,640 <sup>1</sup>

---

<sup>1</sup>Discharge affected by regulation or diversion.

**Table 214. 01673500 Totopotomoy Creek near Atlee, Va.**

LOCATION.--Latitude 37°40'09", Longitude 077°22'58", NAD27, Hanover County, Hydrologic Unit 02080106, on right bank at upstream side of bridge on State Highway 301, 0.7 mi upstream from Opossum Creek, and 1.6 mi northeast of Atlee.

DRAINAGE AREA.--5.77 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 116.33 ft NGVD of 1929. Prior to Aug. 9, 1954, at site 8 ft downstream at datum of 116.37 NGVD 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 525 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Subsequent to June 30, 1957, records were provided by the Virginia Department of Environmental Quality - Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1945	July 1945	7.50 <sup>1</sup>	400 <sup>2,3</sup>	1963	June 3, 1963	5.16	110
1949	July 16, 1949	4.44 <sup>1</sup>	66.0	1964	February 16, 1964	4.04	59.0
1950	October 31, 1949	5.04 <sup>1</sup>	82.0	1965	July 12, 1965	4.91	95.0
1951	June 14, 1951	3.41 <sup>1</sup>	39.0	1966	September 21, 1966	3.66	43.0
1952	March 24, 1952	5.64 <sup>1</sup>	147	1967	August 23, 1967	4.27	66.0
1953	November 21, 1952	6.27 <sup>1</sup>	192	1968	January 14, 1968	4.60	83.0
1954	December 14, 1953	3.85 <sup>1</sup>	52.0	1969	July 22, 1969	6.02	182
1955	August 13, 1955	8.62	748	1970	April 1, 1970	3.95	55.0
1956	October 14, 1955	5.85	158	1971	June 15, 1971	4.77	88.0
1957	February 27, 1957	5.30	90.0	1972	June 22, 1972	6.88	308
1958	December 21, 1957	6.36	194	1973	February 2, 1973	5.64	148
1959	December 29, 1958	4.99	91.0	1974	September 7, 1974	6.04	147
1960	April 5, 1960	6.08	194	1975	July 14, 1975	6.58	260
1961	February 23, 1961	6.23	212	1976	January 1, 1976	5.43	140
1962	January 7, 1962	5.90	172	1977	September 10, 1977	4.86	61.0

<sup>1</sup>Gage height at different site and (or) datum.

<sup>2</sup>Discharge is a historic peak.

<sup>3</sup>Month or day of occurrence is unknown or not exact.

**Table 215. 01673550 Totopotomoy Creek near Studley, Va.**

LOCATION.--Latitude 37°39'45", Longitude 077°15'29", NAD27, Hanover County, Hydrologic Unit 02080106, on right bank at downstream side of bridge on State Highway 606, 2.0 mi southeast of Studley, 2.4 mi downstream from Hawes millrace, and 4.1 mi upstream from mouth.

DRAINAGE AREA.--25.5 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 38.36 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 2,040 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--6 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Records were provided by the Virginia Department of Environmental Quality - Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1978	January 26, 1978	7.38	296	1993	March 5, 1993	7.65	610
1979	February 25, 1979	8.77	640	1994	March 3, 1994	7.79	568
1980	January 19, 1980	6.26	236	1995	November 21, 1994	5.11	182
1981	May 11, 1981	5.55	166	1996	January 20, 1996	6.27	299
1982	August 8, 1982	5.81	191	1997	October 10, 1996	6.39	312
1983	April 16, 1983	7.30	350	1998	January 29, 1998	7.83	585
1984	March 29, 1984	8.20	689	1999	September 16, 1999	9.46	1,620
1985	August 19, 1985	8.22	802	2000	April 18, 2000	5.62	229
1986	November 5, 1985	7.09	448	2001	August 13, 2001	6.81	363
1987	April 17, 1987	7.65	610	2002	May 10, 2002	4.35	121
1988	May 22, 1988	6.17	263	2003	September 19, 2003	8.87	1,170
1989	March 25, 1989	5.03	145	2004	August 31, 2004	16.37	11,300
1990	May 30, 1990	5.87	226	2005	January 15, 2005	6.40	473
1991	March 30, 1991	5.68	205	2006	September 2, 2006	7.29	791
1992	March 8, 1992	7.46	553	2007	January 2, 2007	7.96	890

**Table 216. 01673638 Cohoke Mill Creek near Lester Manor, Va.**

LOCATION.--Latitude 37°37'36", Longitude 076°57'46", NAD27, King William County, Hydrologic unit 02080106, on right bank at downstream side of culvert on State Highway 626, 3.2 mi northeast of Lester Manor and 4.7 mi above mouth.

DRAINAGE AREA.--8.81 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 40 ft NGVD of 1929, from topographic map.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

<b>Water year</b>	<b>Date</b>	<b>Gage height (ft)</b>	<b>Discharge (ft<sup>3</sup>/s)</b>	<b>Water year</b>	<b>Date</b>	<b>Gage height (ft)</b>	<b>Discharge (ft<sup>3</sup>/s)</b>
Annual maximum stages and discharges							
1999	September 16, 1999	10.31	1,430	2004	August 30, 2004	9.09	733
2000	August 25, 2000	5.54	37	2005	July 8, 2005	6.03	66
2001	August 14, 2001	7.70	118	2006	September 2, 2006	6.56	153
2002	May 10, 2002	5.30	19	2007	November 16, 2006	6.57	154
2003	September 19, 2003	9.28	826				

**Table 217. 01673800 Po River near Spotsylvania, Va.**

LOCATION.--Latitude 38°10'17", Longitude 077°35'42", NAD27, Spotsylvania County, Hydrologic Unit 02080105, on right bank at upstream side of bridge on State Highway 208, 1.6 mi north of Snell, 2.0 mi south of Spotsylvania, 4.8 mi downstream from Gladys Run, and 4.9 mi upstream from U.S. Highway 1.

DRAINAGE AREA.--77.6 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 183.76 ft NGVD of 1929. Prior to Sept. 30, 1964, nonrecording gage at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 3,360 ft<sup>3</sup>/s and extended above on basis of slope-area measurement at 5,000 ft<sup>3</sup>/s.

BANKFULL STAGE.--10 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Records were provided by the Virginia Department of Environmental Quality - Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1963	March 13, 1963	12.27	2,200	1986	November 5, 1985	10.67	2,110
1964	January 11, 1964	8.32	960	1987	April 17, 1987	11.08	2,300
1965	March 6, 1965	8.84	1,110	1988	January 21, 1988	8.83	1,360
1966	February 14, 1966	8.95	1,170	1989	May 7, 1989	9.83	1,740
1967	October 20, 1966	8.49	1,020	1990	January 2, 1990	9.73	1,700
1968	March 14, 1968	10.37	1,590	1991	January 13, 1991	10.01	1,810
1969	August 20, 1969	14.00	4,480	1992	July 24, 1992	9.05	1,430
1970	April 3, 1970	8.96	1,180	1993	March 5, 1993	13.31	3,760
1971	May 31, 1971	11.67	2,400	1994	November 28, 1993	17.10	8,070
1972	June 22, 1972	19.03	10,900	1995	March 10, 1995	7.41	938
1973	April 28, 1973	12.15	2,780	1996	January 20, 1996	12.25	3,180
1974	December 22, 1973	11.27	2,150	1997	October 20, 1996	9.25	1,560
1975	September 26, 1975	13.52	3,920	1998	March 21, 1998	13.44	4,070
1976	January 2, 1976	11.17	2,100	1999	March 16, 1999	8.41	1,250
1977	October 21, 1976	8.88	1,140	2000	April 18, 2000	8.25	1,200
1978	January 27, 1978	12.73	3,170	2001	March 31, 2001	8.95	1,440
1979	February 26, 1979	13.87	4,380	2002	April 29, 2002	6.43	676
1980	October 2, 1979	12.95	3,510	2003	February 23, 2003	13.11	3,800
1981	May 12, 1981	6.54	675	2004	December 12, 2003	12.23	3,160
1982	February 4, 1982	8.36	1,190	2005	January 15, 2005	10.01	1,720
1983	April 16, 1983	12.18	2,930	2006	June 28, 2006	8.66	1,200
1984	March 29, 1984	13.02	3,530	2007	March 17, 2007	11.25	2,470
1985	February 13, 1985	7.50	920				

**Table 218. 01674000 Mattaponi River near Bowling Green, Va.**

LOCATION.--Latitude 38°03'42", Longitude 077°23'10", NAD27, Caroline County, Hydrologic Unit 02080105, on right bank 0.1 mi upstream from bridge on State Highway 605, 2.2 mi northwest of Bowling Green, 2.4 mi upstream from South River, and 7.1 mi downstream from confluence of Matta and Poni Rivers.

DRAINAGE AREA.--256 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 85.14 ft NGVD of 1929. Prior to Aug. 17, 1978, water-stage recorder located on left bank at present datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 8,100 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--11 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Records were provided by the Virginia Department of Environmental Quality - Water Division from July 1, 1957, to Jan. 13, 1987, and subsequent to Sept. 30, 1989.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1928	August 1928	19.50	15,000 <sup>1,2</sup>	1975	September 27, 1975	15.58	7,640
1943	October 17, 1942	17.45	10,400	1976	January 2, 1976	12.19	3,780
1944	March 15, 1944	8.82	1,300	1977	October 23, 1976	9.47	1,750
1945	July 18, 1945	14.23	4,980	1978	January 27, 1978	15.05	6,800
1946	December 28, 1945	10.70	1,940	1979	February 27, 1979	16.01	8,600
1947	January 6, 1947	8.90	1,330	1980	October 3, 1979	12.71	4,600
1948	August 5, 1948	15.34	6,580	1981	May 14, 1981	5.87	655
1949	December 5, 1948	16.21	8,060	1982	February 6, 1982	8.27	1,300
1950	September 11, 1950	13.78	4,130	1983	April 17, 1983	12.69	4,590
1951	March 22, 1951	8.67	1,260	1984	March 30, 1984	15.16	7,470
1952	December 23, 1951	13.14	3,600	1985	February 4, 1985	9.24	1,680
1953	November 23, 1952	14.22	4,980	1986	November 6, 1985	11.30	3,240
1954	March 4, 1954	6.04	557	1987	April 20, 1987	12.37	4,260
1955	August 20, 1955	15.60	7,060	1988	January 22, 1988	10.38	2,460
1956	February 9, 1956	7.86	990	1989	May 8, 1989	10.06	2,240
1957	November 3, 1956	11.70	2,570	1990	May 31, 1990	10.75	2,780
1958	March 22, 1958	12.80	3,420	1991	January 14, 1991	10.56	2,620
1959	January 1, 1959	9.87	1,670	1992	July 26, 1992	9.82	2,030
1960	April 7, 1960	12.82	3,560	1993	March 6, 1993	13.93	5,920
1961	February 20, 1961	14.03	4,760	1994	March 29, 1994	15.63	8,080
1962	March 14, 1962	13.58	4,310	1995	March 10, 1995	9.57	1,860
1963	March 14, 1963	13.12	3,830	1996	January 21, 1996	13.05	4,950
1964	February 18, 1964	9.83	1,770	1997	October 21, 1996	10.12	2,260 <sup>3</sup>
1965	March 7, 1965	9.83	1,770	1998	February 6, 1998	14.45	6,540
1966	February 16, 1966	9.67	1,720	1999	March 17, 1999	9.18	1,640
1967	October 22, 1966	8.68	1,280	2000	April 20, 2000	9.13	1,610

1968	March 15, 1968	10.64	2,160	2001	April 1, 2001	10.00	2,100
1969	August 21, 1969	16.70	8,960	2002	May 1, 2002	5.67	475
1970	January 2, 1970	10.06	1,910	2003	February 24, 2003	13.60	5,520
1971	June 1, 1971	12.66	3,840	2004	December 13, 2003	12.36	4,230
1972	June 23, 1972	18.95	13,400	2005	January 16, 2005	10.69	2,770
1973	April 29, 1973	13.00	4,500	2006	June 29, 2006	10.73	2,800
1974	December 23, 1973	12.69	4,230	2007	March 18, 2007	12.11	3,990

---

<sup>1</sup>Discharge is a historic peak.

<sup>2</sup>Month or day of occurrence is unknown or not exact.

<sup>3</sup>Discharge is an estimate.

**Table 219. 01674100 Motto River tributary near Cedon, Va.**

LOCATION.--Latitude 38°05'24", Longitude 077°31'11", NAD27, Caroline County, Hydrologic Unit 02080105, at culvert on State Highway 605, 1.9 mi north of Cedon.

DRAINAGE AREA.--1.62 mi<sup>2</sup>.

GAGE.--Water-stage recorder (flood-hydrograph recorder). Datum of gage is 203.41 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--5 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1967	May 7, 1967	3.50	67.0	1972	June 21, 1972	9.30	488
1968	January 14, 1968	4.42	120	1973	May 27, 1973	4.45	116
1969	August 20, 1969	12.80	690	1974	December 20, 1973	4.55	108
1970	April 15, 1970	3.75	55.0	1975	September 26, 1975	5.90	212
1971	August 27, 1971	4.41	99.0	1976	December 31, 1975	4.50	105

**Table 220. 01674200 Reedy Creek near Dawn, Va.**

LOCATION.--Latitude 37°52'55", Longitude 077°21'35", NAD27, Caroline County, Hydrologic Unit 02080105, at bridge on U.S. Highway 301, 3.3 mi north of Dawn.

DRAINAGE AREA.--17.5 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 110.00 ft NGVD of 1929. July 7, 1965, to Oct. 7, 1969, and Apr. 27, 1971, to June 19, 1973, flood-hydrograph recorder at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements.

BANKFULL STAGE.--4 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--No Data for 1970-71; gage not in service due to bridge reconstruction.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1951	June 14, 1951	3.64	125	1980	November 11, 1979	4.32	147
1952	September 1, 1952	5.28	310	1981	July 4, 1981	3.72	108
1953	November 21, 1952	5.00	275	1982	December 5, 1981	3.93	121
1954	April 20, 1954	3.26	95.0	1983	April 15, 1983	4.62	170
1955	August 13, 1955	5.00	275	1984	March 29, 1984	5.87	287
1956	March 14, 1956	4.45	225	1985	August 18, 1985	3.66	105
1957	June 1957	4.31	205 <sup>1</sup>	1986	October 21, 1985	4.40	153
1958	December 1957	3.99	170 <sup>1</sup>	1987	April 16, 1987	4.69	175
1959	October 22, 1958	3.69	140	1988	February 3, 1988	5.15	215
1960	April 5, 1960	4.45	215	1989	June 26, 1989	5.49	249
1961	February 23, 1961	4.16	185	1990	May 29, 1990	5.43	243
1962	October 21, 1961	4.67	246	1991	March 30, 1991	4.45	157
1963	June 3, 1963	4.93	265	1992	March 27, 1992	4.63	170
1964	July 15, 1964	4.06	176	1993	March 4, 1993	4.90	192
1965	March 5, 1965	3.51	127	1994	March 29, 1994	5.29	229
1966	September 21, 1966	4.10	180	1995	July 28, 1995	4.02	126
1967	May 7, 1967	3.50	127	1996	January 20, 1996	4.97	181
1968	January 14, 1968	4.02	170	1997	October 8, 1996	3.90	108
1969	August 20, 1969	7.28	2,500	1998	February 5, 1998	5.10	191
1972	June 22, 1972	5.92	292	1999	September 16, 1999	5.23	202
1973	February 2, 1973	4.49	159	2000	April 26, 2000	4.34	135
1974	September 6, 1974	4.46	157	2001	January 20, 2001	4.70	160
1975	September 26, 1975	5.57	257	2002	January 7, 2002	4.19	125
1976	January 27, 1976	4.37	151	2003	September 19, 2003	5.95	270
1977	October 2, 1976	4.39	152	2004	December 14, 2003	4.20	126
1978	January 26, 1978	5.07	207	2005	January 14, 2005	3.92	109
1979	February 25, 1979	5.83	283				

<sup>1</sup>Month or day of occurrence is unknown or not exact.

**Table 221. 01674500 Mattaponi River near Beulahville, Va.**

LOCATION.--Latitude 37°53'02", Longitude 077°09'55", NAD27, King and Queen County, Hydrologic Unit 02080105, on left bank 0.4 mi upstream from bridge on State Highway 628, 2.4 mi north of Beulahville, and 2.7 mi downstream from Maracossic Creek.

DRAINAGE AREA.--603 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 12.43 ft NGVD of 1929 (levels by the Virginia Department of Transportation). Prior to Oct. 14, 1942, nonrecording gage. Oct. 14, 1942, to Aug. 8, 1974, water-stage recorder on right bank at site 0.6 mi upstream at present datum. Aug. 8, 1974, to Sept. 8, 1987, water-stage recorder on left bank 80 ft downstream from previous site, at present datum. Sept. 8, 1987, to Aug. 31, 1989, nonrecording gage on downstream side of bridge, at present datum. Aug. 31, 1989, to Mar. 31, 1994, water-stage recorder on upstream side of bridge, at present datum. Mar. 31, 1994, to Sept. 28, 1995, nonrecording gage on downstream side of bridge, at present datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements.

BANKFULL STAGE.--14 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1889	June 1889	24.00 <sup>1</sup>		1973	May 2, 1973	15.30 <sup>1,4</sup>	3,750
1928	August 1928	23.00 <sup>1</sup>	12,000 <sup>2,3</sup>	1974	December 26, 1973	15.04 <sup>1</sup>	3,390
1942	August 14, 1942	13.40 <sup>1</sup>	2,700	1975	September 30, 1975	19.90 <sup>1</sup>	8,390
1943	October 20, 1942	18.65 <sup>1</sup>	7,490	1976	January 31, 1976	15.62 <sup>1,4</sup>	3,770
1944	March 19, 1944	11.54 <sup>1</sup>	1,730	1977	October 27, 1976	12.99 <sup>1</sup>	2,260
1945	July 20, 1945	20.00 <sup>1</sup>	8,700	1978	January 29, 1978	19.20 <sup>1</sup>	7,650
1946	January 1, 1946	13.60 <sup>1</sup>	2,800	1979	March 1, 1979	20.90 <sup>1</sup>	10,600
1947	January 10, 1947	11.92 <sup>1</sup>	1,890	1980	October 6, 1979	16.80 <sup>1</sup>	5,360
1948	August 8, 1948	16.68 <sup>1</sup>	5,130	1981	May 21, 1981	8.79 <sup>1</sup>	916
1949	December 8, 1948	18.82 <sup>1</sup>	7,280	1982	February 24, 1982	10.91 <sup>1</sup>	1,470
1950	September 14, 1950	15.84 <sup>1</sup>	4,360	1983	April 20, 1983	16.20 <sup>1</sup>	4,780
1951	March 26, 1951	10.86 <sup>1</sup>	1,590	1984	April 1, 1984	20.49 <sup>1</sup>	9,960
1952	May 1, 1952	16.29 <sup>1</sup>	5,210	1985	February 8, 1985	12.18 <sup>1</sup>	2,010
1953	November 26, 1952	16.70 <sup>1</sup>	5,610	1986	November 9, 1985	14.52 <sup>1</sup>	3,370
1954	January 30, 1954	9.06 <sup>1</sup>	1,160	1987	April 21, 1987	15.97 <sup>1</sup>	4,570
1955	August 22, 1955	18.62 <sup>1</sup>	7,120	1990	May 31, 1990	15.73	4,050
1956	October 16, 1955	12.14 <sup>1</sup>	2,050	1991	January 17, 1991	12.81	2,310
1957	March 4, 1957	13.19 <sup>1</sup>	2,620	1992	July 29, 1992	10.24	1,420
1958	March 25, 1958	16.10 <sup>1</sup>	4,690	1993	March 9, 1993	16.64	4,810
1959	January 4, 1959	12.67 <sup>1</sup>	2,350	1994	April 1, 1994	19.59	7,910
1960	April 9, 1960	15.62 <sup>1</sup>	4,280	1995	March 14, 1995		1,990 <sup>5,6</sup>
1961	February 23, 1961	17.37 <sup>1</sup>	5,900	1996	January 23, 1996	16.12	4,370
1962	March 17, 1962	16.78 <sup>1</sup>	5,320	1997	December 12, 1996	13.41	2,580
1963	March 17, 1963	15.64 <sup>1</sup>	4,280	1998	February 9, 1998	18.42	6,560
1964	February 22, 1964	13.52 <sup>1</sup>	2,800	1999	September 18, 1999	13.37	2,560

1965	March 11, 1965	12.13 <sup>1</sup>	1,780	2000	May 1, 2000	11.17	1,690
1966	February 19, 1966	12.26 <sup>1</sup>	1,840	2001	April 4, 2001	12.40	2,140
1967	October 23, 1966	10.45 <sup>1</sup>	1,400	2002	May 2, 2002	6.48	554
1968	January 20, 1968	13.18 <sup>1</sup>	2,610	2003	February 27, 2003	16.61	4,780
1969	August 23, 1969	24.04 <sup>1</sup>	12,300	2004	December 16, 2003	15.35	3,760
1970	January 6, 1970	13.09 <sup>1</sup>	2,220	2005	January 20, 2005	13.18	2,460
1971	June 5, 1971	15.45 <sup>1</sup>	3,580	2006	July 3, 2006	12.43	2,150
1972	June 25, 1972	23.97 <sup>1</sup>	16,900	2007	November 18, 2006	15.46	3,840

<sup>1</sup>Gage height at different site and (or) datum.

<sup>2</sup>Discharge is a historic peak.

<sup>3</sup>Month or day of occurrence is unknown or not exact.

<sup>4</sup>Gage height is not the maximum for the year.

<sup>5</sup>Discharge is a maximum daily average.

<sup>6</sup>Discharge is an estimate.

**Table 222. 01674700 Aylett Creek at Aylett, Va.**

LOCATION.--Latitude 37°47'05", Longitude 077°06'23", NAD27, King William County, Hydrologic Unit 02080105, on right upstream wingwall of culvert on U.S. Highway 360 at Aylett and 2.8 mi upstream from mouth.

DRAINAGE AREA.--6.55 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 26.72 ft NGVD of 1929. Prior to Nov. 6, 1974, flood-hydrograph recorder at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1969	August 20, 1969	4.55	350	1983	April 15, 1983	4.57	255
1970		3.00 <sup>1</sup>	100 <sup>2,3</sup>	1984	March 29, 1984	4.40	240
1971	May 16, 1971	3.73	245	1985	August 18, 1985	3.14	160
1972	June 22, 1972	4.75	625	1986	May 20, 1986	3.47	145
1973	February 2, 1973	3.85	220	1987	September 13, 1987	4.76	650
1974	September 6, 1974	3.40	160	1988	May 18, 1988	4.18	160 <sup>4</sup>
1975	September 26, 1975	4.91	720	1989	November 1, 1988	3.79	
1976	January 27, 1976	3.47	145	1990	May 29, 1990	4.26	
1977	October 20, 1976	3.58	180	1991	June 23, 1991	4.01	
1978	April 27, 1978	4.06	210	1992	March 7, 1992	4.51	
1979	September 5, 1979	5.28	440	1993	March 4, 1993	4.53	
1980	May 20, 1980	3.76	220	1994	March 2, 1994	4.81	
1981	May 19, 1981	3.77	220	1995	June 26, 1995	3.49	
1982	August 9, 1982	4.70	420				

<sup>1</sup>Gage height below minimum recordable elevation.

<sup>2</sup>Month or day of occurrence is unknown or not exact.

<sup>3</sup>Discharge is less than indicated value, which is minimum recordable discharge at this site.

<sup>4</sup>Discharge actually greater than indicated value.

**Table 223.** 01677000 Ware Creek near Toano, Va.

LOCATION.--Latitude 37°26'17", Longitude 076°47'12", NAD27, New Kent County, Hydrologic Unit 02080107, on left bank at upstream side of bridge State Highway 600, 0.8 mi upstream from France Swamp, and 4.9 mi north of Toano.

DRAINAGE AREA.--6.29 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 10 ft NGVD of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 120 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1980	November 3, 1979	2.30	36.0	1987	January 19, 1987	1.59	71.0
1981	October 25, 1980	2.17	33.0	1988	May 22, 1988	1.43	52.0
1982	June 2, 1982	1.83	26.0	1989	May 2, 1989	1.74	91.0
1983	April 16, 1983	1.98	30.0	1990	May 27, 1990	1.35	43.0
1984	May 30, 1984	1.78	111	1991	January 9, 1991	1.42	51.0
1985	September 27, 1985	2.60	260	1994	March 3, 1994	2.59	258
1986	July 23, 1986	1.51	61.0	1995	March 9, 1995	2.03	139

## South Atlantic Slope Basin: James River Basin

**Table 224.** 02009500 Cattail Run near Bolar, Va.

LOCATION.--Latitude 38°16'00", Longitude 079°40'20", NAD27, Highland County, Hydrologic Unit 02080201, at culvert on U.S. Highway 220, 3.5 mi north of Bolar.

DRAINAGE AREA.--0.68 mi<sup>2</sup>.

GAGE.--Water-stage recorder (flood-hydrograph recorder). Datum of gage is 2,217.58 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1966	July 30, 1966	4.30	40.0	1971	February 13, 1971	3.92	26.0
1967	August 5, 1967	4.64	50.0	1972	April 22, 1972	4.20	33.0
1968	June 18, 1968	3.80	28.0	1973	May 28, 1973	4.02	28.0
1969	July 23, 1969	4.30	36.0	1974	May 12, 1974	4.50	40.0
1970	December 30, 1969	3.40	15.0	1975	March 19, 1975	4.00	28.0

**Table 225. 02011400 Jackson River near Bacova, Va.**

LOCATION.--Latitude 38°02'32", Longitude 079°52'54", NAD27, Bath County, Hydrologic Unit 02080201, on left bank 0.1 mi downstream from ford, 1.8 mi upstream from Back Creek, and 2.2 mi southwest of Bocova.

DRAINAGE AREA.--157 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 1,639.20 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 1,300 ft<sup>3</sup>/s and extended above on basis of slope-area measurement at 2,400 ft<sup>3</sup>/s, 5,200 ft<sup>3</sup>/s, 7,100 ft<sup>3</sup>/s, and 30,000 ft<sup>3</sup>/s.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1972	June 21, 1972	11.40	4,800 <sup>1</sup>	1991	March 23, 1991	9.46	2,990
1974	December 26, 1973	13.88	7,560	1992	April 22, 1992	11.15	4,510
1975	March 19, 1975	11.20	4,600	1993	April 16, 1993	12.66	6,100
1976	October 18, 1975	10.41	3,820	1994	May 8, 1994	10.35	3,760
1977	April 5, 1977	13.39	6,970	1995	January 15, 1995	11.86	5,230
1978	January 26, 1978	12.26	5,680	1996	January 19, 1996	17.94	16,300
1979	January 21, 1979	10.00	3,450	1997	March 3, 1997	9.82	3,300 <sup>2</sup>
1980	April 14, 1980	11.02	4,390	1998	January 8, 1998	10.87	4,180
1981	May 28, 1981	10.22	3,640	1999	January 24, 1999	6.81	1,190
1982	June 13, 1982	10.50	3,900	2000	February 19, 2000	8.10	1,930
1983	April 24, 1983	9.08	2,690	2001	May 23, 2001	7.96	1,840
1984	March 21, 1984	11.07	4,430	2002	April 22, 2002	9.07	2,620
1985	November 28, 1984	7.33	1,500	2003	February 23, 2003	10.52	3,840
1986	November 4, 1985	22.25	30,000	2004	November 19, 2003	14.65	9,230
1987	April 17, 1987	11.02	4,380	2005	March 28, 2005	8.65	2,310
1988	January 20, 1988	8.05	1,960	2006	June 27, 2006	10.62	3,940
1989	April 26, 1989	9.77	3,250	2007	March 2, 2007	12.30	5,680
1990	December 31, 1989	8.70	2,410				

<sup>1</sup>Discharge is a historic peak.

<sup>2</sup>Discharge is an estimate.

**Table 226. 02011460 Back Creek near Sunrise, Va.**

LOCATION.--Latitude 38°14'43", Longitude 079°46'08", NAD27, Bath County, Hydrologic Unit 02080201, on right bank 900 ft upstream from bridge on State Highway 600, 0.8 mi upstream from Gap Run, and 4.8 mi northeast of Sunrise.

DRAINAGE AREA.--60.9 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 2,200.02 ft NGVD of 1929 (levels by Virginia Department of Transportation).

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 3,800 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Records were provided by the Virginia Department of Environmental Quality - Water Division from June 20, 1975, to Sep. 30, 1984.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1975	March 19, 1975	5.27	2,410	1992	April 21, 1992	5.98	3,560
1976	October 18, 1975	6.30	4,200	1993	March 24, 1993	5.54	2,830
1977	April 5, 1977		4,570 <sup>1</sup>	1994	May 8, 1994	6.31	4,240
1978	January 26, 1978	6.80	5,400	1995	January 15, 1995	6.63	4,980
1979	January 21, 1979	5.15	2,270	1996	January 19, 1996	8.15	9,400
1980	April 14, 1980		2,380 <sup>1</sup>	1997	December 2, 1996	5.69	3,570
1981	May 28, 1981	4.65	1,660	1998	January 8, 1998	6.55	5,360
1982	June 13, 1982	5.51	2,780	1999	January 24, 1999	3.70	1,080
1983	December 16, 1982	4.53	1,530	2000	February 19, 2000	4.74	2,160
1984	March 21, 1984	6.10	3,800	2001	July 29, 2001	4.27	1,610
1985	May 3, 1985	5.05	2,130	2002	April 28, 2002	5.45	3,200
1986	November 4, 1985	10.01	17,500	2003	February 22, 2003	5.14	2,710
1987	April 17, 1987	4.88	1,920	2004	November 19, 2003	7.15	6,260
1988	January 20, 1988	4.26	1,270	2005	March 28, 2005	4.74	2,120
1989	April 26, 1989	5.73	3,130	2006	November 29, 2005	6.09	4,110
1990	December 31, 1989	5.03	2,100	2007	March 2, 2007	6.37	4,620
1991	March 23, 1991	5.10	2,200				

<sup>1</sup>Discharge is an estimate.

**Table 227. 02011470 Back Creek at Sunrise, Va.**

LOCATION.--Latitude 38°11'25", Longitude 079°48'43", NAD27, Bath County, Hydrologic Unit 02080201, on left bank 75 ft upstream from bridge on State Highway 600 at Sunrise, 180 ft upstream from Beaver Run, 0.5 mi downstream from Back Creek Dam, and 7.6 mi northeast of Mountain Grove.

DRAINAGE AREA.--75.6 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Concrete control since Oct. 24, 1984. Datum of gage is 1,968.52 ft NGVD of 1929 (Virginia Power bench mark). From November 5, 1992 to January 5, 1993, nonrecording gage at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 960 ft<sup>3</sup>/s and extended above on basis of releases from Back Creek Lake at 5,100 ft<sup>3</sup>/s.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered regulated. Flow regulated since October 1984 by Back Creek Lake 0.5 mi upstream, usable capacity approximately 4,650 acre-ft.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1985	May 3, 1985	7.81	2,360 <sup>1</sup>	1997	December 2, 1996	8.97	3,080 <sup>1</sup>
1986	November 5, 1985	11.37	5,100 <sup>1</sup>	1998	January 8, 1998	9.96	3,990 <sup>1</sup>
1987	April 16, 1987	8.04	2,530 <sup>1</sup>	1999	January 24, 1999	6.16	1,140 <sup>1</sup>
1988	January 20, 1988	6.93	1,680 <sup>1</sup>	2000	February 19, 2000	8.53	2,930 <sup>1</sup>
1989	April 26, 1989	9.98	3,980 <sup>1</sup>	2001	May 22, 2001	7.92	2,500 <sup>1</sup>
1990	December 31, 1989	8.33	2,740 <sup>1</sup>	2002	April 28, 2002	8.69	3,050 <sup>1</sup>
1991	March 23, 1991	8.79	3,090 <sup>1</sup>	2003	February 22, 2003	9.19	3,410 <sup>1</sup>
1992	April 22, 1992	9.25	3,430 <sup>1</sup>	2004	November 19, 2003	12.22	5,820 <sup>1</sup>
1993	March 24, 1993	9.86	3,890 <sup>1</sup>	2005	March 24, 2005	6.71	1,680 <sup>1</sup>
1994	May 8, 1994	10.55	4,430 <sup>1</sup>	2006	June 27, 2006	8.64	3,090 <sup>1</sup>
1995	January 15, 1995	10.60	4,420 <sup>1</sup>	2007	March 2, 2007	10.41	4,430 <sup>1</sup>
1996	January 19, 1996	11.99	5,690 <sup>1</sup>				

<sup>1</sup>Discharge is affected by regulation or diversion.

**Table 228. 02011480 Back Creek on Route 600 near Mountain Grove, Va.**

LOCATION.--Latitude 38°08'05", Longitude 079°51'57", NAD27, Bath County, Hydrologic Unit 02080201, on left bank 100 ft downstream from bridge on State Highway 600, 2.8 mi northeast of Mountain Grove, and 3.0 mi upstream from Little Back Creek.

DRAINAGE AREA.--88.6 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 1,818.05 ft NGVD of 1929 (levels by The Virginia Department of Transportation). Prior to Aug. 2, 1979, water-stage recorder at site 170 ft upstream at present datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 5,140 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated. Flow regulated to unknown extent since October 1984 by Back Creek Lake 11 mi upstream.

REMARKS.--Records were provided by the Virginia Department of Environmental Quality - Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1974	December 26, 1973	9.90 <sup>1</sup>	7,420	1980	April 14, 1980	7.80	3,600
1975	March 19, 1975	7.04 <sup>1</sup>	3,140	1981	May 28, 1981	7.04	2,870
1976	October 18, 1975	8.85 <sup>1</sup>	5,800	1982	March 20, 1982	8.61	4,830
1977	April 5, 1977	9.43 <sup>1</sup>	6,880	1983	December 16, 1982	6.25	2,080
1978	January 26, 1978		6,200 <sup>2</sup>	1984	March 21, 1984	8.82	5,450
1979	January 21, 1979	7.33 <sup>1</sup>	3,580				

<sup>1</sup>Gage height at different site and (or) datum.

<sup>2</sup>Discharge is an estimate.

**Table 229.** 02011490 Little Back Creek near Sunrise, Va.

LOCATION.--Latitude 38°12'52", Longitude 079°50'16", NAD27, Bath County, Hydrologic Unit 02080201, in George Washington National Forest, on right bank 600 ft downstream from Long Spring Run, 1.2 mi downstream from Little Back Creek Dam, and 8.5 mi northeast of Mountain Grove.

DRAINAGE AREA.--4.90 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Concrete control with rectangular weir plate. Datum of gage is 2,638.48 ft NGVD of 1929 (Virginia Power bench mark). November 5, 1992 to January 5, 1993 nonrecording gage at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 30 ft<sup>3</sup>/s and extended above on basis of slope-area measurement at 580 ft<sup>3</sup>/s.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered regulated. Flow regulated since January 1985 by Little Back Creek Lake 1.2 mi upstream, usable capacity approximately 9,800 acre-ft.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1985	May 3, 1985	3.50	254 <sup>1</sup>	1997	March 3, 1997	2.85	78 <sup>1</sup>
1986	November 4, 1985	4.06	580 <sup>1</sup>	1998	January 8, 1998	3.14	137 <sup>1</sup>
1987	April 15, 1987	2.78	68.0 <sup>1</sup>	1999	January 24, 1999	2.53	39 <sup>1</sup>
1988	May 6, 1988	2.52	38.0 <sup>1</sup>	2000	February 19, 2000	2.72	60 <sup>1</sup>
1989	April 26, 1989	3.40	216 <sup>1</sup>	2001	May 22, 2001	2.80	71 <sup>1</sup>
1990	December 31, 1989	2.85	78.0 <sup>1</sup>	2002	April 28, 2002	2.66	52 <sup>1</sup>
1991	March 23, 1991	2.84	77.0 <sup>1</sup>	2003	February 22, 2003	3.09	125 <sup>1</sup>
1992	April 21, 1992	3.03	112 <sup>1</sup>	2004	November 19, 2003	3.31	185 <sup>1</sup>
1993	March 24, 1993	2.97	100 <sup>1</sup>	2005	March 28, 2005	2.57	42 <sup>1</sup>
1994	May 8, 1994	2.95	96.0 <sup>1</sup>	2006	June 27, 2006	3.07	121 <sup>1</sup>
1995	January 15, 1995	2.86	80.0 <sup>1</sup>	2007	March 2, 2007	3.28	176 <sup>1</sup>
1996	January 19, 1996	3.82	414 <sup>1</sup>				

<sup>1</sup>Discharge is affected by regulation or diversion.

**Table 230. 02011500 Back Creek near Mountain Grove, Va.**

LOCATION.--Latitude 38°04'10", Longitude 079°53'50", NAD27, Bath County, Hydrologic Unit 02080201, on left bank 0.3 mi downstream from Cummings Run, 0.8 mi downstream from bridge on State Highway 39, and 2.1 mi south of Mountain Grove.

DRAINAGE AREA.--134 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 1,701.45 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 3,970 ft<sup>3</sup>/s and extended above on the basis of three slope-area measurements at 18,400 ft<sup>3</sup>/s.

BANKFULL STAGE.--7 ft.

REGULATION.--High-flow conditions at this site are considered regulated after 1983. Flow regulated since October 1984 by Back Creek Lake 11.3 mi upstream, and since January 1985 by Little Back Creek Lake 14.4 mi upstream. Usable capacity approximately 14,500 acre-ft. Diversion 10.5 mi upstream from station for recreation lakes, net averages 0.5 ft<sup>3</sup>/s.

REMARKS.--Records were provided by the Virginia Department of Environmental Quality - Water Division from July 1, 1957, to Sept. 30, 1984.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1913	March 1913	17.00		1979	January 21, 1979	7.75	4,990
1951	December 1950	8.20	5,940 <sup>1</sup>	1980	April 9, 1980	7.10	3,860
1952	March 11, 1952	8.70	7,110	1981	May 28, 1981	7.15	3,940
1953	February 21, 1953	9.05	7,800	1982	June 13, 1982	8.36	6,300
1954	March 1, 1954	8.98	7,790	1983	December 16, 1982	6.46	2,800
1955	October 15, 1954	9.35	8,750	1984	February 14, 1984	8.65	6,960
1956	March 14, 1956	5.40	1,850	1985	May 3, 1985	6.66	3,190 <sup>2</sup>
1957	April 5, 1957	7.28	4,170	1986	November 4, 1985	11.24	14,200 <sup>2</sup>
1958	December 26, 1957	6.55	3,110	1987	April 16, 1987	7.62	4,750 <sup>2</sup>
1959	June 2, 1959	6.69	3,300	1988	January 20, 1988	6.04	2,340 <sup>2</sup>
1960	March 30, 1960	7.96	5,510	1989	April 26, 1989	8.53	6,600 <sup>2</sup>
1961	February 18, 1961	6.76	3,430	1990	December 31, 1989	7.34	4,250 <sup>2</sup>
1962	March 21, 1962	7.44	4,340	1991	March 23, 1991	7.62	4,750 <sup>2</sup>
1963	March 12, 1963	8.24	5,940	1992	April 22, 1992	7.52	4,570 <sup>2</sup>
1964	March 5, 1964	8.66	7,080	1993	March 24, 1993	7.87	5,240 <sup>2</sup>
1965	February 7, 1965	8.14	5,720	1994	May 8, 1994	8.59	6,750 <sup>2</sup>
1966	February 13, 1966	7.68	4,890	1995	January 15, 1995	8.51	6,570 <sup>2</sup>
1967	March 7, 1967	10.77	12,700	1996	January 19, 1996	12.41	18,400 <sup>2</sup>
1968	March 13, 1968	6.73	3,300	1997	March 3, 1997	7.33	4,230 <sup>2</sup>
1969	August 20, 1969	9.65	9,270	1998	January 8, 1998	8.59	6,740 <sup>2</sup>
1970	December 31, 1969	9.24	8,270	1999	January 24, 1999	5.46	1,700 <sup>2</sup>
1971	February 13, 1971	9.02	7,790	2000	February 19, 2000	7.10	3,840 <sup>2</sup>
1972	June 21, 1972	9.25	8,270	2001	May 22, 2001	7.04	3,740 <sup>2</sup>
1973	March 17, 1973	9.42	8,750	2002	April 22, 2002	6.98	3,650 <sup>2</sup>
1974	December 26, 1973	10.42	11,600	2003	February 22, 2003	8.41	6,400 <sup>2</sup>
1975	March 19, 1975	7.35	4,340	2004	November 19, 2003	9.79	9,740 <sup>2</sup>

1976	October 18, 1975	9.37	8,750	2005	March 8, 2005	5.34	1,650 <sup>2</sup>
1977	April 5, 1977	10.23	11,000	2006	June 27, 2006	6.99	3,760 <sup>2</sup>
1978	January 26, 1978	10.07	10,600	2007	March 2, 2007	9.33	8,530 <sup>2</sup>

---

<sup>1</sup>Month or day of occurrence is unknown or not exact.

<sup>2</sup>Discharge is affected by regulation or diversion.

**Table 231. 02011800 Jackson River below Gathright Dam near Hot Springs, Va.**

LOCATION.--Latitude 37°56'54", Longitude 079°56'58", NAD27, Alleghany County, Hydrologic Unit 02080201, on right bank 0.4 mi upstream from Cedar Creek, 0.5 mi downstream from Gathright Dam and Lake Moomaw, and 7.3 mi southwest of Hot Springs.

DRAINAGE AREA.--345 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 1,400.00 ft NGVD of 1929 (U.S. Army Corps of Engineers bench mark). Prior to Dec. 20, 1973, nonrecording gage at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 9,200 ft<sup>3</sup>/s and extended above on basis of slope-area measurement at 29,000 ft<sup>3</sup>/s.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered regulated after 1978. Flow regulated since December 1979 by Lake Moomaw 0.5 mi upstream; since October 1984 by Back Creek Lake 28.5 mi upstream, and since January 1985 by Little Back Creek Lake 31.6 mi upstream. Total usable capacity 526,900 acre-ft.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1974	December 26, 1973	18.77	29,000 <sup>1</sup>	1991	May 8, 1991	13.60	5,500 <sup>2</sup>
1975	March 19, 1975	15.03	10,100	1992	April 23, 1992	13.84	6,090 <sup>2</sup>
1976	October 18, 1975	15.57	12,300	1993	March 26, 1993	13.92	6,290 <sup>2</sup>
1977	April 5, 1977	15.95	13,800	1994	March 30, 1994	13.60	5,500 <sup>2</sup>
1978	January 26, 1978	15.74	13,000	1995	June 24, 1995	12.31	3,000 <sup>2</sup>
1979	January 21, 1979	15.04	10,100	1996	January 21, 1996	14.19	7,010 <sup>2</sup>
1980	March 19, 1980	13.14	4,580 <sup>2</sup>	1997	December 2, 1996	13.64	5,600 <sup>2</sup>
1981	June 3, 1981	12.20	2,980 <sup>2</sup>	1998	March 23, 1998	13.61	5,530 <sup>2</sup>
1982	June 14, 1982	14.00	6,650 <sup>2</sup>	1999	March 23, 1999	10.63	1,100 <sup>2</sup>
1983	April 25, 1983	13.28	4,780 <sup>2</sup>	2000	March 22, 2000	11.99	2,540 <sup>2</sup>
1984	August 14, 1984	13.52	5,320 <sup>2</sup>	2001	May 23, 2001	12.22	2,870 <sup>2</sup>
1985	February 25, 1985	12.44	3,200 <sup>2</sup>	2002	April 29, 2002	13.27	4,760 <sup>2</sup>
1986	November 7, 1985	15.29	10,400 <sup>2</sup>	2003	February 25, 2003	13.97	6,420 <sup>2</sup>
1987	April 19, 1987	14.48	7,840 <sup>2</sup>	2004	November 20, 2003	13.90	6,240 <sup>2</sup>
1988	January 21, 1988	13.32	4,870 <sup>2</sup>	2005	March 29, 2005	12.77	3,770 <sup>2</sup>
1989	May 6, 1989	13.26	4,740 <sup>2</sup>	2006	June 29, 2006	12.86	3,940 <sup>2</sup>
1990	November 17, 1989	12.22	2,850 <sup>2</sup>	2007	April 16, 2007	13.50	5,270 <sup>2</sup>

<sup>1</sup>Discharge affected by dam failure.

<sup>2</sup>Discharge is affected by regulation or diversion.

**Table 232.** 02011950 Johnson Spring near Hot Springs, Va.

LOCATION.--Latitude 37°54'56", Longitude 079°58'22", NAD27, Alleghany County, Hydrologic Unit 02080201, on right bank at upstream end of culvert on State Highway 638, 90 ft upstream from Jackson River, 0.5 mi upstream from Board Tree Run, 3.7 mi downstream from Gathright Dam, and 9.6 mi southwest of Hot Springs.

DRAINAGE AREA.--Not available for springs.

GAGE.--Water-stage recorder. Datum of gage is 1,390 ft NGVD of 1929, from topographic map.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Do not use site or data. Continuous record of spring flow. Limited drainage area to supply stormflow.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1979	June 10, 1979		3.90 <sup>1</sup>	1980	March 18, 1980		3.10

<sup>1</sup>Discharge is affected by regulation or diversion.

**Table 233.** 02012000 Falling Spring Creek near Falling Spring, Va.

LOCATION.--Latitude 37°52'05", Longitude 079°56'45", NAD27, Alleghany County, Hydrologic Unit 02080201, at bridge on U.S. Highway 220, 0.7 mi downstream from Falling Spring (the main source), 2.1 mi southeast of town of Falling Spring, and 5 mi northeast of Covington.

DRAINAGE AREA.--11.2 mi<sup>2</sup>.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 2,150 ft NGVD of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 320 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Data for this station have been published under variations of both the stream name, Falling Spring(s) Creek, and the town name, Falling Spring(s).

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1948	February 14, 1948	2.08	162	1951	December 7, 1950	2.94	519
1949	April 13, 1949	2.27	304	1952	March 11, 1952	1.81	197
1950	September 13, 1950	1.91	222				

**Table 234. 02012500 Jackson River at Falling Spring, Va.**

(Formerly published as Jackson River at Barber.)

LOCATION.--Latitude 37°52'36", Longitude 079°58'39", NAD27, Alleghany County, Hydrologic Unit 02080201, on right bank 20 ft upstream from Smith Bridge, 0.8 mi south of town of Falling Spring, 1.6 mi downstream from Falling Spring Creek, and 5.5 mi north of Covington.

DRAINAGE AREA.--410 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 1,333.49 ft NGVD of 1929 (levels by U.S. Army Corps of Engineers). Prior to Oct. 26, 1934, nonrecording gage at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 17,000 ft<sup>3</sup>/s and extended above on basis of records of other stations in the James River basin.

BANKFULL STAGE.--11 ft.

REGULATION.--High-flow conditions at this site are considered regulated after 1978. Flow regulated since December 1979 by Lake Moomaw 7.6 mi upstream; since October 1984 by Back Creek Lake 35.6 mi upstream, and since January 1985 by Little Back Creek Lake 38.7 mi upstream. Total usable capacity 526,900 acre-ft.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1913	March 1913	20.00	50,000 <sup>1,2,3</sup>	1966	February 14, 1966	10.31	8,180
1925	May 12, 1925	6.04	1,390	1967	March 7, 1967	13.17	17,900
1926	January 19, 1926	9.70	6,680	1968	March 13, 1968	9.24	5,580
1927	November 16, 1926	10.90	10,300	1969	August 20, 1969	13.35	18,700
1928	May 1, 1928	9.00	4,890	1970	December 31, 1969	12.00	13,200
1929	February 28, 1929	10.40	8,680	1971	February 13, 1971	12.05	13,400
1930	November 18, 1929	12.00	14,000	1972	June 21, 1972	12.72	16,100
1931	March 29, 1931	7.90	3,100	1973	March 17, 1973	12.02	13,300
1932	May 1, 1932	11.00	10,600	1974	December 26, 1973	14.45	23,600
1933	March 19, 1933	10.00	7,500	1975	March 20, 1975	11.09	10,300
1934	March 28, 1934	10.50	8,980	1976	October 18, 1975	11.59	11,800
1935	January 23, 1935	12.32	15,100	1977	April 5, 1977	12.15	13,800 <sup>4</sup>
1936	March 17, 1936	14.74	24,700	1978	January 26, 1978	11.89	12,800
1937	January 20, 1937	11.19	11,300	1979	January 21, 1979	11.02	10,100
1938	October 28, 1937	10.92	10,300	1980	March 19, 1980	8.86	4,660 <sup>5</sup>
1939	January 30, 1939	11.28	11,600	1981	June 2, 1981	7.92	3,110 <sup>5</sup>
1940	April 20, 1940	10.03	7,500	1982	June 14, 1982	9.75	6,720 <sup>5</sup>
1941	April 5, 1941	7.14	2,290	1983	April 25, 1983	9.10	5,210 <sup>5</sup>
1942	May 16, 1942	13.65	20,100	1984	February 15, 1984	9.50	6,140 <sup>5</sup>
1943	March 13, 1943	11.32	11,600	1986	November 7, 1985	12.62	15,600 <sup>5</sup>
1944	February 23, 1944	8.50	4,000	1987	April 19, 1987	10.43	8,490 <sup>5</sup>
1945	January 2, 1945	8.50	4,000	1988	February 21, 1988	9.05	5,090 <sup>5</sup>
1946	January 8, 1946	11.06	10,900	1989	May 8, 1989	9.08	5,160 <sup>5</sup>
1947	March 15, 1947	9.12	5,220	1990	November 17, 1989	7.74	2,930 <sup>5</sup>

1948	February 14, 1948	11.33	11,600	1991	March 5, 1991	9.37	5,840 <sup>5</sup>
1949	April 14, 1949	12.97	17,800	1992	April 23, 1992	9.81	6,870 <sup>5</sup>
1950	February 2, 1950	10.58	7,210	1993	March 26, 1993	9.87	7,020 <sup>5</sup>
1951	December 8, 1950	14.11	17,600	1994	March 30, 1994	9.56	6,270 <sup>5</sup>
1952	March 11, 1952	12.28	11,600	1995	June 24, 1995	7.75	2,940 <sup>5</sup>
1953	February 21, 1953	12.43	15,500	1996	January 21, 1996	11.09	10,300 <sup>5</sup>
1954	March 1, 1954	11.55	12,600	1997	December 2, 1996	9.58	6,320 <sup>5</sup>
1955	October 16, 1954	11.86	13,700	1998	March 23, 1998	9.52	6,180 <sup>5</sup>
1956	March 15, 1956	8.32	3,600	1999	March 23, 1999	5.76	1,180 <sup>5</sup>
1957	April 5, 1957	11.24	10,900	2000	March 22, 2000	7.44	2,590 <sup>5</sup>
1958	December 26, 1957	9.46	6,080	2001	May 23, 2001	7.61	2,780 <sup>5</sup>
1959	June 3, 1959	9.62	6,440	2002	April 29, 2002	8.80	4,550 <sup>5</sup>
1960	March 30, 1960	11.63	12,100	2003	February 25, 2003	9.98	7,290 <sup>5</sup>
1961	February 19, 1961	10.02	7,400	2004	November 20, 2003	9.96	7,240 <sup>5</sup>
1962	October 21, 1961	11.52	11,800	2005	March 29, 2005	8.40	3,790 <sup>5</sup>
1963	March 12, 1963	12.26	14,600	2006	June 29, 2006	7.75	2,940 <sup>5</sup>
1964	March 5, 1964	11.41	11,500	2007	April 16, 2007	9.35	5,800 <sup>5</sup>
1965	February 8, 1965	10.58	8,960				

<sup>1</sup>Discharge is a historic peak.

<sup>2</sup>Month or day of occurrence is unknown or not exact.

<sup>3</sup>Discharge is an estimate.

<sup>4</sup>Discharge is affected to unknown degree by regulation or diversion.

<sup>5</sup>Discharge is affected by regulation or diversion.

**Table 235. 02012950 Sweet Springs Creek tributary at Sweet Chalybeate, Va.**

LOCATION.--Latitude 37°39'25", Longitude 080°14'10", NAD27, Alleghany County, Hydrologic Unit 02080201, on left bank 20 ft upstream from culvert on State Highway 311, 0.1 mi upstream from mouth, and 0.9 mi north of Sweet Chalybeate.

DRAINAGE AREA.--0.86 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 1,926.94 ft NGVD of 1929. Prior to Nov. 2, 1976, flood-hydrograph recorder at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--4 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1966		4.00 <sup>1</sup>	30.0 <sup>2,3</sup>	1980		4.14 <sup>1</sup>	36.0 <sup>2,3</sup>
1967	March 15, 1967	4.61	58.0	1981		4.14 <sup>1</sup>	36.0 <sup>2,3</sup>
1968	June 18, 1968	4.50	52.0	1982		4.14 <sup>1</sup>	36.0 <sup>2,3</sup>
1969	August 20, 1969	6.80	185	1983		4.14 <sup>1</sup>	36.0 <sup>2,3</sup>
1970	December 31, 1969	4.40	46.0	1984	August 12, 1984	4.34	44.0
1971	September 12, 1971	7.87	248	1985	February 2, 1985	4.33	43.0
1972	June 22, 1972	7.50	230	1986	November 4, 1985	8.24	267
1973	May 28, 1973	7.50	230	1987		4.14 <sup>1</sup>	36.0 <sup>2,3</sup>
1974	July 5, 1974	10.50	375	1988		4.14 <sup>1</sup>	36.0 <sup>2,3</sup>
1975	June 1, 1975	4.79	64.0	1989		4.14 <sup>1</sup>	36.0 <sup>2,3</sup>
1977	April 5, 1977	4.29	42.0	1990		4.14 <sup>1</sup>	36.0 <sup>2,3</sup>
1978	October 8, 1977	4.41	46.0	1991		4.14 <sup>1</sup>	36.0 <sup>2,3</sup>
1979	September 22, 1979	4.84	67.0	1995	January 28, 1995	3.96	28.3 <sup>4</sup>

<sup>1</sup>Gage height below minimum recordable elevation.

<sup>2</sup>Discharge is less than indicated value, which is minimum recordable discharge at this site.

<sup>3</sup>Month or day of occurrence is unknown or not exact.

<sup>4</sup>Discharge is a historic peak.

**Table 236. 02013000 Dunlap Creek near Covington, Va.**

LOCATION.--Latitude 37°48'10", Longitude 080°02'50", NAD27, Alleghany County, Hydrologic Unit 02080201, on right bank 20 ft upstream from bridge on U.S. Highway 60, 2.2 mi downstream from Ogle Creek, and 3.0 mi west of Covington.

DRAINAGE AREA.--162 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 1,294.70 ft NGVD of 1929. Prior to Dec. 8, 1949, nonrecording gage at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 4,500 ft<sup>3</sup>/s and extended above on basis of step-backwater computations and contracted-opening measurements.

BANKFULL STAGE.--8 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1913	March 1913	18.00		1968	January 31, 1968	4.54	1,540
1929	February 27, 1929	7.50	4,080	1969	August 20, 1969	13.13	16,500
1930	November 18, 1929	9.70	7,300	1970	December 31, 1969	9.12	5,870
1931	March 28, 1931	5.50	2,140	1971	February 13, 1971	8.77	5,490
1932	May 1, 1932	8.70	5,580	1972	June 21, 1972	15.65	27,400
1933	March 19, 1933	8.50	5,300	1973	March 17, 1973	10.76	9,370
1934	March 8, 1934	7.20	3,760	1974	December 26, 1973	11.03	9,970
1935	January 23, 1935	10.00	7,900	1975	March 14, 1975	8.16	4,820
1936	March 17, 1936	10.52	8,370	1976	October 18, 1975	7.84	4,480
1937	January 20, 1937	9.10	6,200	1977	April 5, 1977	11.74	11,700
1938	October 27, 1937	8.00	4,660	1978	January 26, 1978	9.98	7,760
1939	January 30, 1939	7.48	4,160	1979	February 24, 1979	9.07	6,150
1940	August 14, 1940	10.30	8,050	1980	March 17, 1980	7.45	4,080
1941	March 12, 1941	4.20	1,150	1981	May 28, 1981	8.44	5,230
1942	May 22, 1942	8.70	5,580	1982	June 13, 1982	9.32	6,570
1943	March 13, 1943	8.60	5,440	1983	March 19, 1983	8.33	5,080
1944	March 24, 1944	5.50	2,140	1984	August 13, 1984	10.21	8,220
1945	January 1, 1945	5.60	2,230	1985	February 2, 1985	6.85	3,470
1946	January 8, 1946	7.00	3,560	1986	November 4, 1985	13.42	17,400
1947	March 14, 1947	6.30	2,860	1987	April 16, 1987	9.62	7,100
1948	February 14, 1948	10.20	8,300	1988	January 20, 1988	5.37	2,040
1949	April 13, 1949	10.10	8,100	1989	September 22, 1989	7.48	4,110
1950	February 2, 1950	7.28	4,030	1990	December 31, 1989	8.73	5,640
1951	March 30, 1951	8.59	5,570	1991	January 11, 1991	8.81	5,750
1952	March 11, 1952	8.68	5,700	1992	February 26, 1992	9.84	7,500
1953	February 21, 1953	7.04	3,720	1993	March 4, 1993	10.17	8,140
1954	March 1, 1954	10.10	7,770	1994	February 23, 1994	7.00	3,640
1955	March 6, 1955	10.14	7,770	1995	January 15, 1995	10.45	8,710

1956	March 14, 1956	5.83	2,560	1996	January 19, 1996	13.33	17,100
1957	April 5, 1957	8.53	5,440	1997	June 1, 1997	9.36	6,640
1958	March 31, 1958	8.56	5,570	1998	April 20, 1998	8.62	5,480
1959	April 12, 1959	6.06	2,830	1999	March 18, 1999	5.05	1,780
1960	March 30, 1960	6.60	3,320	2000	March 12, 2000	8.70	5,590
1961	February 25, 1961	5.48	2,290	2001	May 25, 2001	7.19	3,820
1962	October 21, 1961	8.13	4,950	2002	April 22, 2002	6.61	3,220
1963	March 12, 1963	10.98	9,120	2003	February 22, 2003	11.59	11,400
1964	March 4, 1964	5.38	2,200	2004	September 28, 2004	14.04	19,700
1965	March 25, 1965	8.53	5,440	2005	March 28, 2005	7.05	3,690
1966	May 2, 1966	7.30	4,030	2006	June 27, 2006	8.00	4,640
1967	March 7, 1967	9.22	6,450	2007	April 15, 2007	9.33	6,590

---

**Table 237. 02013100 Jackson River below Dunlap Creek at Covington, Va.**

LOCATION.--Latitude 37°47'19", Longitude 080°00'03", NAD27, Covington County, Hydrologic Unit 02080201, on left bank in city recreation park and 0.5 mi downstream from Dunlap Creek.

DRAINAGE AREA.--612 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 1,206.53 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 19,000 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered regulated after 1978. Flow regulated since December 1979 by Lake Moomaw 19.9 mi upstream; since October 1984 by Back Creek Lake 47.9 mi upstream, and since January 1985 by Little Back Creek Lake 51.0 mi upstream. Usable capacity 138,200 acre-ft. Additional flow control by numerous small facilities.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1972	June 21, 1972	24.36	34,000 <sup>1</sup>	1991	January 11, 1991	11.56	8,420 <sup>2</sup>
1974	December 27, 1973	22.09	28,000	1992	February 26, 1992	12.00	9,130 <sup>2</sup>
1975	March 20, 1975	13.60	14,400	1993	March 4, 1993	12.93	10,700 <sup>2</sup>
1976	October 18, 1975	13.36	11,400	1994	March 30, 1994	10.14	6,240 <sup>2</sup>
1977	April 5, 1977	19.85	23,200	1995	January 15, 1995	14.23	12,800 <sup>2</sup>
1978	January 26, 1978	17.86	19,200	1996	January 19, 1996	20.85	25,400 <sup>2</sup>
1979	February 25, 1979	15.13	14,300	1997	March 3, 1997	12.34	9,690 <sup>2</sup>
1980	March 17, 1980	11.33	8,140 <sup>2</sup>	1998	April 19, 1998	11.20	7,860 <sup>2</sup>
1981	May 28, 1981	10.94	7,550 <sup>2</sup>	1999	January 24, 1999	7.43	2,660 <sup>2</sup>
1982	June 13, 1982	11.84	8,870 <sup>2</sup>	2000	March 12, 2000	11.13	7,750 <sup>2</sup>
1983	April 10, 1983	10.48	6,760 <sup>2</sup>	2001	May 25, 2001	10.00	6,050 <sup>2</sup>
1984	February 14, 1984	13.69	11,900 <sup>2</sup>	2002	April 29, 2002	9.35	5,130 <sup>2</sup>
1985	February 1, 1985	8.92	4,550 <sup>2</sup>	2003	February 22, 2003	14.97	14,300 <sup>2</sup>
1986	November 4, 1985	23.31	31,300 <sup>2</sup>	2004	September 28, 2004	17.27	18,100 <sup>2</sup>
1987	April 16, 1987	13.72	12,000 <sup>2</sup>	2005	March 28, 2005	9.84	6,440 <sup>2</sup>
1988	January 21, 1988	9.37	5,160 <sup>2</sup>	2006	June 27, 2006	12.15	9,960 <sup>2</sup>
1989	April 28, 1989	12.12	9,330 <sup>2</sup>	2007	April 15, 2007	12.46	10,400 <sup>2</sup>
1990	December 31, 1989	10.85	7,320 <sup>2</sup>				

<sup>1</sup>Discharge is a historic peak.

<sup>2</sup>Discharge is affected by regulation or diversion.

**Table 238. 02014000 Potts Creek near Covington, Va.**

LOCATION.--Latitude 37°43'44", Longitude 080°02'33", NAD27, Alleghany County, Hydrologic Unit 02080201, on left bank at downstream side of bridge on State Highway 18, 0.8 mi downstream from Blue Spring Creek, and 5.2 mi southwest of Covington.

DRAINAGE AREA.--153 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 1,273.93 ft NGVD of 1929. Prior to Sept. 30, 1956, nonrecording gage at site 1.3 mi downstream at different datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 3,600 ft<sup>3</sup>/s and extended to 7,510 ft<sup>3</sup>/s on basis of velocity-area studies, for the period 1929-54. Subsequent defined by current-meter measurements. Major shift occurred during 1954, probably caused by channel changes made at time new bridge was constructed. Since 1954, defined by current-meter measurements below 11,200 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--5 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Records were provided by the Virginia Department of Environmental Quality - Water Division from July 1, 1957, to Sep. 30, 1989.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1878	November 1877	12.00 <sup>1</sup>		1972	June 21, 1972	12.33	12,400
1913	March 1913	12.50 <sup>1</sup>		1973	May 28, 1973	11.01	9,320
1929	February 27, 1929	4.90 <sup>1</sup>	2,230	1974	December 27, 1973	8.92	5,280
1930	November 18, 1929	7.00 <sup>1</sup>	4,460	1975	March 14, 1975	7.63	3,590
1931	May 23, 1931	3.80 <sup>1</sup>	1,310	1976	October 18, 1975	7.43	3,370
1932	May 1, 1932	4.90 <sup>1</sup>	2,230	1977	April 5, 1977	9.08	5,570
1933	November 9, 1932	4.50 <sup>1</sup>	1,870	1978	January 26, 1978	8.98	5,420
1934	March 28, 1934	6.00 <sup>1</sup>	3,270	1979	March 5, 1979	8.23	4,300
1935	January 23, 1935	10.10 <sup>1</sup>	7,510	1980	April 14, 1980	7.14	3,040
1936	March 17, 1936	9.52 <sup>1</sup>	6,850	1981	May 28, 1981	6.58	2,500
1937	January 20, 1937	6.90 <sup>1</sup>	4,330	1983	March 19, 1983	8.01	4,040
1938	October 28, 1937	5.60 <sup>1</sup>	2,870	1984	February 14, 1984	8.05	4,100
1939	January 30, 1939	5.06 <sup>1</sup>	2,410	1985	August 18, 1985	8.30	4,440
1940	August 14, 1940	7.90 <sup>1</sup>	5,090	1986	November 4, 1985	13.46	15,400
1941	July 7, 1941	4.82 <sup>1</sup>	2,140	1987	April 17, 1987	9.56	5,920
1942	May 16, 1942	8.58 <sup>1</sup>	5,860	1988	May 6, 1988	5.13	761
1943	December 30, 1942	5.90 <sup>1</sup>	3,170	1989	September 22, 1989	9.08	5,040
1944	February 29, 1944	4.30 <sup>1</sup>	1,710	1990	October 17, 1989	8.32	3,880
1945	March 6, 1945	5.10 <sup>1</sup>	2,410	1991	January 12, 1991	7.84	3,220
1946	January 8, 1946	4.90 <sup>1</sup>	2,230	1992	April 21, 1992	8.60	4,300
1947	March 14, 1947	5.30 <sup>1</sup>	2,590	1993	March 24, 1993	9.06	5,080
1948	February 14, 1948	7.72 <sup>1</sup>	5,480	1994	August 17, 1994	7.23	2,640
1949	April 13, 1949	9.32 <sup>1</sup>	6,630	1995	January 15, 1995	9.83	6,570
1950	February 2, 1950	5.32 <sup>1</sup>	2,590	1996	January 19, 1996	11.32	9,860
1951	December 7, 1950	8.70 <sup>1</sup>	5,970	1997	December 1, 1996	8.57	4,260

1952	March 11, 1952	9.10 <sup>1</sup>	6,410	1998	April 20, 1998	8.39	4,010
1953	March 24, 1953	7.43 <sup>1</sup>	5,030	1999	March 18, 1999	4.35	708
1954	March 1, 1954	9.90 <sup>1</sup>	7,290	2000	April 18, 2000	6.43	1,910
1955	March 6, 1955	9.67 <sup>1</sup>	6,460	2001	May 23, 2001	7.52	2,950
1956	April 16, 1956	4.95 <sup>1,2</sup>	2,000	2002	May 3, 2002	7.20	2,600
1966	February 14, 1966	7.27	3,290	2003	February 22, 2003	9.71	7,070
1967	March 7, 1967	7.66	3,700	2004	September 28, 2004	11.65	10,700
1968	March 13, 1968	5.56	1,620	2005	March 28, 2005	7.01	3,260
1969	August 20, 1969	7.88	3,920	2006	June 27, 2006	9.35	6,480
1970	December 31, 1969	8.37	4,580	2007	April 15, 2007	7.63	4,010
1971	May 30, 1971	8.97	5,420				

---

<sup>1</sup>Gage height at different site and (or) datum.

<sup>2</sup>Gage datum changed during this year.

**Table 239.** 02014500 Smith Creek above old dam near Clifton Forge, Va.

LOCATION.--Latitude 37°51'05", Longitude 079°50'48", NAD27, Alleghany County, Hydrologic Unit 02080201, on left abutment of bridge on city of Clifton Forge highway, 0.2 mi upstream from old water-supply dam, 0.8 mi upstream from new water-supply dam, 3.1 mi northwest of Clifton Forge, and about 3.5 mi upstream from mouth.

DRAINAGE AREA.--12.3 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 1,406 ft NGVD of 1929, by barometer. Prior to August 1953, nonrecording gage at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 760 ft<sup>3</sup>/s and extended above by logarithmic plotting.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1947	July 18, 1947	4.40	342	1952	March 11, 1952	4.90	447
1948	November 3, 1947	5.50	600	1953	March 24, 1953	5.95	752
1949	April 13, 1949	6.00	752	1954	March 1, 1954	4.08	282
1950	May 15, 1950	3.69	214	1955	March 6, 1955	4.75	425
1951	December 7, 1950	7.30	1,200	1956	March 14, 1956	3.25	155

**Table 240. 02015600 Cowpasture River near Head Waters, Va.**

LOCATION.--Latitude 38°19'30", Longitude 079°26'14", NAD27, Highland County, Hydrologic Unit 02080201, on left downstream wingwall of bridge on U.S. Highway 250, 1.2 mi west of Head Waters, and 3 mi upstream from Shaw Fork.

DRAINAGE AREA.--11.2 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 1,985.65 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 187 ft<sup>3</sup>/s and extended on basis of contracted-opening measurements at 900 ft<sup>3</sup>/s and 5,650 ft<sup>3</sup>/s.

BANKFULL STAGE.--5 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1949	June 17, 1949	6.50	5,650	1978	January 26, 1978	4.87	662
1950	September 12, 1950	4.20	340	1979	March 5, 1979	4.04	302
1951	December 7, 1950	5.00	740	1980	November 2, 1979	3.61	202
1952	March 11, 1952	4.84	620	1981		2.95	108 <sup>1,2</sup>
1953	February 21, 1953	5.00	740	1982	March 20, 1982	4.90	680
1954	March 1, 1954	5.07	810	1983	April 15, 1983	3.55	190
1955	October 15, 1954	5.19	900	1984	August 12, 1984	4.76	596
1956	March 14, 1956	3.64	200	1985	May 3, 1985	3.74	228
1957	April 5, 1957	4.13	320	1986	November 4, 1985	6.45	5,380
1958	December 26, 1957	2.97	110	1987	April 16, 1987	3.88	264
1959	June 2, 1959	4.10	305	1988	January 20, 1988	3.30	147
1960	May 8, 1960	4.21	340	1989		2.97	110 <sup>1,2</sup>
1961	February 26, 1961	3.34	155	1990	November 16, 1989	4.05	305
1962	October 22, 1961	4.14	320	1991	March 4, 1991	3.26	142
1963	March 12, 1963	4.53	450	1992	April 21, 1992	4.31	374
1964	March 5, 1964	3.31	147	1993	March 4, 1993	3.80	240
1965	February 7, 1965	3.12	124	1994	May 8, 1994	3.83	249
1966	February 13, 1966	2.70	83.0	1996	September 6, 1996	8.36	
1967	March 7, 1967	4.66	560	1997	December 1, 1996	5.58	140
1968	March 12, 1968	3.06	118	1998	January 8, 1998	6.13	190
1969	August 20, 1969	2.94	107	1999	January 24, 1999	4.26	70
1970	July 10, 1970	4.44	426	2000	February 18, 2000	4.57	88
1971	May 30, 1971	4.50	450	2001	May 22, 2001	5.32	220
1972	June 21, 1972	3.80	240	2002	April 22, 2002	5.92	300
1973	October 5, 1972	5.80	2,450	2003	September 19, 2003	8.74	790
1974	December 26, 1973	5.05	775	2004	September 28, 2004	7.15	1,660
1975	March 19, 1975	4.71	566	2005	March 28, 2005	4.70	168
1976	October 18, 1975	3.74	228	2006	June 27, 2006	7.19	1,730
1977	April 5, 1977	4.94	704	2007	November 16, 2006	6.87	1,290

<sup>1</sup>Discharge is less than indicated value, which is minimum recordable discharge at this site.

<sup>2</sup>Month or day of occurrence is unknown or not exact.

**Table 241. 02015700 Bullpasture River at Williamsville, Va.**

LOCATION.--Latitude 38°11'43", Longitude 079°34'14", NAD27, Bath County, Hydrologic Unit 02080201, on left bank 15 ft downstream from bridge on U.S. Highway 614 at Williamsville and 0.62 mi upstream from mouth.

DRAINAGE AREA.--110 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 1,610.14 ft NGVD of 1929. Prior to July 12, 1974, water-stage recorder at site 700 ft upstream at datum of 1,621.98 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 2,790 ft<sup>3</sup>/s and extended above on basis of slope-area measurement at 22,800 ft<sup>3</sup>/s.

BANKFULL STAGE.--4 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Records were provided by the Virginia Department of Environmental Quality - Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1961	February 25, 1961	4.93 <sup>1</sup>	3,350	1985	May 3, 1985	7.00	4,210
1962	March 21, 1962	4.73 <sup>1</sup>	2,990	1986	November 4, 1985	14.39	22,900
1963	March 12, 1963	4.82 <sup>1</sup>	3,080	1987	April 15, 1987	6.23	4,260
1964	March 5, 1964	5.40 <sup>1</sup>	4,260	1988	January 20, 1988	4.91	2,380
1965	February 7, 1965	4.83 <sup>1</sup>	3,170	1989	May 5, 1989	5.28	2,870
1966	February 13, 1966	4.62 <sup>1</sup>	2,900	1990	November 16, 1989	5.73	3,520
1967	March 7, 1967	5.91 <sup>1</sup>	6,230	1991	March 4, 1991	5.95	3,840
1968	March 12, 1968	3.36 <sup>1</sup>	1,780	1992	April 21, 1992	7.37	6,170
1969	August 20, 1969	4.03 <sup>1</sup>	2,820	1993	November 23, 1992	8.36	8,100
1970	July 9, 1970	5.04 <sup>1</sup>	4,530	1994	May 8, 1994	6.87	5,270
1971	February 13, 1971	4.46 <sup>1</sup>	3,540	1995	January 15, 1995	6.37	4,480
1972	June 21, 1972	4.54 <sup>1</sup>	3,720	1996	September 6, 1996	12.50	21,600
1973	October 5, 1972	6.03 <sup>1</sup>	6,490	1997	December 1, 1996	6.77	4,600
1974	December 26, 1973	6.37 <sup>1,2</sup>	7,230	1998	January 8, 1998	8.18	7,460
1975	March 19, 1975	7.18	4,300	1999	January 24, 1999	4.14	1,260
1976	October 18, 1975	7.85	5,650	2000	March 12, 2000	5.55	2,750
1977	April 5, 1977	9.25	9,430	2001	May 22, 2001	5.64	2,870
1978	January 26, 1978	8.92	8,430	2002	April 22, 2002	6.60	4,310
1979	March 5, 1979	7.37	4,970	2003	September 19, 2003	8.57	8,400
1980	April 9, 1980	7.56	5,350	2004	September 8, 2004	7.20	5,390
1981	February 11, 1981	5.49	1,890	2005	March 28, 2005	5.08	2,180
1982	March 20, 1982	8.39	7,060	2006	June 27, 2006	8.40	7,980
1983	April 15, 1983	6.56	3,460	2007	November 16, 2006	8.26	7,650
1984	February 14, 1984	7.06	4,320				

<sup>1</sup>Gage height at different site and (or) datum.

<sup>2</sup>Gage datum changed during this year.

**Table 242.** 02015900 Jerry Branch near Clifton Forge, Va.

LOCATION.--Latitude 37°52'23", Longitude 079°44'36", NAD27, Alleghany County, Hydrologic Unit 02080201, at culvert on State Highway 42, 6 mi northeast of Clifton Forge.

DRAINAGE AREA.--0.56 mi<sup>2</sup>.

GAGE.--Water-stage recorder (flood-hydrograph recorder). Datum of gage is 1,137.44 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--3 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1967	March 7, 1967	4.15	84.0	1972	June 21, 1972	6.43	201
1968		3.00 <sup>1</sup>	38.0 <sup>2,3</sup>	1973	May 28, 1973	6.30	193
1969	August 20, 1969	7.50	270	1974	May 12, 1974	5.90	170
1970	December 31, 1969	3.50	56.0	1975	March 19, 1975	3.23	45.0
1971	February 13, 1971	3.44	54.0	1976	June 16, 1976	3.57	59.0

<sup>1</sup>Gage height below minimum recordable elevation.

<sup>2</sup>Discharge is less than indicated value, which is minimum recordable discharge at this site.

<sup>3</sup>Month or day of occurrence is unknown or not exact.

**Table 243. 02016000 Cowpasture River near Clifton Forge, Va.**

LOCATION.--Latitude 37°47'30", Longitude 079°45'35", NAD27, Alleghany County, Hydrologic Unit 02080201, on left bank 100 ft downstream from bridge on State Highway 633, 2.5 mi upstream from confluence with Jackson River, and 4.0 mi southeast of Clifton Forge.

DRAINAGE AREA.--461 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 1,006.93 ft NGVD of 1929 (levels by U.S. Army Corps of Engineers). Prior to October 1934, nonrecording gage at site 100 ft upstream at present datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 12,200 ft<sup>3</sup>/s and extended above on basis of slope-area measurement at 25,000 ft<sup>3</sup>/s and 40,900 ft<sup>3</sup>/s.

BANKFULL STAGE.--6 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Records were provided by the Virginia Department of Environmental Quality - Water Division from Oct. 1, 1984, to Sep. 30, 1989.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1913	March 1913	20.80 <sup>1</sup>	45,000 <sup>23</sup>	1967	March 8, 1967	12.27	14,300
1926	January 19, 1926	9.10 <sup>1</sup>	7,610	1968	March 13, 1968	8.17	6,590
1927	December 26, 1926	10.00 <sup>1</sup>	9,240	1969	August 20, 1969	15.70	25,000
1928	October 13, 1927	9.70 <sup>1</sup>	8,680	1970	December 31, 1969	10.22	10,300
1929	February 27, 1929	9.00 <sup>1</sup>	7,440	1971	May 31, 1971	11.85	13,800
1930	November 18, 1929	9.88 <sup>1</sup>	9,050	1972	June 22, 1972	12.63	15,700
1931	March 29, 1931	5.99 <sup>1</sup>	3,090	1973	October 6, 1972	11.43	12,800
1932	February 5, 1932	9.90 <sup>1</sup>	9,050	1974	December 27, 1973	13.85	19,000
1933	October 18, 1932	9.15 <sup>1</sup>	7,780	1975	March 20, 1975	11.41	12,800
1934	March 28, 1934	8.80 <sup>1</sup>	7,100	1976	January 1, 1976	10.53	11,000
1935	January 23, 1935	13.76	17,700	1977	April 5, 1977	12.40	15,100
1936	March 18, 1936	18.62	34,200	1978	January 26, 1978	12.34	15,000
1937	January 21, 1937	11.57	12,500	1979	February 26, 1979	10.72	11,300
1938	October 20, 1937	11.56	12,500	1980	April 9, 1980	10.66	11,200
1939	February 4, 1939	11.10	11,400	1981	May 28, 1981	8.01	6,060
1940	May 31, 1940	11.09	11,400	1982	June 14, 1982	12.00	14,400
1941	April 6, 1941	6.61	3,830	1983	April 25, 1983	9.51	8,780
1942	May 17, 1942	14.07	18,500	1984	February 15, 1984	11.69	13,600
1943	March 14, 1943	10.93	11,000	1985	November 29, 1984	7.86	5,810
1944	May 7, 1944	8.31	6,280	1986	November 5, 1985	19.15	40,900
1945	September 19, 1945	8.67	6,930	1987	April 16, 1987	12.44	15,500
1946	January 8, 1946	9.77	8,860	1988	January 20, 1988	8.07	6,620
1947	March 15, 1947	9.22	7,780	1989	May 6, 1989	9.98	10,500
1948	February 15, 1948	9.08	7,610	1990	November 16, 1989	10.07	10,700
1949	June 18, 1949	13.32	16,400	1991	March 4, 1991	10.79	12,400
1950	September 13, 1950	12.17	13,900	1992	April 22, 1992	14.11	21,800

1951	June 13, 1951	11.98	13,400	1993	March 5, 1993	12.17	14,500
1952	March 12, 1952	12.18	13,900	1994	May 8, 1994	10.02	9,580
1953	February 22, 1953	12.63	14,800	1995	June 23, 1995	13.28	17,500
1954	March 2, 1954	11.43	12,100	1996	September 7, 1996	16.91	30,100
1955	March 6, 1955	11.15	11,600	1997	July 24, 1997	12.37	15,000
1956	March 15, 1956	6.97	4,350	1998	January 8, 1998	14.39	20,800
1957	April 6, 1957	11.57	12,500	1999	January 24, 1999	7.55	5,210
1958	April 1, 1958	7.68	5,850	2000	February 19, 2000	7.88	5,710
1959	June 3, 1959	9.52	8,950	2001	May 22, 2001	9.69	8,910
1960	March 31, 1960	10.79	11,100	2002	April 22, 2002	10.26	10,200
1961	February 26, 1961	8.15	6,320	2003	September 20, 2003	12.68	17,100
1962	October 21, 1961	11.68	13,100	2004	November 20, 2003	12.52	16,600
1963	March 13, 1963	10.80	11,400	2005	March 29, 2005	7.45	5,610
1964	March 6, 1964	9.30	8,570	2006	June 28, 2006	13.49	19,400
1965	February 8, 1965	9.50	8,950	2007	November 17, 2006	12.64	17,000
1966	February 14, 1966	9.75	9,520				

<sup>1</sup>Gage height at different site and (or) datum.

<sup>2</sup>Discharge is a historic peak.

<sup>3</sup>Month or day of occurrence is unknown or not exact.

**Table 244. 02016500 James River at Lick Run, Va.**

LOCATION.--Latitude 37°46'25", Longitude 079°47'05", NAD27, Botetourt County, Hydrologic Unit 02080201, on right bank at community of Lick Run, 1,000 ft downstream from bridge on U.S. Highway 220, 0.9 mi downstream from confluence of Cowpasture and Jackson Rivers, 1.8 mi south of Iron Gate, and at mile 342.3.

DRAINAGE AREA.--1,371 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 978.30 ft NGVD of 1929 (levels by U.S. Army Corps of Engineers). Prior to Oct. 26, 1928, nonrecording gage at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 65,700 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--10 ft.

REGULATION.--High-flow conditions at this site are considered regulated after 1978. Flow regulated since December 1979 by Lake Moomaw 43.7 mi upstream from station; since October 1984 by Back Creek Lake 71.7 mi upstream, and since January 1985 by Little Back Creek Lake 74.8 mi upstream. Usable capacity 526,900 acre-ft.

REMARKS.--Records were provided by the Virginia Department of Environmental Quality - Water Division from July 1, 1957, to Sep. 30, 1989.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1878	November 1877	33.00	120,000 <sup>1,2,3</sup>	1965	February 8, 1965	16.50	27,000
1913	March 1913	30.40	98,000 <sup>1,2,3</sup>	1966	February 14, 1966	16.34	26,400
1924	May 1924	24.60	57,500 <sup>1,2</sup>	1967	March 8, 1967	22.30	42,800
1925	April 30, 1925	6.30	5,370	1968	March 13, 1968	12.58	17,000
1926	January 19, 1926	14.47	20,600	1969	August 20, 1969	25.53	58,500
1927	December 26, 1926	20.00	37,000	1970	December 31, 1969	19.88	34,800
1928	October 13, 1927	12.50	17,000	1971	February 14, 1971	19.61	33,900
1929	February 28, 1929	15.10	21,800	1972	June 21, 1972	27.01	66,200
1930	November 18, 1929	17.75	31,400	1973	May 28, 1973	19.44	33,500
1931	March 29, 1931	8.32	8,890	1974	December 27, 1973	24.77	54,200
1932	February 5, 1932	18.14	32,300	1975	March 20, 1975	17.79	28,900
1933	March 20, 1933	13.08	17,800	1976	January 1, 1976	16.40	25,600
1934	March 28, 1934	14.07	19,900	1977	April 5, 1977	22.54	43,700
1935	January 23, 1935	22.98	53,000	1978	January 26, 1978	21.66	40,600
1936	March 18, 1936	25.65	66,000	1979	February 25, 1979	18.04	29,400
1937	January 21, 1937	17.45	28,700	1980	April 15, 1980	14.76	21,900 <sup>4</sup>
1938	October 28, 1937	15.78	24,800	1981	May 28, 1981	13.43	18,800 <sup>4</sup>
1939	January 31, 1939	16.98	27,700	1982	June 13, 1982	17.79	28,900 <sup>4</sup>
1940	May 31, 1940	16.12	25,500	1983	April 10, 1983	13.43	18,800 <sup>4</sup>
1941	April 6, 1941	8.39	8,390	1984	February 14, 1984	17.30	27,800 <sup>4</sup>
1942	May 17, 1942	21.10	43,500	1985	August 19, 1985	9.99	11,300 <sup>4</sup>
1943	March 14, 1943	17.60	30,800	1986	November 5, 1985	30.22	87,500 <sup>4</sup>
1944	May 25, 1944	10.22	12,000	1987	April 16, 1987	20.23	38,000 <sup>4</sup>
1945	September 19, 1945	10.40	12,400	1988	January 21, 1988	7.95	8,670 <sup>4</sup>
1946	January 8, 1946	16.00	26,100	1989	May 6, 1989	13.69	21,200 <sup>4</sup>

1947	March 15, 1947	13.00	18,200	1990	January 1, 1990	13.23	20,000 <sup>4</sup>
1948	February 15, 1948	16.10	26,400	1991	January 12, 1991	14.73	23,600 <sup>4</sup>
1949	April 14, 1949	20.45	40,600	1992	April 22, 1992	18.97	34,500 <sup>4</sup>
1950	February 2, 1950	15.56	24,600	1993	March 4, 1993	18.04	32,000 <sup>4</sup>
1951	December 8, 1950	20.45	38,300	1994	February 23, 1994	11.78	16,800 <sup>4</sup>
1952	March 12, 1952	19.07	34,300	1995	January 15, 1995	19.26	35,400 <sup>4</sup>
1953	February 22, 1953	20.55	38,900	1996	January 19, 1996	25.14	57,800 <sup>3,4</sup>
1954	March 2, 1954	18.82	33,400	1997	December 2, 1996	16.43	27,900 <sup>4</sup>
1955	March 6, 1955	19.50	35,500	1998	January 8, 1998	18.43	33,000 <sup>4</sup>
1956	March 15, 1956	10.78	13,300	1999	January 24, 1999	8.86	10,200 <sup>4</sup>
1957	April 6, 1957	19.56	35,800	2000	February 19, 2000	10.79	14,600 <sup>4</sup>
1958	March 31, 1958	14.82	22,500	2001	May 22, 2001	11.88	17,100 <sup>4</sup>
1959	June 3, 1959	13.18	18,600	2002	April 22, 2002	11.86	17,000 <sup>4</sup>
1960	March 31, 1960	19.65	35,400	2003	February 22, 2003	19.92	37,600 <sup>4</sup>
1961	February 26, 1961	13.08	18,300	2004	September 29, 2004	21.69	43,700 <sup>4</sup>
1962	October 21, 1961	19.87	36,200	2005	March 29, 2005	11.53	15,100 <sup>4</sup>
1963	March 12, 1963	22.60	45,200	2006	June 27, 2006	19.79	37,100 <sup>4</sup>
1964	March 6, 1964	16.07	25,900	2007	April 16, 2007	17.18	29,200 <sup>4</sup>

<sup>1</sup>Discharge is a historic peak.

<sup>2</sup>Month or day of occurrence is unknown or not exact.

<sup>3</sup>Discharge is an estimate.

<sup>4</sup>Discharge is affected by regulation or diversion.

**Table 245. 02017000 Meadow Creek at New Castle, Va.**

LOCATION.--Latitude 37°29'35", Longitude 080°06'35", NAD27, Craig County, Hydrologic Unit 02080201, on left bank at southern town limits of New Castle, 800 ft upstream from New Castle-Salem highway bridge, and 0.6 mi upstream from mouth.

DRAINAGE AREA.--13.3 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 1,337.38 ft NGVD of 1929. Prior to June 21, 1937, water-stage recorder at site 400 ft downstream at different datum. June 21, 1937, to Sept. 30, 1952, water-stage recorder and V-notch sharp-crested weir at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 287 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1930	October 2, 1929	3.64 <sup>1</sup>	242	1944	February 29, 1944	3.41	100
1931	August 23, 1931	2.71 <sup>1</sup>	130	1945	September 18, 1945	3.68	148
1932	March 28, 1932	2.38 <sup>1</sup>	75.0	1946	January 8, 1946	3.74	161
1933	October 18, 1932	3.10 <sup>1</sup>	152	1947	January 20, 1947	3.58	128
1934	March 4, 1934	3.02 <sup>1</sup>	118	1948	November 3, 1947	4.15	277
1935	January 23, 1935	3.60 <sup>1</sup>	200	1949	July 15, 1949	4.22	303
1936	March 17, 1936	3.65 <sup>1</sup>	218	1950	November 2, 1949	3.84	187
1937	January 20, 1937	3.12 <sup>1</sup>	152	1951	March 31, 1951	4.08	253
1938	August 10, 1938	3.35	90.0	1952	March 11, 1952	3.98	222
1939	August 19, 1939	3.45	106	1953	March 24, 1953	3.40	95.0
1940	August 16, 1940	4.80	700	1954	March 1, 1954	4.00	227
1941	July 8, 1941	4.17	284	1955	March 1, 1955	4.18	295
1942	May 16, 1942	4.10	259	1957	April 5, 1957	4.00	227 <sup>2</sup>
1943	December 30, 1942	3.83	182				

<sup>1</sup>Gage height at different site and (or) datum.

<sup>2</sup>Discharge is a historic peak.

**Table 246. 02017300 Craig Creek at New Castle, Va.**

LOCATION.--Latitude 37°30'06", Longitude 080°06'18", NAD27, Craig County, Hydrologic Unit 02080201, on left upstream pier of old bridge, about 20 ft downstream from new bridge on State Highway 616, 800 ft upstream from Johns Creek, and 0.3 mi southeast of New Castle.

DRAINAGE AREA.--112 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 1,245.69 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by step-backwater computation.

BANKFULL STAGE.--8 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1967	March 7, 1967	10.15	3,250	1982	June 13, 1982	10.09	3,190
1968		8.50 <sup>1</sup>	1,750 <sup>2,3</sup>	1983	March 18, 1983	12.11	5,780
1969	October 19, 1968	9.79	2,900	1984	May 6, 1984	10.69	3,830
1970	December 31, 1969	10.49	3,600	1985	August 18, 1985	11.93	5,500
1971	May 30, 1971	10.09	3,200	1986	November 4, 1985	19.55	24,400
1972	June 21, 1972	17.09	16,500	1987	April 16, 1987	12.04	5,660
1973	May 28, 1973	12.65	6,600	1988		8.49 <sup>1</sup>	1,810 <sup>2,3</sup>
1974	December 26, 1973	9.06	2,200	1989	September 22, 1989	11.54	4,960
1975	March 19, 1975	12.51	6,420	1990	November 16, 1989	10.09	3,190
1976	December 31, 1975	9.36	2,490	1991	January 11, 1991	10.62	3,740
1977	April 5, 1977	11.57	5,000	1992	January 4, 1992	11.19	4,470
1978	April 26, 1978	14.35	9,870	1993	March 4, 1993	12.04	5,660
1979	September 21, 1979	10.96	4,150	1994	August 18, 1994	13.70	8,530
1980	April 14, 1980	11.14	4,400	1995	January 15, 1995	13.77	8,660
1981	May 28, 1981	11.24	4,540				

<sup>1</sup>Gage height below minimum recordable elevation.

<sup>2</sup>Discharge is less than indicated value, which is minimum recordable discharge at this site.

<sup>3</sup>Month or day of occurrence is unknown or not exact.

**Table 247.** 02017400 Johns Creek tributary near New Castle, Va.

LOCATION.--Latitude 37°30'28", Longitude 080°11'23", NAD27, Craig County, Hydrologic Unit 02080201, at culvert on State Highway 311, 4.2 mi west of New Castle.

DRAINAGE AREA.--1.46 mi<sup>2</sup>.

GAGE.--Water-stage recorder (flood-hydrograph recorder). Datum of gage is 1,551.65 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--4 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1967	March 7, 1967	3.86	40.0	1972	June 21, 1972	8.48	354
1968	March 12, 1968	3.38	25.0	1973	March 16, 1973	8.12	328
1969	August 20, 1969	4.05	48.0	1974	December 26, 1973	5.54	145
1970	December 31, 1969	4.00	46.0	1975	March 19, 1975	5.05	105
1971	May 30, 1971	4.32	60.0	1976	June 16, 1976	5.05	105

**Table 248. 02017500 Johns Creek at New Castle, Va.**

LOCATION.--Latitude 37°30'22", Longitude 080°06'25", NAD27, Craig County, Hydrologic Unit 02080201, on right bank 20 ft downstream from bridge on State Highway 615 at New Castle and 1,700 ft upstream from mouth.

DRAINAGE AREA.--105 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 1,254.30 ft NGVD of 1929. Prior to June 7, 1937, nonrecording gage at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 3,200 ft<sup>3</sup>/s and extended above on basis of slope-area measurement at 8,000 ft<sup>3</sup>/s.

BANKFULL STAGE.--8 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Subsequent to June 30, 1957, records were provided by the Virginia Department of Environmental Quality - Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1927	February 23, 1927	9.40	4,310	1968	March 13, 1968	6.95	1,020
1928	August 16, 1928	10.20	6,290	1969	October 19, 1968	6.60	855
1929	March 1, 1929	7.70	1,790	1970	December 31, 1969	8.92	2,500
1930	October 3, 1929	9.40	4,310	1971	February 13, 1971	8.88	2,500
1931	May 8, 1931	7.00	1,240	1972	June 21, 1972	12.48	7,960
1932	March 28, 1932	7.70	1,790	1973	May 28, 1973	10.63	5,000
1933	December 28, 1932	7.80	1,880	1974	December 26, 1973	9.57	3,750
1934	March 27, 1934	9.20	3,890	1975	March 14, 1975	9.71	3,690
1935	January 23, 1935	10.80	8,000	1976	June 17, 1976	8.83	2,690
1936	March 17, 1936	9.70	5,000	1977	April 5, 1977	10.25	4,350
1937	January 20, 1937	8.00	2,150	1978	April 26, 1978	10.33	4,500
1938	October 27, 1937	8.85	3,180	1979	February 25, 1979	9.14	2,760
1939	January 30, 1939	8.22	2,370	1980	April 14, 1980	9.07	2,760
1940	August 15, 1940	9.53	4,640	1981	May 28, 1981	9.94	3,960
1941	July 7, 1941	8.73	2,960	1982	June 13, 1982	9.37	3,100
1942	May 16, 1942	9.17	3,790	1983	March 18, 1983	9.79	3,740
1943	December 30, 1942	9.15	3,790	1984	May 6, 1984	8.20	1,880
1944	May 28, 1944	8.35	2,530	1985	August 18, 1985	8.28	1,940
1945	March 6, 1945	8.14	2,230	1986	November 4, 1985	11.96	7,010
1946	January 8, 1946	8.15	2,230	1987	April 16, 1987	10.01	4,060
1947	March 14, 1947	7.95	2,020	1988	January 20, 1988	6.09	760
1948	February 14, 1948	9.20	3,890	1989	September 22, 1989	9.27	3,060
1949	December 4, 1948	9.58	4,750	1990	November 16, 1989	8.33	2,080
1950	May 3, 1950	8.75	3,050	1991	January 11, 1991	8.79	2,490
1951	March 31, 1951	9.38	4,310	1992	April 21, 1992	9.88	3,870
1952	March 11, 1952	9.71	5,000	1993	March 4, 1993	9.51	3,370
1953	March 24, 1953	9.64	4,880	1994	August 17, 1994	10.76	5,190

1954	March 1, 1954	8.79	3,100	1995	January 15, 1995	10.57	4,900
1955	March 1, 1955	9.16	3,760	1996	January 19, 1996	11.78	6,760 <sup>1</sup>
1956	April 16, 1956	8.52	2,180	1997	December 1, 1996	9.97	4,010
1957	April 5, 1957	10.03	3,420	1998	April 19, 1998	9.30	3,100
1958	April 23, 1958	8.37	2,100	1999	January 24, 1999	5.60	520
1959	April 13, 1959	8.00	1,810	2000	April 18, 2000	8.19	1,990
1960	April 4, 1960	9.21	2,800	2001	May 23, 2001	8.38	2,150
1961	February 26, 1961	8.52	2,100	2002	May 3, 2002	7.99	1,830
1962	December 18, 1961	8.68	2,300	2003	February 22, 2003	11.05	5,620
1963	March 12, 1963	10.58	4,500	2004	September 28, 2004	12.87	6,810
1964	January 25, 1964	7.62	1,390	2005	March 28, 2005	8.88	2,470
1965	February 8, 1965	9.56	3,200	2006	June 27, 2006	9.25	2,780
1966	February 14, 1966	9.62	3,200	2007	April 15, 2007	9.15	2,690
1967	March 7, 1967	8.40	2,000				

---

<sup>1</sup>Discharge is a maximum daily average.

**Table 249. 02017700 Craig Creek tributary near New Castle, Va.**

LOCATION.--Latitude 37°33' 21", Longitude 079°59'52", NAD27, Craig County, Hydrologic Unit 02080201, on right upstream wingwall of culvert on State Highway 606, 0.4 mi upstream from mouth, and 7.1 mi northeast of New Castle.

DRAINAGE AREA.--2.05 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 1,180 ft NGVD of 1929. Prior to August 17, 1978, flood-hydrograph recorder at present site and datum.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1968	March 13, 1968	3.55	58.0	1987	April 16, 1987	8.11	395
1969	October 19, 1968	6.00	220	1988	January 20, 1988	3.49	54.0
1970	December 31, 1969	4.40	104	1989	May 6, 1989	6.65	272
1971	October 31, 1970	6.38	252	1990	November 16, 1989	4.76	126
1972	June 21, 1972	7.85	372	1991	January 11, 1991	5.30	164
1973	May 28, 1973	9.70	550	1992	April 21, 1992	10.24	606
1974	May 12, 1974	6.30	244	1993	March 4, 1993	6.42	254
1975	March 19, 1975	6.00	220	1994	August 18, 1994	6.54	263
1976	October 18, 1975	4.65	119	1995	January 15, 1995	9.98	577
1977	March 13, 1977	6.70	276	1996	January 19, 1996	9.18	497
1978	April 26, 1978	5.90	212	1997	December 1, 1996	4.62	109
1979	September 21, 1979	9.99	579	2000	April 17, 2000	4.81	124
1980	April 14, 1980	9.53	533	2001	May 25, 2001	8.20	403
1981	May 28, 1981	3.50	55.0	2002		2.79 <sup>1</sup>	10.5 <sup>2,3</sup>
1982	February 3, 1982	3.40	50.0	2003	February 22, 2003	7.29	323
1983	March 18, 1983	3.56	58.0	2004	September 28, 2004	7.45	336
1984	May 6, 1984	3.63	62.0	2005	March 28, 2005	3.39	28.8
1985	February 2, 1985	3.46	53.0	2006	January 14, 2006	8.53	433
1986	November 4, 1985	13.45	1,100	2007	November 16, 2006	7.18	314

<sup>1</sup>Gage height below minimum recordable elevation.

<sup>2</sup>Discharge is less than indicated value, which is minimum recordable discharge at this site.

<sup>3</sup>Month or day of occurrence is unknown or not exact.

**Table 250. 02018000 Craig Creek at Parr, Va.**

LOCATION.--Lat 37°39'57", long 79°54'42" referenced to North American Datum of 1927, Botetourt County, Hydrologic Unit 02080201, on right bank 12 ft upstream from abandoned railway bridge, 700 ft downstream from Stony Run, 0.2 mi northeast of Horton, 0.4 mi northwest of Parr, and at mile 12.0.

DRAINAGE AREA.--329 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 992.50 ft NGVD of 1929 (levels by U.S. Army Corps of Engineers). Prior to June 7, 1937, nonrecording gage at present site and datum.

STAGE-DISCHARGE RELATION. -- Defined by current-meter measurements below 17,500 and extended above on basis of slope-area measurement at 58,500.

BANKFULL STAGE. -- 7 ft.

REMARKS.-- Records were provided by the Virginia Water Control Board from July 1, 1957, to September 30, 1989.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1926	January 19, 1926	9.53	5,820	1967	March 7, 1967	10.62	6,620
1927	December 26, 1926	12.60	11,200	1968	March 13, 1968	8.30	3,360
1928	August 17, 1928	15.60	16,900	1969	October 20, 1968	9.80	5,340
1929	February 27, 1929	8.80	4,650	1970	December 31, 1969	11.05	7,300
1930	October 22, 1929	11.30	8,660	1971	May 30, 1971	11.23	7,640
1931	August 23, 1931	7.35	2,700	1972	June 21, 1972	19.29	20,200
1932	May 1, 1932	9.00	4,950	1973	May 28, 1973	13.04	11,200
1933	October 18, 1932	11.40	8,830	1974	December 27, 1973	10.72	6,790
1934	March 28, 1934	11.20	8,490	1975	March 15, 1975	12.68	10,600
1935	January 23, 1935	170.00	19,100	1976	June 21, 1976	9.88	5,500
1936	March 18, 1936	14.26	14,000	1977	April 5, 1977	12.21	9,600
1937	January 21, 1937	10.32	7,400	1978	April 27, 1978	14.79	15,600
1938	October 20, 1937	11.48	9,000	1979	February 26, 1979	11.40	8,010
1939	January 31, 1939	9.18	5,330	1980	April 15, 1980	12.10	9,400
1940	August 15, 1940	15.02	15,200	1981	May 29, 1981	11.10	7,500
1941	July 8, 1941	13.35	12,300	1982	June 14, 1982	10.63	6,670
1942	May 16, 1942	13.43	12,300	1983	March 19, 1983	12.40	10,000
1943	April 20, 1943	10.30	7,030	1984	February 14, 1984	11.63	8,460
1944	February 18, 1944	8.99	4,950	1985	August 19, 1985	11.06	7,400
1945	September 18, 1945	9.32	5,430	1986	November 4, 1985	24.76	58,500
1946	January 8, 1946	9.40	5,590	1987	April 16, 1987	13.67	12,800
1947	January 21, 1947	9.11	5,110	1988	January 21, 1988	6.84	1,840
1948	November 3, 1947	11.75	9,510	1989	September 23, 1989	11.07	7,530
1949	December 4, 1948	12.95	11,600	1990	November 17, 1989	10.05	5,890
1950	May 3, 1950	9.92	6,710	1991	January 12, 1991	11.15	7,660
1951	December 8, 1950	12.24	10,200	1992	April 22, 1992	17.29	23,600
1952	March 11, 1952	10.60	7,510	1993	March 5, 1993	12.95	11,100
1953	March 24, 1953	11.93	9,680	1994	August 18, 1994	13.06	11,300
1954	March 1, 1954	13.42	12,000	1995	January 15, 1995	15.93	19,200

1955	March 7, 1955	12.40	10,100	1996	January 19, 1996	16.71	21,600
1956	April 16, 1956	9.15	4,280	1997	December 2, 1996	12.62	10,400
1957	April 5, 1957	12.10	9,550	1998	January 8, 1998	11.83	8,820
1958	May 6, 1958	9.62	5,120	1999	September 6, 1999	7.35	2,100
1959	April 13, 1959	9.40	4,860	2000	April 18, 2000	11.00	7,160
1960	October 1, 1959	10.59	6,620	2001	March 30, 2001	9.30	4,370
1961	February 26, 1961	8.37	3,480	2002	May 3, 2002	8.52	3,340
1962	December 19, 1961	10.02	5,660	2003	February 23, 2003	15.94	19,200
1963	March 13, 1963	11.75	8,800	2004	September 29, 2004	19.87	23,500
1964	April 14, 1964	9.64	5,030	2005	March 29, 2005	10.76	6,450
1965	February 8, 1965	10.40	6,300	2006	June 28, 2006	12.39	8,820
1966	February 14, 1966	10.83	6,960	2007	April 16, 2007	10.43	6,010

---

**Table 251. 02018500 Catawba Creek near Catawba, Va.**

LOCATION.--Latitude 37°28'05", Longitude 080°00'20", NAD27, Botetourt County, Hydrologic Unit 02080201, on right bank 80 ft upstream from bridge on State Highway 779, 1.0 mi downstream from Little Catawba Creek, 1.9 mi west of Haymakertown, and 8.2 mi northeast of Catawba.

DRAINAGE AREA.--34.3 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 1,299.96 ft NGVD of 1929. Prior to Aug. 1, 1953, nonrecording gage at site 80 ft downstream at present datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 1,650 ft<sup>3</sup>/s and extended above on basis of slope-area measurement at 7,740 ft<sup>3</sup>/s and 20,100 ft<sup>3</sup>/s.

BANKFULL STAGE.--5 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--At a point 5.3 mi upstream from station, there is a trans-mountain diversion through a tunnel into the Roanoke River basin for the municipal water supply of the city of Roanoke. This diversion was established in December of 1974. Subsequent to June 30, 1981, records were provided by the Virginia Department of Environmental Quality - Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1940	August 1940	13.26 <sup>1</sup>		1976	May 29, 1976	4.49	963
1944	February 18, 1944	3.20 <sup>1</sup>	790	1977	April 5, 1977	4.99	1,350
1945	September 18, 1945	3.90 <sup>1</sup>	1,330	1978	April 26, 1978	7.43	3,720
1946	March 15, 1946	2.80 <sup>1</sup>	560	1979	September 21, 1979	6.15	2,350
1947	January 20, 1947	3.00 <sup>1</sup>	670	1980	April 14, 1980	6.68	2,880
1948	November 3, 1947	3.90 <sup>1</sup>	1,330	1981	May 28, 1981	4.19	762
1949	June 29, 1949	5.60 <sup>1</sup>	3,000	1982	February 3, 1982	3.84	562
1950	May 31, 1950	3.73 <sup>1</sup>	1,090	1983	March 18, 1983	6.46	2,640
1951	December 7, 1950	5.80 <sup>1</sup>	3,300	1984	February 14, 1984	5.64	1,880
1952	September 1, 1952	4.13 <sup>1</sup>	1,380	1985	August 18, 1985	6.69	2,870
1953	March 24, 1953	5.46 <sup>1</sup>	2,870	1986	November 4, 1985	19.19	21,200
1954	March 1, 1954	6.58	2,780	1987	April 16, 1987	7.11	3,320
1955	October 15, 1954	4.72	1,140	1988	November 29, 1987	2.65	145
1956	April 16, 1956	3.68	443	1989	September 16, 1989	5.98	2,180
1957	April 5, 1957	4.52	976	1990	May 22, 1990	4.86	1,250
1958	May 5, 1958	5.30	1,600	1991	January 11, 1991	4.99	1,350
1959	September 30, 1959	6.09	2,290	1992	April 21, 1992	7.86	4,150
1960	February 11, 1960	5.22	1,540	1993	March 4, 1993	5.97	2,170
1961	August 25, 1961	5.70	1,920	1994	August 17, 1994	5.36	1,630
1962	December 18, 1961	4.37	856	1995	June 28, 1995	11.34	8,640
1963	November 9, 1962	5.93	2,130	1996	September 6, 1996	6.96	3,160
1964	April 14, 1964	4.79	1,190	1997	June 1, 1997	9.92	6,680
1965	February 7, 1965	4.81	1,210	1998	March 20, 1998	6.98	2,590
1966	February 13, 1966	4.91	1,290	1999	September 21, 1999	3.83	355
1967	March 7, 1967	5.57	1,820	2000	April 17, 2000	6.03	1,670

1968	March 12, 1968	4.23	744	2001	March 30, 2001	4.09	455
1969	October 19, 1968	4.95	1,320	2002	May 3, 2002	2.32	28
1970	December 31, 1969	4.81	1,210	2003	February 22, 2003	7.68	3,420
1971	May 30, 1971	4.99	1,350	2004	September 28, 2004	10.30	7,640
1972	June 21, 1972	10.35	7,740	2005	March 28, 2005	5.63	1,300
1973	May 28, 1973	8.04	4,460	2006	June 26, 2006	7.33	2,990
1974	July 26, 1974	5.58	1,820	2007	November 16, 2006	5.19	1,040
1975	March 14, 1975	5.83	2,030				

---

<sup>1</sup>Gage height at different site and (or) datum.

**Table 252.** 02018700 Campbell Branch near Fincastle, Va.

LOCATION.--Latitude 37°32'37", Longitude 079°57'28", NAD27, Botetourt County, Hydrologic Unit 02080201, at culvert on State Highway 606, 5.3 mi northwest of Fincastle.

DRAINAGE AREA.--1.50 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is not determined. Prior to Oct. 7, 1973, flood-hydrograph recorder at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--7 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1968		3.00 <sup>1</sup>	100 <sup>2,3</sup>	1972		2.50 <sup>1</sup>	55.0 <sup>2,3</sup>
1969	October 19, 1968	3.50	150	1973	May 28, 1973	3.90	190
1970		3.00 <sup>1</sup>	100 <sup>2,3</sup>	1974		2.50 <sup>1</sup>	55.0 <sup>2,3</sup>
1971		3.00 <sup>1</sup>	100 <sup>2,3</sup>	1975	March 19, 1975	2.55	60.0

<sup>1</sup>Gage height below minimum recordable elevation.

<sup>2</sup>Discharge is less than indicated value, which is minimum recordable discharge at this site.

<sup>3</sup>Month or day of occurrence is unknown or not exact.

**Table 253. 02018800 North Fork near Fincastle, Va.**

LOCATION.--Latitude 37°32'07", Longitude 079°56'03", NAD27, Botetourt County, Hydrologic Unit 02080201, on left upstream wingwall of culvert on State Highway 606, 3.5 mi upstream from mouth, and 3.9 mi northwest of Fincastle.

DRAINAGE AREA.--5.63 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 1,248.65 ft NGVD of 1929. Prior to Aug. 17, 1978, flood-hydrograph recorder at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1969	October 19, 1968	5.15	304	1983	March 18, 1983	7.17	654
1970	December 31, 1969	4.45	203	1984	May 6, 1984	5.55	368
1971	February 13, 1971	5.15	304	1985	February 2, 1985	3.89	126
1972	June 21, 1972	7.00	620	1986	November 4, 1985	10.39	3,470
1973	May 28, 1973	8.10	840	1987	April 16, 1987	10.76	3,870
1974	May 12, 1974	4.85	259	1988	January 20, 1988	3.46	78.0
1975	March 19, 1975	5.57	371	1989	May 6, 1989	5.58	482
1976	May 29, 1976	4.35	189	1990	November 16, 1989	4.88	309
1977	March 13, 1977	6.10	458	1991	January 11, 1991	4.64	253
1978	January 26, 1978	6.25	485	1992	April 21, 1992	5.38	429
1979	September 21, 1979	9.88	1,230	1993	March 4, 1993	7.09	1,030
1981	May 28, 1981	6.44	519	1994	August 17, 1994	5.01	342
1982	February 3, 1982	4.20	168				

**Table 254. 02019000 Catawba Creek near Fincastle, Va.**

LOCATION.--Latitude 37°33'00", Longitude 079°50'05", NAD27, Botetourt County, Hydrologic Unit 02080201, at highway bridge at Kyles Mills, 4 mi northeast of Fincastle.

DRAINAGE AREA.--104 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 994.05 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 1,600 ft<sup>3</sup>/s and extended to 7,700 ft<sup>3</sup>/s on basis of velocity-area studies and logarithmic plotting.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Flood of August 1928 highest in memory from information by local residents while gage was in operation. Flood of November 1985 was probably higher but no data available for comparison.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1928	August 1928	20.00	7,700 <sup>1</sup>	1933	October 17, 1932	15.20	3,890
1929	February 28, 1929	10.50	1,550	1934	March 4, 1934	9.60	1,330
1930	October 2, 1929	15.00	3,750	1935	January 23, 1935	18.02	6,000
1931	August 2, 1931	10.00	1,430	1936	March 17, 1936	14.27	3,330
1932	March 6, 1932	10.40	1,520	1937	January 2, 1937	19.40	7,160

<sup>1</sup>Month or day of occurrence is unknown or not exact.

**Table 255. 02019400 Mill Creek near Buchanan, Va.**

(Formerly published as Looney Mill Creek near Buchanan.)

LOCATION.--Latitude 37°29'48", Longitude 079°45'28", NAD27, Botetourt County, Hydrologic Unit 02080201, on right downstream abutment of bridge on State Highway 636, 300 ft southeast of U.S. Highway 11, and 5 mi southwest of Buchanan.

DRAINAGE AREA.--29.3 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 950 ft NGVD of 1929, from topographic map. Sep. 13, 1965, to Oct. 6, 1970, flood-hydrograph recorder at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 30 ft<sup>3</sup>/s and by contracted-opening measurements at 6,990 ft<sup>3</sup>/s and 7,680 ft<sup>3</sup>/s.

BANKFULL STAGE.--10 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1928	August 1928	14.00	18,000 <sup>1,2</sup>	1962	December 18, 1961	5.50	1,220
1950	September 10, 1950	10.76	7,100	1963	July 28, 1963	7.75	2,800
1951	December 7, 1950	7.60	2,650	1964	March 6, 1964	6.20	1,620
1952	September 1, 1952	7.20	2,300	1965	February 7, 1965	5.50	1,220
1953	March 24, 1953	6.80	2,000	1966	September 14, 1966	7.00	2,200
1954		5.20 <sup>3</sup>	1,100 <sup>2,4</sup>	1967	March 7, 1967	9.01	4,000
1955	October 15, 1954	10.82	7,200	1968		5.40 <sup>3</sup>	1,200 <sup>2,4</sup>
1956		5.20 <sup>3</sup>	1,100 <sup>2,4</sup>	1969	August 20, 1969	6.05	1,550
1957	September 14, 1957	6.29	1,700	1970		5.40 <sup>3</sup>	1,200 <sup>2,4</sup>
1958	May 5, 1958	6.25	1,650	1971	February 13, 1971	6.28	1,670
1959	September 30, 1959	8.05	3,100	1972	June 21, 1972	9.08	4,370
1960	February 3, 1960	8.10	3,150	1973	May 28, 1973	10.19	6,100
1961	August 25, 1961	10.83	7,200	1974		5.40 <sup>3</sup>	1,200 <sup>2,4</sup>

<sup>1</sup>Discharge is a historic peak.

<sup>2</sup>Month or day of occurrence is unknown or not exact.

<sup>3</sup>Gage height below minimum recordable elevation.

<sup>4</sup>Discharge is less than indicated value, which is minimum recordable discharge at this site.

**Table 256. 02019500 James River at Buchanan, Va.**

LOCATION.--Latitude 37°31'50", Longitude 079°40'45", NAD27, Botetourt County, Hydrologic Unit 02080201, on left bank 300 ft upstream from bridge on U.S. Highway 11 at Buchanan, 1,000 ft upstream from Purgatory Creek, 1.5 mi downstream from Looney Creek, and at mile 306.4.

DRAINAGE AREA.--2,073 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 802.90 ft NGVD of 1929. Prior to July 1, 1927, nonrecording gage at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 110,000 ft<sup>3</sup>/s and extended above on basis of records for other stations in James River basin.

BANKFULL STAGE.--15 ft.

REGULATION.--High-flow conditions at this site are considered regulated after 1978. Flow regulated since December 1979 by Lake Moomaw, 79.6 mi upstream; since October 1984 by Back Creek Lake 107.6 mi upstream, and since January 1985 by Little Back Creek Lake 110.7 mi upstream. Usable capacity 526,900 acre-ft.

REMARKS.--Gage-height record for October 1892 to July 1927 provided by the National Weather-Service. Prior to flood of November 1985, the flood of November 1877 was reported by local residents to have been the highest since at least 1870.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1878	November 1877	34.90	142,000 <sup>1,2</sup>	1949	April 14, 1949	20.18	54,800
1886	April 1886	27.00	85,000 <sup>1,2</sup>	1950	February 2, 1950	14.73	33,300
1889	March 1889	27.00	85,000 <sup>1,2</sup>	1951	December 8, 1950	18.95	49,800
1893	May 4, 1893	15.00	36,000	1952	March 12, 1952	17.73	42,000
1894	October 14, 1893	11.00	22,000	1953	February 22, 1953	19.15	48,000
1895	April 9, 1895	19.00	49,800	1954	March 2, 1954	18.75	46,400
1896	September 30, 1896	15.50	38,000	1955	March 7, 1955	19.36	48,800
1897	February 23, 1897	16.50	40,400	1956	April 17, 1956	10.03	15,800
1898	May 7, 1898	12.00	25,700	1957	April 6, 1957	18.78	46,400
1899	March 5, 1899	19.50	51,900	1958	March 31, 1958	14.42	29,500
1900	March 20, 1900	11.40	23,800	1959	April 13, 1959	11.63	20,100
1901	November 26, 1900	21.40	59,800	1960	March 31, 1960	18.45	44,700
1902	March 1, 1902	25.00	76,000	1961	February 26, 1961	12.40	22,600
1903	March 24, 1903	17.50	43,800	1962	October 21, 1961	17.68	42,000
1904	May 19, 1904	10.40	20,500	1963	March 13, 1963	22.30	61,800
1905	July 13, 1905	15.40	36,800	1964	March 6, 1964	14.27	27,500
1906	January 23, 1906	11.50	24,000	1965	February 8, 1965	16.28	35,600
1907	June 14, 1907	17.00	41,800	1966	February 14, 1966	16.44	36,000
1908	February 16, 1908	19.00	49,800	1967	March 8, 1967	20.77	55,000
1909	April 14, 1909	15.00	35,500	1968	March 13, 1968	12.46	21,500
1910	June 14, 1910	16.00	38,800	1969	August 20, 1969	23.37	65,800
1911	January 3, 1911	12.00	25,700	1970	January 1, 1970	19.81	49,500
1912	March 30, 1912	16.50	39,900	1971	May 31, 1971	19.07	46,600
1913	March 27, 1913	31.00	105,000	1972	June 22, 1972	30.49	111,000

1914	February 20, 1914	10.00	17,900	1973	May 29, 1973	20.38	52,900
1915	February 2, 1915	20.00	56,100	1974	December 27, 1973	24.17	73,400
1916	December 30, 1915	13.00	28,800	1975	March 20, 1975	17.93	42,000
1917	March 5, 1917	17.70	44,600	1976	January 1, 1976	16.02	34,400
1918	March 14, 1918	17.30	43,000	1977	April 6, 1977	22.81	66,000
1919	January 3, 1919	18.50	47,800	1978	January 27, 1978	22.31	63,200
1920	March 20, 1920	12.80	26,800	1979	February 25, 1979	19.91	50,600
1921	January 23, 1921	12.00	24,400	1980	April 15, 1980	18.29	43,500 <sup>3</sup>
1922	March 11, 1922	12.00	24,200	1981	May 29, 1981	15.10	30,700 <sup>3</sup>
1923	March 7, 1923	10.30	18,800	1982	June 13, 1982	18.37	43,400 <sup>3</sup>
1924	May 12, 1924	21.50	60,000	1983	April 10, 1983	16.05	33,700 <sup>3</sup>
1925	January 12, 1925	8.00	11,700	1984	February 14, 1984	19.10	46,700 <sup>3</sup>
1926	January 19, 1926	13.40	28,700	1985	February 2, 1985	11.73	18,600 <sup>3</sup>
1927	December 26, 1926	16.00	38,000	1986	November 5, 1985	38.84	179,000 <sup>3</sup>
1928	August 16, 1928	16.53	39,000	1987	April 16, 1987	24.81	76,100 <sup>3</sup>
1929	March 1, 1929	13.85	30,000	1988	January 21, 1988	10.27	14,500 <sup>3</sup>
1930	November 19, 1929	16.50	39,000	1989	May 6, 1989	16.29	35,000 <sup>3</sup>
1931	March 30, 1931	8.12	12,000	1990	January 1, 1990	14.95	29,800 <sup>3</sup>
1932	February 5, 1932	15.30	35,000	1991	January 12, 1991	16.92	37,500 <sup>3</sup>
1933	March 21, 1933	12.27	24,900	1992	April 22, 1992	23.64	69,900 <sup>3</sup>
1934	March 28, 1934	14.36	32,000	1993	March 5, 1993	20.60	54,200 <sup>3</sup>
1935	January 23, 1935	23.82	70,400	1994	December 6, 1993	14.19	27,000 <sup>3</sup>
1936	March 18, 1936	26.80	84,100	1995	January 16, 1995	22.70	64,800 <sup>3</sup>
1937	January 21, 1937	17.12	41,400	1996	January 20, 1996	29.24	103,000 <sup>3</sup>
1938	October 20, 1937	15.36	35,600	1997	December 2, 1996	18.79	45,600 <sup>3</sup>
1939	January 31, 1939	15.63	36,200	1998	January 9, 1998	19.95	51,000 <sup>3</sup>
1940	May 31, 1940	17.00	41,100	1999	January 25, 1999	9.58	12,700 <sup>3</sup>
1941	July 8, 1941	11.73	23,300	2000	April 18, 2000	12.44	21,000 <sup>3</sup>
1942	May 17, 1942	19.56	52,300	2001	May 23, 2001	12.96	22,700 <sup>3</sup>
1943	March 14, 1943	15.19	35,100	2002	April 23, 2002	11.57	18,300 <sup>3</sup>
1944	March 1, 1944	10.00	17,900	2003	February 23, 2003	24.03	72,000 <sup>3</sup>
1945	September 18, 1945	11.20	21,700	2004	September 29, 2004	25.66	61,200 <sup>3</sup>
1946	January 8, 1946	14.80	33,700	2005	March 29, 2005	14.41	25,200 <sup>3</sup>
1947	March 15, 1947	12.48	25,800	2006	June 28, 2006	21.98	48,300 <sup>3</sup>
1948	February 15, 1948	16.25	38,800	2007	April 16, 2007	17.85	35,100 <sup>3</sup>

<sup>1</sup>Discharge is a historic peak.

<sup>2</sup>Month or day of occurrence is unknown or not exact.

<sup>3</sup>Discharge affected by regulation or diversion.

**Table 257. 02020100 Renick Run near Buchanan, Va.**

LOCATION.--Latitude 37°35'27", Longitude 079°38'04", NAD27, Botetourt County, Hydrologic Unit 02080201, on left upstream wingwall of culvert on Frontage Road of Interstate Highway 81 between exists 48 and 49, 2.2 mi upstream from mouth, and 4.8 mi northeast of Buchanan.

DRAINAGE AREA.--2.08 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 1,261.85 ft NGVD of 1929. Prior to Nov. 7, 1978, flood-hydrograph recorder at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--4 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1967	March 7, 1967	6.57	580	1988	July 21, 1988	5.76	454
1968	March 17, 1968	4.15	230	1989	May 6, 1989	5.23	374
1969	August 20, 1969	9.90	1,210	1990	November 16, 1989	6.06	500
1970	April 2, 1970	3.70	174	1991	July 29, 1991	5.22	373
1971	May 30, 1971	4.55	282	1992	April 22, 1992	8.44	918
1972	June 21, 1972	4.55	282	1993	March 4, 1993	5.18	367
1973	May 28, 1973	8.45	920	1994	August 17, 1994	4.94	332
1974	December 21, 1973	3.48	148	1995	June 23, 1995	4.36	257
1975	September 1, 1975	6.50	570	1996	January 19, 1996	7.05	659
1976	October 17, 1975	5.97	486	1997	June 1, 1997	4.88	324
1977	October 9, 1976	5.55	422	1998	February 5, 1998	6.86	628
1978	January 26, 1978	5.15	362	1999	September 29, 1999	2.46	46
1979	September 21, 1979	8.48	926	2000	April 18, 2000	5.25	378
1980	April 14, 1980	4.66	296	2001	March 30, 2001	3.47	147
1981	May 28, 1981	3.50	150	2002		2.34 <sup>1</sup>	
1982	June 13, 1982	4.78	311	2003	September 19, 2003	10.94	1,460
1983	April 24, 1983	5.24	376	2004	November 19, 2003	4.60	288
1984	August 11, 1984	4.78	311	2005	March 28, 2005	3.86	191
1985	August 18, 1985	3.13	113	2006	June 26, 2006	7.78	789
1986	November 4, 1985	5.88	472	2007	November 16, 2006	4.88	324
1987	September 7, 1987	9.74	1,190				

<sup>1</sup>Gage height below minimum recordable elevation.

**Table 258.** 02020200 Calfpasture River near West Augusta, Va.

LOCATION.--Latitude 38°16'24", Longitude 079°18'02", NAD27, Augusta County, Hydrologic Unit 02080202, at bridge on U.S. Highway 250, 1.5 mi east of West Augusta, and 9 mi west of Churchville.

DRAINAGE AREA.--12.5 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 1,897.46 ft NGVD of 1929. Aug. 11, 1965, to Aug. 22, 1973, flood-hydrograph recorder at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 14 ft<sup>3</sup>/s and extended above on basis of slope-area measurement at 1,840 ft<sup>3</sup>/s.

BANKFULL STAGE.--5 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1949	June 17, 1949	6.60	4,800	1963	March 12, 1963	3.03	560
1950		1.30 <sup>1</sup>	85.0 <sup>2,3</sup>	1964	March 5, 1964	2.39	320
1951	December 7, 1950	4.00	1180	1965	February 7, 1965	3.10	600
1952	March 11, 1952	1.98	210	1966	April 24, 1966	2.86	490
1953	February 21, 1953	2.34	300	1967	March 7, 1967	3.66	940
1954	March 1, 1954	4.74	1,840	1968	May 28, 1968	2.41	310
1955	August 19, 1955	2.83	480	1969	August 20, 1969	2.41	310
1956	March 14, 1956	1.35	94.0	1970	December 31, 1969	2.81	474
1957	April 5, 1957	3.15	640	1971	May 30, 1971	5.46	2,810
1958	December 26, 1957	1.79	170	1972	June 21, 1972	3.56	846
1959	June 2, 1959	4.01	1,180	1973	October 5, 1972	5.71	3,160
1960	May 8, 1960	3.54	880	1974	December 26, 1973	3.41	756
1961	February 26, 1961	2.73	440	1975	March 19, 1975	3.72	954
1962	October 21, 1961	2.56	380	1976	December 31, 1975	2.08	226

<sup>1</sup>Gage height below minimum recordable elevation.

<sup>2</sup>Discharge is less than indicated value, which is minimum recordable discharge at this site.

<sup>3</sup>Month or day of occurrence is unknown or not exact.

**Table 259. 02020500 Calfpasture River above Mill Creek at Goshen, Va.**

LOCATION.--Latitude 37°59'16", Longitude 079°29'38", NAD27, Rockbridge County, Hydrologic Unit 02080202, on left bank 20 ft upstream from bridge on State Highway 42 at Goshen and 400 ft upstream from Mill Creek.

DRAINAGE AREA.--141 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 1,382.84 ft NGVD of 1929. Prior to October 1, 1998, water-stage recorder at datum of 1,384.84 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 9,200 ft<sup>3</sup>/s and extended above on basis of slope-area measurement at 16,500 ft<sup>3</sup>/s and 56,100 ft<sup>3</sup>/s.

BANKFULL STAGE.--8 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Subsequent to June 30, 1957, records were provided by the Virginia Department of Environmental Quality - Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1939	February 4, 1939	7.67 <sup>1</sup>	4,900	1973	October 6, 1972	12.78 <sup>1</sup>	20,900
1940	May 31, 1940	9.03 <sup>1</sup>	7,010	1974	December 26, 1973	12.19 <sup>1</sup>	17,600
1941	April 5, 1941	5.73 <sup>1</sup>	2,300	1975	March 19, 1975	10.90 <sup>1</sup>	11,600
1942	May 16, 1942	10.38 <sup>1</sup>	10,200	1976	January 1, 1976	7.26 <sup>1</sup>	4,210
1943	October 16, 1942	8.38 <sup>1</sup>	6,120	1977	October 9, 1976	10.75 <sup>1</sup>	11,200
1944	May 7, 1944	6.39 <sup>1</sup>	3,110	1978	January 26, 1978	11.70 <sup>1</sup>	15,000
1945	September 18, 1945	7.00 <sup>1</sup>	3,910	1979	September 6, 1979	11.76 <sup>1</sup>	15,600
1946	January 8, 1946	6.26 <sup>1</sup>	2,920	1980	April 14, 1980	7.13 <sup>1</sup>	3,910
1947	March 14, 1947	6.71 <sup>1</sup>	3,500	1981	May 20, 1981	5.01 <sup>1</sup>	1,530
1948	February 14, 1948	7.00 <sup>1</sup>	3,910	1982	June 13, 1982	10.66 <sup>1</sup>	10,900
1949	June 18, 1949	12.14 <sup>1</sup>	14,800	1983	April 24, 1983	7.11 <sup>1</sup>	4,040
1950	September 10, 1950	8.97 <sup>1</sup>	7,240	1984	February 14, 1984	8.70 <sup>1</sup>	6,740
1951	December 8, 1950	10.43 <sup>1</sup>	10,200	1985	August 18, 1985	7.56 <sup>1</sup>	4,640
1952	March 11, 1952	7.83 <sup>1</sup>	5,080	1986	November 4, 1985	20.23 <sup>1</sup>	56,300
1953	February 21, 1953	9.87 <sup>1</sup>	9,080	1987	April 17, 1987	7.80 <sup>1</sup>	5,120
1954	March 1, 1954	10.74 <sup>1</sup>	10,900	1988	January 20, 1988	4.62 <sup>1</sup>	1,870
1955	October 16, 1954	8.58 <sup>1</sup>	6,480	1989	August 25, 1989	6.49 <sup>1</sup>	3,540
1956	March 14, 1956	5.29 <sup>1</sup>	1,520	1990	November 16, 1989	7.23 <sup>1</sup>	4,380
1957	April 5, 1957	9.32 <sup>1</sup>	7,840	1991	March 4, 1991	7.02 <sup>1</sup>	4,740
1958	December 26, 1957	5.98 <sup>1</sup>	2,280	1992	April 22, 1992	13.90 <sup>1</sup>	23,800
1959	June 2, 1959	8.42 <sup>1</sup>	6,120	1993	March 4, 1993	9.12 <sup>1</sup>	7,700
1960	May 8, 1960	8.06 <sup>1</sup>	5,600	1994	December 5, 1993	6.73 <sup>1</sup>	4,390
1961	February 26, 1961	6.03 <sup>1</sup>	2,520	1995	June 23, 1995	12.44 <sup>1</sup>	17,600
1962	October 21, 1961	7.45 <sup>1</sup>	4,360	1996	September 6, 1996	16.38 <sup>1</sup>	35,800
1963	March 12, 1963	8.54 <sup>1</sup>	6,360	1999	January 24, 1999	5.97	1,860
1964	March 5, 1964	6.25 <sup>1</sup>	2,810	2000	February 19, 2000	5.68	1,840
1965	February 8, 1965	7.88 <sup>1</sup>	5,230	2001	March 21, 2001	6.76	2,830

1966	February 13, 1966	7.03 <sup>1</sup>	3,760	2002	April 22, 2002	7.62	3,770
1967	March 7, 1967	10.32 <sup>1</sup>	10,100	2003	February 22, 2003	9.51	6,590
1968	March 17, 1968	6.78 <sup>1</sup>	3,500	2004	September 9, 2004	12.87	13,800
1969	August 20, 1969	8.06 <sup>1</sup>	5,600	2005	January 14, 2005	7.51	3,220
1970	December 31, 1969	8.44 <sup>1</sup>	6,170	2006	June 26, 2006	12.22	11,900
1971	May 30, 1971	11.97 <sup>1</sup>	16,600	2007	November 16, 2006	10.94	8,690
1972	June 22, 1972	11.43 <sup>1</sup>	13,600				

---

<sup>1</sup>Gage height at different site and (or) datum.

**Table 260. 02021000 Calfpasture River at Goshen, Va.**

LOCATION.--Latitude 37°59'10", Longitude 079°29'38", NAD27, Rockbridge County, Hydrologic Unit 02080202, at downstream side of highway bridge at Goshen, 500 ft downstream from Mill Creek.

DRAINAGE AREA.--186 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 1,381.69 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 1,900 ft<sup>3</sup>/s and extended to 20,000 ft<sup>3</sup>/s on basis of logarithmic plotting and comparison with peak discharge at other stations in the James River basin.

BANKFULL STAGE.--8 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Flood in 1922 reported by local residents to have been 2 ft higher than flood in March 1936.

<b>Water year</b>	<b>Date</b>	<b>Gage height (ft)</b>	<b>Discharge (ft<sup>3</sup>/s)</b>	<b>Water year</b>	<b>Date</b>	<b>Gage height (ft)</b>	<b>Discharge (ft<sup>3</sup>/s)</b>
Annual maximum stages and discharges							
1926	January 19, 1926	8.20	5,980	1933	October 17, 1932	10.00	11,600
1927	November 16, 1926	10.00	11,600	1934	March 28, 1934	6.20	3,140
1928	October 13, 1927	7.30	4,380	1935	January 23, 1935	9.90	11,200
1929	April 16, 1929	8.60	6,930	1936	March 17, 1936	11.71	20,000
1930	November 18, 1929	8.80	7,500	1937	April 26, 1937	8.00	5,570
1931	March 29, 1931	5.30	2,190	1938	October 19, 1937	9.80	10,900
1932	February 4, 1932	8.50	6,670				

**Table 261.** 02021100 Brattons Run tributary near Goshen, Va.

LOCATION.--Latitude 37°55'55", Longitude 079°34'40", NAD27, Rockbridge County, Hydrologic Unit 02080202, at culvert on State Highway 780, 5.8 mi southeast of Goshen.

DRAINAGE AREA.--0.92 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is not determined. Prior to Apr. 17, 1972, flood-hydrograph recorder at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--3 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1966		3.00 <sup>1</sup>	45.0 <sup>2,3</sup>	1971		3.00 <sup>1</sup>	45.0 <sup>2,3</sup>
1967		3.00 <sup>1</sup>	45.0 <sup>2,3</sup>	1972	June 21, 1972	3.89	90.0
1968		3.00 <sup>1</sup>	45.0 <sup>2,3</sup>	1973	May 28, 1973	3.55	70.0
1969	August 20, 1969	9.20	670	1974	May 12, 1974	3.52	69.0
1970		3.00 <sup>1</sup>	45.0 <sup>2,3</sup>	1975	March 19, 1975	4.55	128

<sup>1</sup>Gage height below minimum recordable elevation.

<sup>2</sup>Discharge is less than indicated value, which is minimum recordable discharge at this site.

<sup>3</sup>Month or day of occurrence is unknown or not exact.

**Table 262. 02021500 Maury River at Rockbridge Baths, Va.**

LOCATION.--Latitude 37°54'26", Longitude 079°25'20", NAD27, Rockbridge County, Hydrologic Unit 02080202, on right bank at Rockbridge Baths, 1,200 ft upstream from bridge on State Highway 39, and 1.0 mi upstream from Hays Creek.

DRAINAGE AREA.--329 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 1,100.33 ft NGVD of 1929 (levels by U.S. Army Corps of Engineers).

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 16,000 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--8 ft.

REGULATION.--High-flow conditions at this site are considered unregulated. Flow regulated since 1966 by Lake Merriweather on the Little Calpasture River 5.7 mi upstream, usable capacity approximately 8,025 acre-ft.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1929	April 16, 1929	8.50	9,550	1969	August 20, 1969	11.48	22,900
1930	November 18, 1929	8.58	9,900	1970	December 31, 1969	8.88	10,900
1931	March 29, 1931	5.16	2,600	1971	May 30, 1971	10.73	18,600
1932	February 4, 1932	8.20	8,600	1972	June 22, 1972	10.81	19,000
1933	October 17, 1932	9.00	11,300	1973	October 6, 1972	10.27	16,400
1934	March 3, 1934	6.97	5,400	1974	December 27, 1973	11.05	20,300
1935	January 23, 1935	10.08	15,600	1975	March 19, 1975	10.28	16,400
1936	March 17, 1936	13.07	33,000	1976	January 1, 1976	7.70	7,150
1937	January 20, 1937	8.36	9,200	1977	October 9, 1976	9.93	14,900
1938	October 19, 1937	9.44	12,800	1978	January 26, 1978	10.98	19,900
1939	February 4, 1939	8.16	8,600	1979	September 6, 1979	9.48	13,100
1940	May 31, 1940	9.13	11,600	1980	April 14, 1980	8.19	8,560
1941	April 5, 1941	6.76	5,000	1981	June 4, 1981	5.52	3,190
1942	May 22, 1942	10.53	17,500	1982	June 13, 1982	10.68	18,400
1943	October 16, 1942	8.94	11,000	1983	April 24, 1983	7.91	7,730
1944	May 7, 1944	7.34	6,290	1984	February 14, 1984	8.89	10,900
1945	September 18, 1945	7.23	6,060	1985	November 29, 1984	7.64	7,060
1946	January 8, 1946	6.60	4,700	1986	November 5, 1985	19.19	87,700
1947	March 14, 1947	7.60	6,900	1987	April 16, 1987	9.14	11,800
1948	February 14, 1948	7.75	7,280	1988	January 20, 1988	5.86	3,650
1949	June 18, 1949	10.07	15,600	1989	May 6, 1989	8.00	7,990
1950	September 10, 1950	9.10	11,600	1990	November 16, 1989	8.47	9,450
1951	December 8, 1950	9.80	14,400	1991	March 4, 1991	8.67	10,100
1952	March 11, 1952	8.64	9,900	1992	April 22, 1992	13.28	34,500
1953	February 21, 1953	9.40	12,800	1993	March 4, 1993	9.66	13,800
1954	March 1, 1954	9.75	14,400	1994	August 17, 1994	8.12	8,350
1955	October 16, 1954	8.40	9,200	1995	June 23, 1995	12.58	29,500
1956	March 14, 1956	6.02	3,650	1996	September 6, 1996	14.28	42,000

1957	April 5, 1957	9.03	11,300	1997	December 1, 1996	8.72	10,300
1958	April 1, 1958	6.35	4,220	1998	January 8, 1998	11.52	22,900
1959	June 3, 1959	7.85	7,550	1999	January 24, 1999	6.26	4,260
1960	March 30, 1960	8.54	9,550	2000	March 21, 2000	5.82	3,590
1961	April 13, 1961	6.50	4,500	2001	March 21, 2001	7.06	5,750
1962	October 21, 1961	9.68	14,000	2002	April 22, 2002	7.55	6,840
1963	March 12, 1963	9.08	11,600	2003	February 22, 2003	9.34	12,600
1964	March 4, 1964	6.64	4,920	2004	September 9, 2004	9.54	13,400
1965	February 8, 1965	7.87	7,550	2005	January 14, 2005	7.06	5,750
1966	February 13, 1966	7.45	6,540	2006	June 26, 2006	9.95	15,100
1967	March 7, 1967	9.48	13,100	2007	November 16, 2006	9.27	12,300
1968	March 17, 1968	7.04	5,670				

---

**Table 263. 02021700 Cedar Grove Branch near Rockbridge Baths, Va.**

LOCATION.--Latitude 37°53'00", Longitude 079°23'08", NAD27, Rockbridge County, Hydrologic Unit 02080202, on right upstream wingwall of culvert on State Highway 39, 0.1 mi upstream from mouth, and 1.8 mi southeast of Rockbridge Baths.

DRAINAGE AREA.--12.0 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 1,041.22 ft NGVD of 1929. Prior to Apr. 2, 1975, flood-hydrograph recorder at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--4 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1967	March 7, 1967	7.00	364	1982	June 13, 1982	7.50	420
1968		4.00 <sup>1</sup>	90.0 <sup>2,3</sup>	1983	April 24, 1983	7.26	394
1969	August 20, 1969	31.20	7,300	1984	August 12, 1984	9.62	712
1970	December 31, 1969	4.75	150	1985	June 10, 1985	5.57	217
1971	February 13, 1971	5.82	242	1986	November 4, 1985	10.87	830
1972	June 21, 1972	7.10	376	1987	April 16, 1987	6.39	299
1973	May 28, 1973	19.00	1,400	1988	January 20, 1988	3.94	86.0
1974	September 6, 1974	9.75	735	1989	May 6, 1989	5.14	178
1975	March 19, 1975	7.97	476	1990	November 16, 1989	5.51	211
1976	December 31, 1975	5.62	222	1991	March 4, 1991	6.31	291
1977	October 9, 1976	8.11	492	1992	April 21, 1992	8.90	606
1978	January 26, 1978	9.50	700	1993	March 4, 1993	5.33	195
1979	September 22, 1979	10.58	806	1994	December 5, 1993	5.29	191
1980	April 14, 1980	6.60	321	1995	June 23, 1995	29.10	
1981	September 7, 1981	20.72 <sup>4</sup>	1,050				

<sup>1</sup>Gage height below minimum recordable elevation.

<sup>2</sup>Discharge is less than indicated value, which is minimum recordable discharge at this site.

<sup>3</sup>Month or day of occurrence is unknown or not exact.

<sup>4</sup>Gage height affected by backwater.

**Table 264. 02022500 Kerrs Creek near Lexington, Va.**

LOCATION.--Latitude 37°49'32", Longitude 079°26'36", NAD27, Rockbridge County, Hydrologic Unit 02080202, on right bank 100 ft upstream from bridge on Interstate Highway 64, 1.4 mi upstream from mouth, and 2.9 mi north of Lexington.

DRAINAGE AREA.--35.1 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 980.32 ft NGVD of 1929 (levels by U.S. Army Corps of Engineers). Jan. 27, 1927, to Sept. 30, 1953, nonrecording gage at site 1,000 ft downstream at different datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 800 ft<sup>3</sup>/s and extended above on basis of contracted-opening measurements and slope-area measurement at 23,000 ft<sup>3</sup>/s. Since 1953, defined by current-meter measurements below 1,730 ft<sup>3</sup>/s and extended above on basis of slope-area measurement at 4,160 ft<sup>3</sup>/s and 13,800 ft<sup>3</sup>/s.

BANKFULL STAGE.--6 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Subsequent to June 30, 1957, records were provided by the Virginia Department of Environmental Quality - Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1927	February 23, 1927	7.75 <sup>1</sup>	1,500	1967	March 7, 1967	7.35	2,640
1928	August 16, 1928	8.50 <sup>1</sup>	2,090	1968	March 16, 1968	5.10	695
1929	April 16, 1929	7.40 <sup>1</sup>	1,200	1969	August 19, 1969	13.38	13,800
1930	March 6, 1930	8.15 <sup>1</sup>	1,820	1970	December 31, 1969	5.72	1,080
1931	August 2, 1931	7.30 <sup>1</sup>	1,130	1971	February 13, 1971	5.90	1,220
1932	March 6, 1932	8.00 <sup>1</sup>	1,780	1972	June 21, 1972	7.92	3,300
1933	April 16, 1933	9.00 <sup>1</sup>	3,320	1973	May 28, 1973	7.27	2,320
1934	June 18, 1934	8.00 <sup>1</sup>	1,780	1974	May 12, 1974	7.20	2,220
1935	December 1, 1934	9.00 <sup>1</sup>	3,320	1975	March 19, 1975	7.47	2,760
1936	March 17, 1936	10.80 <sup>1</sup>	7,600	1976	October 18, 1975	6.90	2,100
1937	April 25, 1937	8.40 <sup>1</sup>	2,300	1977	October 9, 1976	7.26	2,520
1938	October 19, 1937	9.50 <sup>1</sup>	4,380	1978	January 26, 1978	8.57	4,300
1939	January 30, 1939	8.50 <sup>1</sup>	2,460	1979	September 21, 1979	8.87	4,810
1940	August 31, 1940	10.50 <sup>1</sup>	7,100	1980	April 14, 1980	7.48	2,740
1941	April 5, 1941	7.20 <sup>1</sup>	1,060	1981	February 11, 1981	4.40	345
1942	May 22, 1942	10.00 <sup>1</sup>	5,660	1982	June 13, 1982	7.39	2,620
1943	October 14, 1942	7.20 <sup>1</sup>	1,060	1983	April 10, 1983	6.59	1,740
1944	March 7, 1944	6.70 <sup>1</sup>	765	1984	August 13, 1984	8.15	3,610
1945	October 20, 1944	7.00 <sup>1</sup>	940	1985	November 28, 1984	5.50	880
1946	January 7, 1946	6.80 <sup>1</sup>	820	1986	November 4, 1985	11.37	9,450
1947	March 14, 1947	7.30 <sup>1</sup>	1,130	1987	September 7, 1987	10.02	6,800
1948	March 31, 1948	9.70 <sup>1</sup>	4,860	1988	January 20, 1988	4.37	334
1949	April 13, 1949	10.00 <sup>1</sup>	5,660	1989	September 16, 1989	7.85	3,190
1950	September 10, 1950	13.80 <sup>1</sup>	23,000	1990	October 17, 1989	8.93	4,860
1951	July 14, 1951	9.30 <sup>1</sup>	5,260	1991	March 4, 1991	7.93	3,300
1952	March 11, 1952	9.04 <sup>1</sup>	4,620	1992	April 21, 1992	11.26	9,230

1953	July 1, 1953	8.45 <sup>1</sup>	3,560	1993	March 4, 1993	8.08	3,510
1954	March 1, 1954	9.28	6,700	1994	August 17, 1994	10.94	8,590
1955	October 15, 1954	7.18	2,480	1995	June 28, 1995	15.44	21,700
1956	March 14, 1956	4.46	391	1996	January 19, 1996	10.28	5,460
1957	April 5, 1957	5.99	1,250	1997	June 1, 1997	9.41	3,980
1958	March 31, 1958	5.21	720	1998	January 8, 1998	10.73	6,350
1959	September 30, 1959	8.51	4,680	1999	March 17, 1999	4.47	254
1960	October 24, 1959	10.46	8,400	2002	April 22, 2002	6.29	983
1961	May 9, 1961	5.44	862	2003	February 22, 2003	9.41	3,980
1962	October 20, 1961	8.42	3,980	2004	June 15, 2004	11.64	8,420
1963	March 12, 1963	6.92	2,100	2005	March 28, 2005	7.15	1,500
1964	February 6, 1964	5.60	1,010	2006	June 26, 2006	10.55	5,980
1965	July 11, 1965	7.13	2,400	2007	November 16, 2006	10.98	6,880
1966	February 13, 1966	5.65	1,040				

---

<sup>1</sup>Gage height at different site and (or) datum.

**Table 265. 02023000 Maury River near Lexington, Va.**

(Formerly published as North River near Lexington.)

LOCATION.--Latitude 37°48'49", Longitude 079°26'42", NAD27, Rockbridge County, Hydrologic Unit 02080202, 900 ft upstream from Lime Kiln highway bridge, 0.2 mi downstream from Kerrs Creek, and 2.8 mi upstream from Lexington.

DRAINAGE AREA.--481 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 906.56 ft NGVD of 1929 (levels by U.S. Army Corps of Engineers).

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 9,000 ft<sup>3</sup>/s and extended to 40,000 ft<sup>3</sup>/s by logarithmic plotting and on basis of records for other stations in the James River basin.

BANKFULL STAGE.--9 ft.

REGULATION.--High-flow conditions at this site are considered unregulated. Flow regulated since 1966 by Lake Merriweather on Little Calpasture River 20 mi upstream, usable capacity approximately 8,025 acre-ft.

REMARKS.--Subsequent to June 30, 1957, records were provided by the Virginia Department of Environmental Quality - Water Division. Flood of March 1936 reported to be highest known since 1877.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1926	January 18, 1926	9.74	6,730	1944	May 7, 1944	9.52	6,680
1927	November 16, 1926	11.42	9,150	1945	September 18, 1945	9.41	6,540
1928	August 17, 1928	9.45	6,310	1946	January 8, 1946	8.67	5,560
1929	April 16, 1929	11.95	10,000	1947	March 14, 1947	10.20	7,700
1930	November 18, 1929		15,000	1948	February 14, 1948	10.80	8,630
1931	May 21, 1931	6.63	2,950	1949	June 18, 1949	13.98	14,500
1932	February 5, 1932	11.05	8,650	1950	September 10, 1950	18.00	23,700
1933	October 18, 1932	12.63	11,100	1951	December 8, 1950	14.28	15,100
1934	March 3, 1934	9.42	6,360	1952	March 11, 1952	12.78	12,100
1935	December 1, 1934	14.29	13,800	1953	February 21, 1953	13.66	13,900
1936	March 18, 1936	23.58	40,000	1954	March 1, 1954	14.22	14,900
1937	January 21, 1937	11.97	10,200	1955	October 15, 1954	11.80	10,300
1938	October 19, 1937	14.03	13,400	1956	March 14, 1956	7.55	4,100
1939	February 4, 1939	11.18	8,950	1957	April 6, 1957	13.16	12,900
1940	May 31, 1940	13.08	11,900	1958	April 1, 1958	8.47	5,280
1941	April 5, 1941	8.93	5,840	1959	June 3, 1959	10.28	7,850
1942	May 22, 1942	16.77	20,700	1960	March 30, 1960	12.15	11,000
1943	October 16, 1942	12.92	12,300	1969	August 20, 1969	27.08	52,000 <sup>1</sup>

<sup>1</sup>Discharge is a historic peak.

**Table 266. 02023300 South River near Steeles Tavern, Va.**

(Formerly published as St. Marys River near Steeles Tavern.)

LOCATION.--Latitude 37°55'50", Longitude 079°09'55", NAD27, Augusta County, Hydrologic Unit 02080202, at bridge on State Highway 608, 2.5 mi northeast of Vesuvius, 3 mi east of Steeles Tavern, and 5 mi south of Greenville.

DRAINAGE AREA.--15.8 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is not determined. July 12, 1965, to Sept. 10, 1975, flood-hydrograph recorder at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 360 ft<sup>3</sup>/s and extended above on basis of slope-area measurement at 2,800 ft<sup>3</sup>/s.

BANKFULL STAGE.--4 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1951	December 4, 1950	5.10	1,500	1974	December 21, 1973	3.75	700
1952	March 11, 1952	3.90	790	1975	March 19, 1975	5.20	1,620
1953	December 11, 1952	2.91	370	1976		3.70 <sup>2</sup>	700 <sup>1,3</sup>
1954	March 1, 1954	4.57	1,150	1977	October 9, 1976	4.21	976
1955	August 18, 1955	6.52	2,770	1978	January 26, 1978	5.67	1,950
1956	September 1956	2.81	340 <sup>1</sup>	1979	September 22, 1979	5.16	1,590
1957	April 5, 1957	3.77	720	1980	April 14, 1980	3.91	805
1958	December 26, 1957	3.82	750	1981		3.67 <sup>2</sup>	685 <sup>1,3</sup>
1959	September 30, 1959	4.43	1,080	1982		3.67 <sup>2</sup>	685 <sup>1,3</sup>
1960	October 24, 1959	4.48	1,100	1983	April 24, 1983	3.86	780
1961	April 13, 1961	3.04	420	1984	February 14, 1984	4.60	1,210
1962	October 21, 1961	5.45	1,800	1985	November 28, 1984	3.73	715
1963	March 12, 1963	3.37	540	1986	November 4, 1985	6.53	2,680
1964	January 25, 1964	3.30	520	1987	April 16, 1987	3.84	770
1965	February 7, 1965	4.49	1,150	1988		3.68 <sup>2</sup>	685 <sup>1,3</sup>
1966	February 13, 1966	3.60	650	1989		3.68 <sup>2</sup>	685 <sup>1,3</sup>
1967	March 7, 1967	4.20	970	1990		3.68 <sup>2</sup>	690 <sup>1,3</sup>
1968	May 27, 1968	3.00	400	1991		3.68 <sup>2</sup>	690 <sup>2,3</sup>
1969	August 20, 1969	8.70	4,700	1992	April 21, 1992	4.76	1,310
1970	December 31, 1969	3.35	540	1993	November 23, 1992	3.32	528
1971	May 30, 1971	2.58	274	1994		2.04 <sup>2</sup>	135 <sup>1,3</sup>
1972	June 21, 1972	5.80	2,040	1995		2.04 <sup>2</sup>	135 <sup>1,3</sup>
1973	October 5, 1972	4.25	1,000				

<sup>1</sup>Month or day of occurrence is unknown or not exact.

<sup>2</sup>Gage height below minimum recordable elevation.

<sup>3</sup>Discharge is less than indicated value, which is minimum recordable discharge at this site.

**Table 267. 02023500 South River near Riverside, Va.**

LOCATION.--Latitude 37°47'00", Longitude 079°21'35", NAD27, Rockbridge County, Hydrologic Unit 02080202, on right bank 20 ft upstream from highway bridge, 1.1 mi southwest of Riverside, 1.9 mi upstream from mouth, and 4 mi east of Lexington.

DRAINAGE AREA.--112 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 910 ft NGVD of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 2,300 ft<sup>3</sup>/s for period 1950-58, and below 3,000 ft<sup>3</sup>/s for 1959 and extended above. A large shift occurred in June 1959 as a result of bulldozing of channel.

BANKFULL STAGE.--4 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Subsequent to June 30, 1957, records were provided by the Virginia Department of Environmental Quality - Water Division. Flood of August 1969 is highest known since at least 1936.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1936	March 1936	13.70	25,000 <sup>1,2,3</sup>	1956	February 7, 1956	4.83	472
1950	June 10, 1950	6.14	1,360	1958	March 31, 1958	6.89	1,950
1951	December 7, 1950	8.67	3,860	1959	September 30, 1959	7.12	3,740
1952	March 11, 1952	7.30	2,310	1960	May 8, 1960	6.51	2,840
1953	March 24, 1953	6.25	1,440	1961	April 13, 1961	4.90	990
1954	March 1, 1954	8.78	4,000	1962	October 21, 1961	8.63	6,300
1955	October 15, 1954	9.44	4,890	1969	August 20, 1969	15.20	35,000 <sup>1,2</sup>

<sup>1</sup>Discharge is an estimate.

<sup>2</sup>Discharge is a historic peak.

<sup>3</sup>Month or day of occurrence is unknown or not exact.

**Table 268. 02024000 Maury River near Buena Vista, Va.**

LOCATION.--Latitude 37°45'45", Longitude 079°23'30", NAD27, Rockbridge County, Hydrologic Unit 02080202, on right bank 0.5 mi downstream from South River and 2.8 mi northwest of Buena Vista.

DRAINAGE AREA.--647 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 846.58 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 17,000 ft<sup>3</sup>/s and extended above on basis of slope-area measurement at 105,000 ft<sup>3</sup>/s.

BANKFULL STAGE.--10 ft.

REGULATION.--High-flow conditions at this site are considered unregulated. Flow regulated since 1966 by Lake Merriweather on Little Calfpasture River 27 mi upstream, usable capacity approximately 8,025 acre-ft.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1936	March 18, 1936	22.00		1972	June 21, 1972	17.10	27,800
1939	February 4, 1939		11,000	1973	October 6, 1972	13.20	15,800
1940	August 16, 1940	13.36	14,700	1974	December 27, 1973	14.63	19,700
1941	April 5, 1941	9.33	6,790	1975	March 20, 1975	14.07	18,100
1942	May 22, 1942	16.00	21,700	1976	January 1, 1976	9.41	8,240
1943	October 16, 1942	13.58	15,200	1977	October 9, 1976	12.69	14,700
1944	May 7, 1944	10.20	8,300	1978	January 26, 1978	15.46	22,300
1945	September 18, 1945	10.30	8,480	1979	September 6, 1979	11.28	11,700
1946	January 8, 1946	9.24	6,630	1980	April 14, 1980	10.63	10,400
1947	March 14, 1947	10.59	9,020	1981	June 4, 1981	5.66	3,330
1948	February 14, 1948	11.54	10,700	1982	June 13, 1982	14.55	19,400
1949	December 4, 1948	13.84	15,600	1983	April 24, 1983	9.73	9,260
1950	September 10, 1950	16.20	22,400	1984	February 14, 1984	12.36	14,400
1951	December 8, 1950	13.76	15,600	1985	November 29, 1984	9.01	8,020
1952	March 11, 1952	12.75	13,400	1986	November 5, 1985	26.30	72,100
1953	February 21, 1953	12.88	13,600	1987	April 16, 1987	13.36	16,600
1954	March 1, 1954	13.80	15,600	1988	January 20, 1988	6.37	4,180
1955	October 15, 1954	12.35	12,500	1989	May 6, 1989	10.84	11,300
1956	March 14, 1956	7.85	4,770	1990	November 16, 1989	9.88	9,520
1957	April 6, 1957	12.39	12,500	1991	March 4, 1991	11.40	12,400
1958	April 1, 1958	8.80	6,010	1992	April 22, 1992	18.99	35,100
1959	September 30, 1959	10.58	9,020	1993	March 4, 1993	13.08	16,800
1960	March 31, 1960	12.20	12,100	1994	August 17, 1994	10.04	10,300
1961	April 13, 1961	8.84	6,010	1995	June 28, 1995	19.48	37,500
1962	October 21, 1961	16.20	22,400	1996	September 7, 1996	18.90	35,300
1963	March 12, 1963	13.70	15,400	1997	December 2, 1996	11.19	12,500
1964	January 25, 1964	9.06	6,470	1998	January 8, 1998	15.20	22,500
1965	February 8, 1965	10.61	9,020	1999	January 24, 1999	6.88	5,280

1966	February 13, 1966	10.12	8,120	2002	April 22, 2002	8.36	7,470
1967	March 7, 1967	13.74	15,500	2003	September 19, 2003	15.36	23,000
1968	March 17, 1968	9.30	6,790	2004	November 19, 2003	11.78	17,100
1969	August 20, 1969	31.23	105,000	2005	January 14, 2005	8.19	8,430
1970	December 31, 1969	12.26	12,200	2006	June 26, 2006	12.41	18,900
1971	May 31, 1971	14.01	17,900	2007	November 17, 2006	11.59	16,600

---

**Table 269.** 02024300 Buffalo Creek near Glasgow, Va.

LOCATION.--Latitude 37°41'10", Longitude 079°26'03", NAD27, Rockbridge County, Hydrologic Unit 02080202, near right bank on upstream side of bridge on State Highway 608, 100 ft downstream from Falling Spring Run, 1 mi upstream from mouth, and 4 mi northeast of Glasgow.

DRAINAGE AREA.--123 mi<sup>2</sup>.

GAGE.--Nonrecording gage (wire-weight gage and crest-stage gage indicator). Datum of gage is 749.83 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 2,870 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Records were provided by the Virginia Department of Environmental Quality - Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1950	September 10, 1950	23.00 <sup>1</sup>		1964	April 14, 1964	5.72	2,150
1963	March 12, 1963	7.36	3,960				

<sup>1</sup>Gage height is an estimate.

**Table 270. 02024500 Maury River near Glasgow, Va.**

(Formerly published as North River at Glasgow.)

LOCATION.--Latitude 37°37'52", Longitude 079°26'38", NAD27, Rockbridge County, Hydrologic Unit 02080202, at highway bridge 0.8 mi from post office at Glasgow, 1 mi above mouth.

DRAINAGE AREA.--837 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 710 ft NGVD of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 11,000 ft<sup>3</sup>/s and extended above by logarithmic plotting.

BANKFULL STAGE.--13 ft.

REGULATION.--High-flow conditions at this site are considered unregulated. Flow regulated since 1966 by Lake Merriweather on Little Calfpasture River 42 mi upstream, usable capacity approximately 8,025 acre-ft.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1896	September 30, 1896	16.00	37,200	1901	June 16, 1901	8.90	16,100
1897	February 23, 1897	10.00	16,900	1902	December 29, 1901	16.00	42,000
1898	August 11, 1898	9.80	16,300	1903	February 17, 1903	10.00	19,500
1899	March 5, 1899	13.05	30,000	1904	May 19, 1904	5.50	7,400
1900	February 22, 1900	7.60	12,600	1905	July 13, 1905	9.40	17,600

**Table 271. 02024750 James River at Bedford Dam near Major, Va.**

LOCATION.--Latitude 37°34'40", Longitude 079°22'36", NAD27, Amherst County, Hydrologic Unit 02080203, on left bank 10 ft upstream from headgates on headrace to city of Bedford hydroelectric plant, 1.2 mi north of Major, and 1.4 mi upstream from Blue Ridge Parkway.

DRAINAGE AREA.--3,070 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 535 ft NGVD of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 19,100 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE. --Not determined.

REGULATION.--High-flow conditions at this site are considered regulated. Flow regulated by Lake Moomaw, 106.8 mi upstream; by Back Creek Lake, 134.8 mi upstream; by Little Back Creek Lake, 137.9 mi upstream; and by Lake Merriweather, 48.8 mi upstream. Total usable capacity 534,900 acre-ft.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1989	May 6, 1989	9.09		1998	January 8, 1998	10.59	70,800 <sup>1</sup>
1990	January 1, 1990	8.51	32,100 <sup>1</sup>	1999	January 25, 1999	7.55	15,100 <sup>1</sup>
1991	January 12, 1991	8.99	42,700 <sup>1</sup>	2000	April 18, 2000	8.04	23,800 <sup>1</sup>
1992	April 22, 1992	13.91	99,600 <sup>1</sup>	2001	May 31, 2001	8.15	26,100 <sup>1</sup>
1993	March 5, 1993	10.18	64,600 <sup>1</sup>	2002	April 23, 2002	7.92	21,800 <sup>1</sup>
1994	March 29, 1994	8.46	33,100 <sup>1</sup>	2004	September 29, 2004	10.96	75,800 <sup>1</sup>
1995	June 28, 1995	12.75	92,800 <sup>1</sup>	2005	March 29, 2005	8.38	21,200 <sup>1</sup>
1996	January 20, 1996	14.63	104,000 <sup>1</sup>	2006	June 28, 2006	10.10	63,500 <sup>1</sup>
1997	December 2, 1996	9.50	53,900 <sup>1</sup>	2007	April 16, 2007	9.25	49,000 <sup>1</sup>

<sup>1</sup>Discharge affected by regulation or diversion.

**Table 272.** 02024915 Pedlar River at Forest Road near Buena Vista, Va.

LOCATION.—Latitude 37°41'51", Longitude 079°16'42", NAD83, Amherst County, Hydrologic Unit Code 02080203, on right bank at bridge on Forest Road, 0.6 mi upstream from Lynchburg Reservoir and 5 mi southeast of Buena Vista.

DRAINAGE AREA.—27.1 mi<sup>2</sup>.

GAGE.—Water-stage recorder. Datum of gage is 1,135 ft NGVD of 1929, from topographic map.

STAGE-DISCHARGE RELATION.—Defined by current-meter measurements below 2,780 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.-- Not determined.

REGULATION.—High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
2004	July 4, 2004	6.67	1,140	2006	November 29, 2005	7.99	2,760
2005	December 23, 2004	6.00	759	2007	November 16, 2006	5.69	613

**Table 273.** 02025000 Pedlar River near Pedlar Mills, Va.

LOCATION.--Latitude 37°32'35", Longitude 079° 15'10", NAD27, Amherst County, Hydrologic Unit 02080203, on right bank 6 ft downstream from highway bridge, 1.2 mi south of Pedlar Mills, 1.5 mi downstream from Horsley Mill Creek, and 3.7 mi upstream from mouth.

DRAINAGE AREA.--94.6 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 656 ft NGVD of 1929, by barometer.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 2,200 ft<sup>3</sup>/s and extended above by logarithmic plotting.

BANKFULL STAGE.--9 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1942	August 8, 1942	14.10	11,200	1950	September 10, 1950	7.77	2,740
1943	October 15, 1942	13.57	10,400	1951	February 7, 1951	7.96	2,900
1944	September 19, 1944	10.70	6,080	1952	March 11, 1952	9.63	4,620
1945	October 20, 1944	4.92	926	1953	March 24, 1953	7.89	2,820
1946	December 5, 1945	5.68	1,320	1954	March 1, 1954	7.52	2,500
1947	June 14, 1947	6.38	1,660	1955	August 18, 1955	11.28	6,890
1948	April 1, 1948	9.84	4,860	1956	July 20, 1956	4.77	856
1949	December 4, 1948	11.44	7,060	1969	August 20, 1969	21.00	32,000 <sup>1</sup>

<sup>1</sup>Discharge is a historic peak.

**Table 274. 02025500 James River at Holcomb Rock, Va.**

LOCATION.--Latitude 37°30'04", Longitude 079°15'46", NAD27, Bedford County, Hydrologic Unit 02080203, on right bank at Holcombs Rock, 0.9 mi downstream from Pedlar River, and at mile 268.6.

DRAINAGE AREA.--3,256 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 548.53 ft NGVD of 1929. January 1900 to September 1915, nonrecording gage in powerhouse of Owens Illinois Glass Company 1,000 ft upstream at different datum. December 1926 to June 1931, water-stage recorder at site 2 mi downstream at different datum.

STAGE-DISCHARGE RELATION.--Period 1900-17 defined by curves of relation based on stage graphs, flood stage of March 1913, and records for station at Buchanan. Defined by current-meter measurements below 17,000 ft<sup>3</sup>/s at 1927-31 site, below 73,000 ft<sup>3</sup>/s at present site, and extended above on basis of records for other stations in James River basin.

BANKFULL STAGE.--12 ft.

REGULATION.--High-flow conditions at this site are considered regulated after 1978. Flow regulated since December 1979 by Lake Moomaw, 117.4 mi upstream; since October 1984 by Back Creek Lake 145.4 mi upstream, and since January 1985 by Little Back Creek Lake 148.5 mi upstream, and smaller reservoirs. Usable capacity 534,900 acre-ft. Some diurnal fluctuation caused by powerplants upstream from station.

REMARKS.--Records were provided by the Virginia Department of Environmental Quality - Water Division from July 1, 1957, to Sept. 30, 1989.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1900	March 21, 1900	11.30 <sup>1</sup>	29,000	1959	September 30, 1959	15.49	29,000
1901	April 21, 1901	16.50 <sup>1</sup>	52,000	1960	March 31, 1960	22.00	58,300
1902	March 1, 1902	21.00 <sup>1</sup>	78,000	1961	February 27, 1961	14.69	26,000
1903	March 24, 1903	16.60 <sup>1</sup>	53,000	1962	October 21, 1961	21.87	57,800
1904	May 19, 1904	11.80 <sup>1</sup>	31,000	1963	March 13, 1963	24.75	74,700
1905	July 13, 1905	17.70 <sup>1</sup>	58,000	1964	March 6, 1964	16.25	31,700
1906	January 24, 1906	11.00 <sup>1</sup>	28,000	1965	February 8, 1965	18.70	42,100
1907	October 20, 1906	19.50 <sup>1</sup>	69,000	1966	February 14, 1966	18.35	40,800
1908	January 13, 1908	19.60 <sup>1</sup>	70,000	1967	March 8, 1967	22.46	61,000
1909	April 14, 1909	17.50 <sup>1</sup>	58,000	1968	March 14, 1968	14.73	26,000
1910	June 14, 1910	15.90 <sup>1</sup>	50,000	1969	August 20, 1969	35.50	150,000
1911	January 31, 1911	12.00 <sup>1</sup>	32,000	1970	January 1, 1970	22.20	59,400
1912	March 30, 1912	17.00 <sup>1</sup>	55,000	1971	May 31, 1971	22.62	61,600
1913	March 28, 1913	31.30 <sup>1</sup>	118,000	1972	June 22, 1972	32.38	126,000
1914	February 1, 1914	10.20 <sup>1</sup>	25,000	1973	May 29, 1973	21.89	57,700
1915	January 7, 1915	21.00 <sup>1</sup>	78,000	1974	December 27, 1973	24.69	74,000
1916	December 30, 1915	10.50 <sup>1</sup>	26,000	1975	March 20, 1975	22.53	61,200
1917	March 5, 1917	16.60 <sup>1</sup>	53,000	1976	January 2, 1976	18.25	40,200
1927	December 27, 1926	14.50 <sup>1</sup>	45,000 <sup>2</sup>	1977	April 6, 1977	23.47	66,700
1929	March 1, 1929	12.83 <sup>1</sup>	37,300	1978	January 26, 1978	25.59	79,700
1930	November 19, 1929	14.92 <sup>1</sup>	46,800	1979	February 26, 1979	24.56	73,300
1931	March 30, 1931	7.29 <sup>1</sup>	14,600	1980	April 15, 1980	21.84	57,400 <sup>3</sup>

1932	February 5, 1932	17.90	38,700	1981	May 29, 1981	15.70	29,800 <sup>3</sup>
1933	October 17, 1932	19.42	45,300	1982	June 13, 1982	23.67	67,900 <sup>3</sup>
1934	March 29, 1934	17.66	37,800	1983	April 11, 1983	18.97	43,400 <sup>3</sup>
1935	January 23, 1935	26.61	86,300	1984	February 15, 1984	22.63	61,800 <sup>3</sup>
1936	March 18, 1936	30.78	115,000	1985	August 19, 1985	14.29	24,600 <sup>3</sup>
1937	January 21, 1937	21.15	53,100	1986	November 5, 1985	42.15	207,000 <sup>3</sup>
1938	October 20, 1937	22.52	59,000	1987	April 17, 1987	28.36	97,900 <sup>3</sup>
1939	January 31, 1939	18.62	41,600	1988	January 21, 1988	12.14	17,400 <sup>3</sup>
1940	August 16, 1940	24.25	66,800	1989	May 6, 1989	19.52	45,900 <sup>3</sup>
1941	July 8, 1941	14.35	25,000	1990	January 1, 1990	17.16	35,600 <sup>3</sup>
1942	May 22, 1942	24.62	68,700	1991	January 12, 1991	18.94	43,300 <sup>3</sup>
1943	December 31, 1942	18.48	41,200	1992	April 22, 1992	29.48	105,000 <sup>3</sup>
1944	September 19, 1944	16.60	33,300	1993	March 5, 1993	23.15	64,900 <sup>3</sup>
1945	September 19, 1945	15.70	29,800	1994	March 29, 1994	16.83	34,300 <sup>3</sup>
1946	January 8, 1946	17.94	38,700	1995	June 28, 1995	26.87	87,800 <sup>3</sup>
1947	March 15, 1947	15.90	30,600	1996	January 20, 1996	30.96	116,000 <sup>3</sup>
1948	February 15, 1948	19.90	47,600	1997	December 2, 1996	21.46	55,500 <sup>3</sup>
1949	April 14, 1949	22.90	63,300	1998	January 9, 1998		48,500 <sup>3,4,5</sup>
1950	September 10, 1950	24.00	69,900	1999	January 25, 1999	11.70	16,200 <sup>3</sup>
1951	December 8, 1950	22.83	62,700	2000	April 19, 2000	14.06	23,800 <sup>3</sup>
1952	March 12, 1952	20.33	49,600	2001	May 23, 2001	14.51	25,400 <sup>3</sup>
1953	February 22, 1953	21.63	56,100	2002	April 23, 2002	13.18	20,800 <sup>3</sup>
1954	March 2, 1954	22.80	62,700	2003	February 23, 2003	25.43	78,600 <sup>3</sup>
1955	March 7, 1955	23.33	65,900	2004	September 29, 2004	24.35	71,900 <sup>3</sup>
1956	March 15, 1956	12.60	18,800	2005	March 29, 2005	15.64	29,600 <sup>3</sup>
1957	April 6, 1957	22.36	60,500	2006	June 28, 2006	22.74	66,800 <sup>3</sup>
1958	March 31, 1958	18.08	39,500	2007	November 17, 2006	19.69	50,600 <sup>3</sup>

<sup>1</sup>Gage height at different site and (or) datum.

<sup>2</sup>Discharge is a historic peak.

<sup>3</sup>Discharge affected by regulation or diversion.

<sup>4</sup>Discharge is a maximum daily average.

<sup>5</sup>Discharge is an estimate.

**Table 275. 02025800 Burton Creek tributary at Lynchburg, Va.**

LOCATION.--Latitude 37°21'10", Longitude 079°11'05", NAD27, Campbell County, Hydrologic Unit 02080203, at culvert on access road just west of U.S. Highway 29, 0.6 mi south of city limits of Lynchburg.

DRAINAGE AREA.--2.36 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 761.87 ft NGVD of 1929. Prior to Apr. 2, 1975, flood-hydrograph recorder at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements and computation of flow through culvert.

BANKFULL STAGE.--5 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1966	February 13, 1966	4.58		1971	May 30, 1971	5.17	
1967	August 24, 1967	5.10		1972	June 21, 1972	7.88	790
1968	May 27, 1968	3.68		1973	July 17, 1973	6.10	
1969	March 24, 1969	4.28	228	1974	September 6, 1974	5.65	
1970	April 2, 1970	5.40		1975	March 19, 1975	6.00	

**Table 276. 02026000 James River at Bent Creek, Va.**

LOCATION.--Latitude 37°32'10", Longitude 078°49'47", NAD27, Nelson County, Hydrologic Unit 02080203, on left bank at town of Bent Creek, 150 ft downstream from Bent Creek, 525 ft upstream from bridge on U.S. Highway 60, 1.3 mi southeast of Gladstone, and at mile 227.8.

DRAINAGE AREA.--3,649 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 381.39 ft NGVD of 1929. Prior to Sept. 12, 1930, nonrecording gage at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 89,000 ft<sup>3</sup>/s and extended above on basis of slope-area measurement at 226,000 ft<sup>3</sup>/s.

BANKFULL STAGE.--16 ft.

REGULATION.--High-flow conditions at this site are considered regulated after 1978. Flow regulated since December 1979 by Lake Moomaw, 158.3 mi upstream; since October 1984 by Back Creek Lake 186.3 mi upstream, and since January 1985 by Little Back Creek Lake 189.4 mi upstream, and smaller reservoirs. Usable capacity 534,900 acre-ft. Large diurnal fluctuation caused by powerplants upstream from station.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1870	September 30, 1870	27.00	150,000 <sup>1</sup>	1964	March 7, 1964	11.55	32,000
1878	November 24, 1877	24.00	125,000 <sup>1</sup>	1965	February 9, 1965	13.62	42,300
1886	April 1, 1886	19.00	79,000 <sup>1</sup>	1966	February 15, 1966	13.16	40,100
1889	June 1, 1889	19.00	79,000 <sup>1</sup>	1967	March 8, 1967	16.23	58,600
1925	May 1, 1925	6.05	7,060	1968	March 14, 1968	10.53	26,200
1926	January 20, 1926	12.33	35,000	1969	August 20, 1969	24.77	144,000
1927	December 27, 1926	14.58	48,800	1970	January 1, 1970	16.08	57,600
1928	August 17, 1928	18.80	74,000	1971	May 31, 1971	16.31	59,200
1929	March 1, 1929	13.08	39,800	1972	June 21, 1972	27.13	176,000
1930	November 19, 1929	14.60	48,800	1973	May 29, 1973	15.75	55,400
1931	August 23, 1931	8.21	15,200	1974	December 28, 1973	18.00	71,500
1932	February 6, 1932	13.30	41,000	1975	March 19, 1975	18.34	75,100
1933	October 18, 1932	15.32	51,300	1976	January 2, 1976	12.86	37,700
1934	March 29, 1934	12.65	35,800	1977	April 6, 1977	16.66	61,600
1935	January 24, 1935	20.22	91,000	1978	January 27, 1978	18.38	75,400
1936	March 18, 1936	23.02	115,000	1979	February 26, 1979	18.37	75,300
1937	January 21, 1937	15.64	53,100	1980	April 15, 1980	15.37	53,000 <sup>2</sup>
1938	October 20, 1937	16.76	60,700	1981	May 29, 1981	10.72	27,800 <sup>2</sup>
1939	August 19, 1939	15.18	50,700	1982	June 14, 1982	16.75	69,500 <sup>2</sup>
1940	August 16, 1940	19.63	86,200	1983	April 11, 1983	13.32	44,100 <sup>2</sup>
1941	July 8, 1941	10.50	25,200	1984	February 15, 1984	16.11	64,400 <sup>2</sup>
1942	May 23, 1942	18.34	70,400	1985	August 19, 1985	10.07	25,100 <sup>2</sup>
1943	December 31, 1942	13.67	43,200	1986	November 5, 1985	30.76	226,000 <sup>2</sup>
1944	September 19, 1944	18.00	73,500	1987	April 17, 1987	21.73	115,000 <sup>2</sup>
1945	September 18, 1945	12.60	36,500	1988	January 21, 1988	8.73	18,800 <sup>2</sup>

1946	January 9, 1946	13.06	39,500	1989	May 6, 1989	14.13	49,600 <sup>2</sup>
1947	March 16, 1947	11.57	30,800	1990	January 1, 1990	11.95	35,600 <sup>2</sup>
1948	February 15, 1948	15.05	49,500	1991	January 12, 1991	13.68	46,500 <sup>2</sup>
1949	December 4, 1948	18.68	76,400	1992	April 22, 1992	21.02	108,000 <sup>2</sup>
1950	September 10, 1950	17.80	69,200	1993	March 5, 1993	16.50	67,500 <sup>2</sup>
1951	December 8, 1950	16.70	60,900	1994	March 29, 1994	12.98	41,900 <sup>2</sup>
1952	March 12, 1952	14.97	49,500	1995	June 28, 1995	17.57	76,400 <sup>2</sup>
1953	February 22, 1953	16.07	56,700	1996	September 7, 1996	19.28	91,500 <sup>2</sup>
1954	March 2, 1954	16.78	61,600	1997	December 2, 1996	15.30	58,100 <sup>2</sup>
1955	March 7, 1955	17.28	65,100	1998	January 9, 1998	17.02	71,700 <sup>2</sup>
1956	March 15, 1956	8.70	17,600	1999	September 30, 1999	10.57	27,800 <sup>2</sup>
1957	April 6, 1957	16.60	60,200	2002	April 23, 2002	9.13	20,600 <sup>2</sup>
1958	April 1, 1958	13.39	41,200	2003	February 23, 2003	17.97	79,800 <sup>2</sup>
1959	June 4, 1959	10.71	27,600	2004	September 29, 2004	16.97	71,300 <sup>2</sup>
1960	March 31, 1960	16.19	58,400	2005	March 29, 2005	10.93	29,700 <sup>2</sup>
1961	February 27, 1961	10.68	27,600	2006	June 28, 2006	15.71	61,300 <sup>2</sup>
1962	October 22, 1961	16.42	59,800	2007	April 16, 2007	13.40	44,700 <sup>2</sup>
1963	March 13, 1963	18.47	75,500				

<sup>1</sup>Discharge is a historic peak.

<sup>2</sup>Discharge affected by regulation or diversion.

**Table 277.** 02026500 Tye River at Roseland, Va.

LOCATION.--Latitude 37°45'13", Longitude 078°59'12", NAD27, Nelson County, Hydrologic Unit 02080203, 0.8 mi northwest of Roseland and 0.8 mi upstream from Hat Creek.

DRAINAGE AREA.--69.0 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 643.3 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 600 ft<sup>3</sup>/s and extended above on basis of velocity-area studies.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1928	August 16, 1928	8.65	3,490	1934	September 16, 1934	10.02	6,000
1929	May 2, 1929	7.10	1,760	1935	December 1, 1934	9.00	4,140
1930	March 7, 1930	7.30	1,920	1936	March 17, 1936	8.92	3,970
1931	August 22, 1931	6.40	1,280	1937	February 22, 1937	7.80	2,410
1932	March 6, 1932	6.00	1,040	1938	October 19, 1937	9.60	5,210
1933	October 17, 1932	9.10	4,310				

**Table 278.** 02027000 Tye River near Lovingston, Va.

LOCATION.--Latitude 37°42'55", Longitude 078°58'55", NAD27, Nelson County, Hydrologic Unit 02080203, on right bank at downstream side of bridge on State Highway 158, 3.5 mi downstream from Hat Creek, 4.8 mi upstream from Piney River and 6.8 mi southwest of Lovingston.

DRAINAGE AREA.--93.0 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 581.39 ft NGVD of 1929. Sept. 15, 1969, to Oct. 15, 1970, nonrecording gage at present site and datum. Prior to September 15, 1969 water-stage recorder at present site and datum of 578.39 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 7,460 ft<sup>3</sup>/s and extended above on basis of slope-area measurement at 80,000 ft<sup>3</sup>/s.

BANKFULL STAGE.--5 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Subsequent to June 30, 1957, records were provided by the Virginia Department of Environmental Quality - Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1939	August 19, 1939	11.13 <sup>1</sup>	6,900	1974	May 12, 1974	5.97 <sup>1</sup>	2,390
1940	August 16, 1940	11.94 <sup>1</sup>	7,700	1975	March 19, 1975	11.49 <sup>1</sup>	7,300
1941	July 7, 1941	5.18 <sup>1</sup>	1,740	1976	June 29, 1976	4.44 <sup>1</sup>	1,480
1942	May 16, 1942	12.09 <sup>1</sup>	7,910	1977	October 9, 1976	10.18 <sup>1</sup>	6,000
1943	October 15, 1942	13.33 <sup>1</sup>	9,230	1978	January 26, 1978	10.92 <sup>1</sup>	6,700
1944	September 19, 1944	13.70 <sup>1</sup>	9,670	1979	September 22, 1979	13.78 <sup>1</sup>	11,100
1945	September 18, 1945	9.90 <sup>1</sup>	5,700	1980	April 9, 1980	7.84 <sup>1</sup>	3,730
1946	March 15, 1946	3.10 <sup>1</sup>	776	1981	September 6, 1981	9.18 <sup>1</sup>	4,980
1947	June 14, 1947	4.90 <sup>1</sup>	1,690	1982	June 13, 1982	5.94 <sup>1</sup>	2,350
1948	April 1, 1948	7.63 <sup>1</sup>	3,510	1983	April 2, 1983	8.69 <sup>1</sup>	4,490
1949	June 18, 1949	10.10 <sup>1</sup>	5,900	1984	August 12, 1984	9.27 <sup>1</sup>	5,070
1950	September 10, 1950	8.02 <sup>1</sup>	3,870	1985	August 20, 1985	5.98 <sup>1</sup>	2,380
1951	December 7, 1950	8.86 <sup>1</sup>	4,700	1986	November 4, 1985	14.46 <sup>1</sup>	12,700
1952	March 11, 1952	10.82 <sup>1</sup>	6,600	1987	April 17, 1987	7.83 <sup>1</sup>	3,720
1953	March 24, 1953	7.17 <sup>1</sup>	3,150	1988	March 26, 1988	2.99 <sup>1</sup>	965
1954	March 1, 1954	5.46 <sup>1</sup>	1,760	1989	July 16, 1989	6.02 <sup>1</sup>	2,430
1955	August 18, 1955	11.50 <sup>1</sup>	7,300	1990	May 10, 1990	8.57 <sup>1</sup>	4,380
1956	July 20, 1956	6.54 <sup>1</sup>	2,560	1991	October 23, 1990	8.42 <sup>1</sup>	4,250
1957	February 26, 1957	7.18 <sup>1</sup>	3,150	1992	April 22, 1992	12.86 <sup>1</sup>	9,290
1958	April 23, 1958	5.43 <sup>1</sup>	1,810	1993	November 23, 1992	10.70 <sup>1</sup>	6,500
1959	September 30, 1959	7.90 <sup>1</sup>	3,780	1994	December 5, 1993	6.46 <sup>1</sup>	2,780
1960	October 24, 1959	8.03 <sup>1</sup>	3,870	1995	January 15, 1995	9.05 <sup>1</sup>	48,900
1961	February 25, 1961	5.88 <sup>1</sup>	2,080	1996	September 6, 1996	16.05 <sup>1</sup>	17,100
1962	October 21, 1961	8.98 <sup>1</sup>	4,800	1997	December 1, 1996	6.82 <sup>1</sup>	3,630

1963	November 10, 1962	5.67 <sup>1</sup>	1,930	1998	January 8, 1998	9.15 <sup>1</sup>	6,850
1964	January 25, 1964	5.78 <sup>1</sup>	2,000	1999	September 30, 1999	10.61 <sup>1</sup>	8,680
1965	February 7, 1965	9.20 <sup>1</sup>	5,000	2000	September 2, 2000	6.67 <sup>1</sup>	4,160
1966	February 13, 1966	6.44 <sup>1</sup>	2,600	2001	June 22, 2001	4.08 <sup>1</sup>	1,960
1967	March 7, 1967	8.20 <sup>1</sup>	4,050	2002	April 22, 2002	2.07 <sup>1</sup>	740
1968	May 27, 1968	4.92 <sup>1</sup>	1,610	2003	September 19, 2003	13.24 <sup>1</sup>	12,400
1969	August 20, 1969	29.00 <sup>1</sup>	80,000	2004	November 19, 2003	8.02 <sup>1</sup>	5,550
1970	December 30, 1969	6.74 <sup>1</sup>	1,950	2005	December 23, 2004	8.98	3,510
1971	October 31, 1970	8.94 <sup>1</sup>	4,180	2006	November 29, 2005	17.04	13,700
1972	June 21, 1972	14.34 <sup>1</sup>	12,200	2007	November 16, 2006	9.14	3,650
1973	October 5, 1972	9.35 <sup>1</sup>	5,200				

---

<sup>1</sup>Gage height at different site and (or) datum.

**Table 279. 02027500 Piney River at Piney River, Va.**

LOCATION.--Latitude 37°42'08", Longitude 079°01'40", NAD27, Nelson County, Hydrologic Unit 02080203, on left bank at upstream side of bridge on State Highway 151, 0.2 mi southwest of Piney River post office, 1.7 mi downstream from Indian Creek, and 2.5 mi southeast of Lowesville.

DRAINAGE AREA.--47.7 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 631.58 ft NGVD of 1929. Prior to May 27, 1969, water-stage recorder at site 20 ft downstream and datum of 633.58 ft NGVD of 1929. From Nov. 4, 1969, to Feb. 26, 1970, nonrecording gage at site 20 ft downstream from former highway bridge at datum of 633.58 ft NGVD of 1929. From Feb. 26, 1970, to Sept. 20, 1973, on right bank 20 ft upstream from bridge at datum of 633.58 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 5,940 ft<sup>3</sup>/s and extended above on basis of slope-area measurement at 38,000 ft<sup>3</sup>/s.

BANKFULL STAGE.--6 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Subsequent to June 30, 1957, records were provided by the Virginia Department of Environmental Quality - Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1949	June 18, 1949	9.90 <sup>1</sup>		1978	January 26, 1978	6.43	3,010
1950	September 10, 1950	5.00 <sup>1</sup>	1,710	1979	September 21, 1979	9.53	8,600
1951	December 7, 1950	6.08 <sup>1</sup>	2,740	1980	April 9, 1980	5.44	2,310
1952	March 11, 1952	5.31 <sup>1</sup>	1,930	1981	September 6, 1981	2.42	521
1953	March 24, 1953	4.89 <sup>1</sup>	1,570	1982	June 13, 1982	4.6	1,740
1954	March 1, 1954	3.36 <sup>1</sup>	608	1983	April 2, 1983	4.74	1,830
1955	August 18, 1955	7.90 <sup>1</sup>	4,930	1984	February 14, 1984	5.46	2,320
1956	July 20, 1956	3.58 <sup>1</sup>	720	1985	August 18, 1985	4.48	1,660
1957	February 26, 1957	5.06 <sup>1</sup>	1,700	1986	November 4, 1985	12.63	25,200
1958	April 23, 1958	3.55 <sup>1</sup>	698	1987	April 16, 1987	5.10	2,070
1959	September 30, 1959	6.13 <sup>1</sup>	2,800	1988	November 29, 1987	2.48	541
1960	July 27, 1960	6.52 <sup>1</sup>	3,180	1989	May 5, 1989	4.42	1,620
1961	February 25, 1961	3.90 <sup>1</sup>	870	1990	May 10, 1990	4.79	1,860
1962	October 21, 1961	4.67 <sup>1</sup>	1,380	1991	October 23, 1990	5.56	2,390
1963	March 12, 1963	3.82 <sup>1</sup>	810	1992	April 21, 1992	9.76	9,330
1964	January 25, 1964	3.64 <sup>1</sup>	735	1993	November 13, 1992	5.43	2,300
1965	February 7, 1965	5.58 <sup>1</sup>	2,220	1994	December 5, 1993	4.55	1,700
1966	February 13, 1966	4.85 <sup>1</sup>	1,540	1995	June 28, 1995	6.41	3,050
1967	March 7, 1967	4.92 <sup>1</sup>	1,580	1996	September 6, 1996	12.85	27,400
1968	May 27, 1968	3.30 <sup>1</sup>	570	1997	December 2, 1996	5.51	2,320
1969	August 20, 1969	13.80 <sup>1</sup>	38,000	1998	January 8, 1998	6.54	3,160
1970	December 31, 1969		1,260	1999	September 30, 1999	9.61	4,400
1971	October 31, 1970	6.12 <sup>1</sup>	3,750	2002	April 22, 2002	3.28	209
1972	June 21, 1972	9.95 <sup>1</sup>	10,000	2003	September 19, 2003	7.54	2,340

1973	October 5, 1972	8.37 <sup>1</sup>	5,760	2004	November 19, 2003	6.29	1,480
1974	December 21, 1973	4.17	1,340	2005	December 23, 2004	5.79	1,180
1975	March 19, 1975	6.19	2,830	2006	November 29, 2005	12.06	10,200
1976	December 31, 1975	2.71	540	2007	November 16, 2006	5.15	850
1977	October 9, 1976	6.27	2,920				

---

<sup>1</sup>Gage height at different site and (or) datum.

**Table 280. 02027700 Buffalo River tributary near Amherst, Va.**

LOCATION.--Latitude 37°33'45", Longitude 078°57'35", NAD27, Amherst County, Hydrologic Unit 02080203, on left bank just upstream from culvert on U.S. Highway 60, 0.8 mi upstream from mouth, and 5.2 mi southeast of Amherst.

DRAINAGE AREA.--0.45 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 583.66 ft NGVD of 1929. Prior to Apr. 17, 1972, flood-hydrograph recorder at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--3 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1966	February 13, 1966	3.27	28.0	1988	May 18, 1988	3.06	22.0
1967	January 27, 1967	3.14	24.0	1989	May 6, 1989	6.30	
1968		3.00 <sup>1</sup>	20.0 <sup>2,3</sup>	1990		2.78 <sup>1</sup>	16.0 <sup>2,3</sup>
1969		3.00 <sup>1</sup>	20.0 <sup>2,3</sup>	1991	October 23, 1990	4.40	64.0
1970		3.00 <sup>1</sup>	20.0 <sup>2,3</sup>	1992	April 22, 1992	3.20	26.0
1971	May 30, 1971	3.32	30.0	1993	March 4, 1993	4.09	53.0
1972	June 21, 1972	7.18	187	1994	March 28, 1994	4.18	55.0
1973	October 5, 1972	6.43	150	1995	June 22, 1995	3.13	24.0
1974	December 21, 1973	3.09	23.0	1996	September 6, 1996	7.33	196
1975	March 19, 1975	4.68	75.0	1997	September 10, 1997	2.94	20.0
1976	December 31, 1975	3.10	23.0	1998	January 28, 1998	3.47	34.0
1977	March 13, 1977	3.60	38.0	1999	September 29, 1999	7.06	181
1978	March 26, 1978	3.50	35.0	2000	September 2, 2000	5.44	105
1980	April 9, 1980	2.95	19.0	2001	March 21, 2001	2.93	20.0
1981	May 28, 1981	3.36	31.0	2002		2.76 <sup>1</sup>	16.0 <sup>2,3</sup>
1982	June 13, 1982	3.17	25.0	2003	April 11, 2003	3.92	48.0
1983	April 2, 1983	3.93	48.0	2004	September 8, 2004	3.39	32.0
1984	February 14, 1984	3.81	44.0	2005	December 23, 2004	4.94	86.0
1985	August 18, 1985	2.96 <sup>4</sup>	20 <sup>5</sup>	2006	November 29, 2005	3.98	49.4
1986	November 4, 1985	4.18	55.0	2007	October 6, 2006	3.02	21.4
1987	September 8, 1987	6.24	145				

<sup>1</sup>Gage height below minimum recordable elevation.

<sup>2</sup>Discharge is less than indicated value, which is minimum recordable discharge at this site.

<sup>3</sup>Month or day of occurrence is unknown or not exact.

<sup>4</sup>Gage height is an estimate.

<sup>5</sup>Discharge actually greater than indicated value. Mud in gage resulted in a reading that is probably less than the actual high-water level.

**Table 281. 02027800 Buffalo River near Tye River, Va.**

LOCATION.--Latitude 37°36'20", Longitude 078°55'25", NAD27, Nelson County, Hydrologic Unit 02080203, on right bank 35 ft upstream from bridge on State Highway 657, 2.1 mi upstream from mouth, and 3.5 mi southeast of town of Tye River.

DRAINAGE AREA.--148 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 444.39 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 5,350 ft<sup>3</sup>/s and extended above on basis of flow-over-dam measurement at 6,150 ft<sup>3</sup>/s and slope-area measurement at 45,000 ft<sup>3</sup>/s.

BANKFULL STAGE.--8 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Records were provided by the Virginia Department of Environmental Quality - Water Division from Aug. 1, 1960, to Sept. 30, 1989.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1961	February 19, 1961	7.04	2,010	1979	June 3, 1979	18.00	19,000
1962	October 21, 1961	11.03	6,150	1980	October 3, 1979	8.73	3,500
1963	March 12, 1963	8.20	3,000	1981	July 5, 1981	4.83	916
1964	February 6, 1964	6.10	1,470	1982	June 13, 1982	9.02	3,820
1965	February 7, 1965	11.18	6,400	1983	April 3, 1983	12.59	8,600
1966	February 28, 1966	9.12	3,910	1984	February 14, 1984	12.75	8,880
1967	March 7, 1967	10.35	5,400	1985	August 18, 1985	6.22	1,550
1968	May 27, 1968	6.78	1,890	1986	November 5, 1985	15.26	13,500
1969	August 20, 1969	27.95	45,000	1987	September 8, 1987	10.05	4,950
1970	December 31, 1969	10.29	3,900	1988	May 18, 1988	3.83	737
1971	October 31, 1970	9.69	4,570	1989	May 6, 1989	13.13	9,520
1972	June 21, 1972	25.22	36,600	1990	January 1, 1990	7.81	2,930
1973	October 5, 1972	19.90	22,800	1991	October 23, 1990	12.59	8,030
1974	December 21, 1973	8.70	3,500	1992	April 22, 1992	11.02	6,040
1975	March 19, 1975	14.80	12,600	1993	March 4, 1993	12.61	8,060
1976	December 31, 1975	8.04	2,800	1994	December 5, 1993	9.89	4,790
1977	October 9, 1976	14.48	12,000	1995	June 23, 1995	6.83	2,210
1978	January 26, 1978	12.94	9,130				

**Table 282.** 02028000 Tye (Buffalo) River near Norwood, Va.

(Formerly published as Buffalo River near Norwood.)

LOCATION.--Latitude 37°37'40", Longitude 078°52'50", NAD27, Nelson County, Hydrologic Unit 02080203, on right bank 1.0 mi downstream from Tye River, 3 mi upstream from Rucker Run, and 4.2 mi upstream from mouth and Norwood.

DRAINAGE AREA.--355 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 400.78 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 12,600 ft<sup>3</sup>/s and extended on basis of slope-area measurement at 18,300 ft<sup>3</sup>/s and logarithmic plotting.

BANKFULL STAGE.--10 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.-- Subsequent to June 30, 1957, records were provided by the Virginia Department of Environmental Quality - Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1940	August 16, 1940	15.25	25,600	1951	June 13, 1951	7.77	8,170
1941	December 29, 1940	5.58	4,220	1952	March 11, 1952	7.60	7,770
1942	May 16, 1942	10.29	13,500	1953	March 24, 1953	6.77	6,270
1943	October 15, 1942	18.10	33,500	1954	December 14, 1953	5.14	3,490
1944	September 19, 1944	18.10	33,500	1955	August 18, 1955	12.06	17,600
1945	September 18, 1945	10.00	12,800	1956	April 16, 1956	4.27	2,110
1946	December 6, 1945	4.33	2,260	1957	February 26, 1957	5.77	4,540
1947	June 14, 1947	5.37	3,810	1958	April 22, 1958	5.35	3,810
1948	August 4, 1948	10.79	14,600	1959	December 29, 1958	4.92	3,090
1949	March 23, 1949	14.28	23,200	1960	May 8, 1960	6.76	6,270
1950	September 10, 1950	9.56	11,900				

**Table 283. 02028500 Rockfish River near Greenfield, Va.**

LOCATION.--Latitude 37°52'10", Longitude 078°49'25", NAD27, Nelson County, Hydrologic Unit 02080203, on left bank 50 ft downstream from bridge on State Highway 634, 2.8 mi downstream from confluence of North and South Forks, and 4.1 mi south of Greenfield.

DRAINAGE AREA.--94.8 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 530.29 ft NGVD of 1929. Prior to Aug. 21, 1943, nonrecording gage at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 8,100 ft<sup>3</sup>/s and extended above on basis of slope-area measurement at 11,000 ft<sup>3</sup>/s, 35,000 ft<sup>3</sup>/s, 70,000 ft<sup>3</sup>/s, contracted-opening measurements at 17,500 ft<sup>3</sup>/s, and peak runoff comparison for nearby stations.

BANKFULL STAGE.--12 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Subsequent to June 30, 1957, records were provided by the Virginia Department of Environmental Quality - Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1943	October 15, 1942	23.40	30,000	1975	March 19, 1975	10.32	6,310
1944	September 19, 1944	17.20	13,700	1976	December 31, 1975	5.45	1,620
1945	September 18, 1945	11.66	4,780	1977	October 9, 1976	8.81	4,680
1946	December 6, 1945	4.89	635	1978	January 26, 1978	6.96	2,880
1947	March 14, 1947	6.40	2,260	1979	September 5, 1979	11.24	7,370
1948	April 1, 1948	9.28	3,050	1980	April 9, 1980	7.07	2,950
1949	December 4, 1948	11.30	4,450	1981	February 20, 1981	3.73	827
1950	September 10, 1950	8.25	2,440	1982	June 13, 1982	5.85	1,920
1951	December 4, 1950	12.12	5,260	1983	April 3, 1983	9.23	5,130
1952	March 11, 1952	13.30	6,840	1984	August 12, 1984	9.72	5,670
1953	March 25, 1953	9.60	3,040	1985	August 18, 1985	7.85	3,730
1954	March 1, 1954	6.68	1,460	1986	November 4, 1985	13.24	9,970
1955	August 18, 1955	16.45	12,200	1987	September 8, 1987	9.10	4,990
1956	July 20, 1956	8.85	2,560	1988	November 29, 1987	5.53	1,700
1957	April 5, 1957	8.17	2,210	1989	May 6, 1989	6.61	2,530
1958	April 23, 1958	8.30	1,840	1990	May 10, 1990	9.72	5,670
1959	September 30, 1959	14.96	7,860	1991	October 23, 1990	9.39	5,310
1960	October 24, 1959	8.92	2,140	1992	April 21, 1992	12.22	8,620
1961	April 13, 1961	9.12	2,240	1993	November 23, 1992	11.88	8,190
1962	October 21, 1961	13.90	6,340	1994	December 5, 1993	7.75	3,520
1963	November 10, 1962	9.23	2,300	1995	June 28, 1995		5,600 <sup>12</sup>
1964	January 25, 1964	8.32	1,840	1996	September 6, 1996	13.77	10,600
1965	February 7, 1965	13.50	5,860	1997	December 1, 1996	7.48	3,280
1966	February 13, 1966	10.11	2,820	1998	February 17, 1998	8.48	4,210
1967	March 7, 1967	12.98	5,260	1999	September 30, 1999	9.54	5,300

1968	December 10, 1967	8.10	1,740	2002	April 22, 2002	2.76	528
1969	August 20, 1969	31.20	70,000	2003	September 19, 2003	12.32	8,610
1970	February 2, 1970	8.67	1,690	2004	September 28, 2004	9.06	4,810
1971	May 30, 1971	9.22	5,560	2005	December 23, 2004	8.78	4,520
1972	June 21, 1972	18.11	17,500	2006	November 29, 2005	9.76	5,540
1973	October 5, 1972	9.57	5,540	2007	October 7, 2006	9.23	4,980
1974	December 26, 1973	6.15	2,190				

---

<sup>1</sup>Discharge is a maximum daily average.

<sup>2</sup>Discharge is an estimate.

**Table 284. 02028700 Cove Creek near Coveseville, Va.**

LOCATION.--Latitude 37°52'06", Longitude 078°43'32", NAD27, Albemarle County, Hydrologic Unit 02080203, at culvert on U.S. Highway 29, 1.8 mi southwest of Coveseville.

DRAINAGE AREA.--3.85 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 629.78 ft NGVD of 1929. Prior to Dec. 9, 1970, nonrecording gage (crest-stage gage) at site just downstream and datum of 630.78 NGVD 1929. Dec. 9, 1970, to Apr. 3, 1975, flood-hydrograph recorder at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 30 ft<sup>3</sup>/s and extended on basis of contracted-opening measurements at 2,000 ft<sup>3</sup>/s and 3,000 ft<sup>3</sup>/s.

BANKFULL STAGE.--4 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Original culvert destroyed by flood waters on Aug. 20, 1969. Culvert rebuild in 1971.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1944	September 19, 1944	9.10 <sup>1</sup>	2,000 <sup>2</sup>	1962	October 21, 1961	6.98 <sup>1</sup>	1,100
1950	May 31, 1950	6.20 <sup>1</sup>	820	1963		2.20 <sup>1,3</sup>	70.0 <sup>4,5</sup>
1951	June 10, 1951	5.60 <sup>1</sup>	640	1964	January 25, 1964	3.24 <sup>1</sup>	175
1952	August 31, 1952	5.89 <sup>1</sup>	730	1965	February 7, 1965	5.51 <sup>1</sup>	600
1953	March 25, 1953	4.10 <sup>1</sup>	305	1966	February 28, 1966	4.38 <sup>1</sup>	360
1954		2.20 <sup>1,3</sup>	70.0 <sup>4,5</sup>	1967	March 7, 1967	4.69 <sup>1</sup>	420
1955	August 18, 1955	6.52 <sup>1</sup>	900	1968	May 27, 1968	3.82 <sup>1</sup>	250
1956	July 10, 1956	4.41 <sup>1</sup>	380	1969	August 20, 1969	8.80 <sup>1</sup>	3,000
1957	April 5, 1957	3.66 <sup>1</sup>	230	1972	June 21, 1972	5.65	645
1958	July 27, 1958	4.99 <sup>1</sup>	490	1973	October 5, 1972	4.22	324
1959	September 30, 1959	8.20 <sup>1</sup>	1,560	1974	September 7, 1974	2.68	113
1960		2.20 <sup>1,3</sup>	70.0 <sup>4,5</sup>	1975	September 26, 1975	6.34	869
1961	April 13, 1961	3.16 <sup>1</sup>	165	1976	December 31, 1975	4.15	310

<sup>1</sup>Gage height at different site and (or) datum.

<sup>2</sup>Discharge is a historic peak.

<sup>3</sup>Gage height below minimum recordable elevation.

<sup>4</sup>Discharge is less than indicated value, which is minimum recordable discharge at this site.

<sup>5</sup>Month or day of occurrence is unknown or not exact.

**Table 285. 02028750 Cove Creek at Faber, Va.**

LOCATION.--Latitude 37°49'50", Longitude 078°44'06", NAD27, Nelson County, Hydrologic Unit 02080203, at bridge on State Highway 632, at Faber.

DRAINAGE AREA.--16.9 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is not determined.

STAGE-DISCHARGE RELATION.--Not developed. Peak discharge for flood of August 1969 determined by slope-area measurement.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1967	March 7, 1967	34.00		1969	August 20, 1969	56.00	28,000
1968		34.40 <sup>1</sup>					

<sup>1</sup>Gage height below minimum recordable elevation.

**Table 286.** 02028800 Ballinger Creek at Esmont, Va.

LOCATION.--Latitude 37°49'33", Longitude 078°36'35", NAD27, Albemarle County, Hydrologic Unit 02080203, at bridge on State Highway 6, at Esmont.

DRAINAGE AREA.--5.56 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is not determined.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert and contracted-opening and flow-over-road at 4,800 ft<sup>3</sup>/s.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1967	August 24, 1967	12.84	1,010	1973	December 15, 1972	11.71	790
1968	December 10, 1967	10.53	580	1974	September 7, 1974	12.24	900
1969	August 20, 1969	17.60	4,800	1975	September 26, 1975	13.23	1,110
1970	April 14, 1970	10.53	580	1976	December 31, 1975	10.89	635
1971	May 30, 1971	12.45	940	1977	October 9, 1976	12.25	900
1972	June 21, 1972	16.90	2,260	1978	January 26, 1978	12.09	868

**Table 287.** 02028900 Miller Creek near Scottsville, Va.

LOCATION.--Latitude 37°48'30", Longitude 078°30'46", NAD27, Albemarle County, Hydrologic Unit 02080203, at bridge on State Highway 6, 1.5 mi west of Scottsville.

DRAINAGE AREA.--6.39 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 309.87 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 65 ft<sup>3</sup>/s and extended above on basis of contracted-opening measurements at 6,300 ft<sup>3</sup>/s.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1967	March 15, 1967	10.29	1,150	1973	October 5, 1972	10.06	1,050
1968		8.95 <sup>1</sup>	490 <sup>2,3</sup>	1974	September 7, 1974	9.15	560
1969	August 20, 1969	13.44	6,300	1975	September 26, 1975	10.66	1,500
1970	July 10, 1970	10.37	1,250	1976	December 31, 1975	9.24	620
1971	May 30, 1971	10.05	1,050	1978	January 26, 1978	10.11	1,060 <sup>4</sup>
1972	June 21, 1972	11.75	2,750				

<sup>1</sup>Gage height below minimum recordable elevation.

<sup>2</sup>Discharge is less than indicated value, which is minimum recordable discharge at this site.

<sup>3</sup>Month or day of occurrence is unknown or not exact.

<sup>4</sup>Discharge is a historic peak.

**Table 288. 02029000 James River at Scottsville, Va.**

LOCATION.--Latitude 37°47'50", Longitude 078°29'30", NAD27, Albemarle County, Hydrologic Unit 02080203, on left bank 900 ft downstream from bridge on State Highway 20 at Scottsville, 6.8 mi upstream from Hardware River, and at mile 188.6.

DRAINAGE AREA.--4,581 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 253.18 ft NGVD of 1929. Prior to Nov. 28, 1928, nonrecording gage at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 120,000 ft<sup>3</sup>/s and extended above on basis of slope-conveyance study.

BANKFULL STAGE.--10 ft.

REGULATION.--High-flow conditions at this site are considered regulated after 1978. Flow regulated since December 1979 by Lake Moomaw, 197.5 mi upstream; since October 1984 by Back Creek Lake 225.5 mi upstream, and since January 1985 by Little Back Creek Lake 228.6 mi upstream, and smaller reservoirs. Usable capacity 534,900 acre-ft. Large diurnal fluctuation caused by powerplants upstream from station.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1871	October 1870	30.70	215,000 <sup>12</sup>	1964	March 7, 1964	13.58	32,700
1878	November 1877	27.90	160,000 <sup>12</sup>	1965	February 8, 1965	17.19	52,100
1913	March 1913	25.16	121,000 <sup>12</sup>	1966	February 15, 1966	15.63	42,900
1925	October 1, 1924		80,000	1967	March 9, 1967	19.07	64,000
1926	January 20, 1926	15.80	42,300	1968	March 14, 1968	12.11	25,900
1927	February 20, 1927	15.68	41,900	1969	August 20, 1969	30.00	188,000
1928	August 17, 1928	20.92	75,600	1970	January 1, 1970	19.05	63,900
1929	February 28, 1929	15.90	44,700	1971	June 1, 1971	19.12	64,400
1930	November 19, 1929	16.12	45,800	1972	June 22, 1972	34.02	301,000
1931	August 23, 1931	10.73	21,100	1973	October 6, 1972	23.24	97,600
1932	March 30, 1932	13.14	31,400	1974	December 28, 1973	21.12	78,500
1933	October 18, 1932	18.45	59,500	1975	March 19, 1975	24.63	114,000
1934	March 29, 1934	14.70	38,800	1976	January 2, 1976	15.55	42,500
1935	September 6, 1935	23.06	93,400	1977	April 6, 1977	19.55	67,400
1936	March 19, 1936	25.46	126,000	1978	January 27, 1978	22.23	88,400
1937	April 26, 1937	18.80	62,200	1979	February 26, 1979	22.63	92,300
1938	October 20, 1937	22.33	87,400	1980	April 15, 1980	18.56	58,700 <sup>3</sup>
1939	August 19, 1939	19.71	68,400	1981	May 30, 1981	12.74	28,000 <sup>3</sup>
1940	August 16, 1940	25.84	130,000	1982	June 14, 1982	20.08	69,800 <sup>3</sup>
1941	July 9, 1941	12.07	27,100	1983	April 10, 1983	17.37	51,000 <sup>3</sup>
1942	May 23, 1942	21.44	80,600	1984	February 15, 1984	19.65	66,600 <sup>3</sup>
1943	October 16, 1942	23.00	95,200	1985	August 19, 1985	13.03	29,200 <sup>3</sup>
1944	September 19, 1944	26.00	133,000	1986	November 6, 1985	31.77	243,000 <sup>3</sup>
1945	September 18, 1945	18.00	57,000	1987	April 17, 1987	26.17	133,000 <sup>3</sup>
1946	January 9, 1946	15.30	41,200	1988	January 21, 1988	10.68	20,200 <sup>3</sup>
1947	March 16, 1947	13.68	33,200	1989	May 6, 1989	20.35	71,900 <sup>3</sup>

1948	April 1, 1948	18.40	59,600	1990	January 2, 1990	15.20	38,800 <sup>3</sup>
1949	December 4, 1948	22.90	94,200	1991	October 23, 1990	19.23	63,500 <sup>3</sup>
1950	September 11, 1950	20.43	73,300	1992	April 23, 1992	25.31	123,000 <sup>3</sup>
1951	December 9, 1950	19.17	64,900	1993	March 5, 1993	20.73	75,200 <sup>3</sup>
1952	March 13, 1952	17.59	54,500	1994	March 29, 1994	18.87	60,900 <sup>3</sup>
1953	March 25, 1953	19.48	67,000	1995	January 16, 1995	21.71	84,300 <sup>3</sup>
1954	March 3, 1954	18.90	62,900	1996	September 7, 1996	28.25	167,000 <sup>3</sup>
1955	March 7, 1955	19.94	70,000	1997	December 3, 1996	19.83	68,000 <sup>3</sup>
1956	April 18, 1956	10.61	20,400	1998	January 9, 1998	21.13	78,800 <sup>3</sup>
1957	April 7, 1957	19.14	64,200	1999	September 30, 1999	20.38	72,200 <sup>3</sup>
1958	April 1, 1958	15.88	44,500	2002	April 24, 2002	10.69	20,200 <sup>3</sup>
1959	June 3, 1959	12.81	29,300	2003	February 24, 2003	22.58	92,800 <sup>3</sup>
1960	April 1, 1960	19.10	64,200	2004	September 30, 2004	20.68	74,700 <sup>3</sup>
1961	February 27, 1961	12.94	29,700	2005	March 30, 2005	14.33	34,700 <sup>3</sup>
1962	October 22, 1961	18.88	62,900	2006	June 27, 2006	20.26	71,200 <sup>3</sup>
1963	March 14, 1963	20.82	76,200	2007	April 17, 2007	17.40	51,200 <sup>3</sup>

<sup>1</sup>Discharge is a historic peak.

<sup>2</sup>Month or day of occurrence is unknown or not exact.

<sup>3</sup>Discharge affected by regulation or diversion.

**Table 289.** 02029200 North Fork Hardware River at Red Hill, Va.

LOCATION.--Latitude 37°58'03", Longitude 078°37'04", NAD27, Albemarle County, Hydrologic Unit 02080203, at bridge on U.S. Highway 29, 0.5 mi west of Red Hill.

DRAINAGE AREA.--11.2 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 577.11 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 260 ft<sup>3</sup>/s and extended above on basis of contracted-opening measurements at 4,000 ft<sup>3</sup>/s and 7,300 ft<sup>3</sup>/s.

BANKFULL STAGE.--7 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1950	September 11, 1950	8.89	850	1963		3.10 <sup>1</sup>	75.0 <sup>2,3</sup>
1951		3.10 <sup>1</sup>	75.0 <sup>2,3</sup>	1964		3.10 <sup>1</sup>	75.0 <sup>2,3</sup>
1952	March 11, 1952	7.77	390	1965	February 7, 1965	6.36	282
1953	March 25, 1953	6.75	300	1966	February 28, 1966	5.29	200
1954	March 1, 1954	6.47	280	1967	March 7, 1967	6.80	314
1955	August 18, 1955	8.84	750	1968	December 10, 1967	4.49	149
1956	July 20, 1956	7.76	390	1969	August 20, 1969	17.00	7,300
1957	April 7, 1957	6.45	270	1970	July 10, 1970	6.67	304
1958	July 27, 1958	4.45	145	1971	February 13, 1971	5.95	246
1959	September 30, 1959	10.00	4,030	1972	June 21, 1972	10.70	4,350
1960	February 18, 1960	4.10	125	1973	October 5, 1972	7.73	414
1961	April 13, 1961	5.62	220	1974	December 21, 1973	5.64	225
1962	October 21, 1961	7.25	340				

<sup>1</sup>Gage height below minimum recordable elevation.

<sup>2</sup>Discharge is less than indicated value, which is minimum recordable discharge at this site.

<sup>3</sup>Month or day of occurrence is unknown or not exact.

**Table 290. 02029400 South Branch North Fork Hardware River near North Garden, Va.**

LOCATION.--Latitude 37°57'21", Longitude 078°39'35", NAD27, Albemarle County, Hydrologic Unit 02080203, at culvert on U.S. Highway 29 at crossroads, 1.5 mi northwest of North Garden.

DRAINAGE AREA.--6.58 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 681.11 ft NGVD of 1929. Dec. 9, 1970, to Apr. 3, 1975, flood-hydrograph recorder at present site and datum.

STAGE-DISCHARGE RELATION.--Defined prior to 1970 by current-meter measurements below 100 ft<sup>3</sup>/s and extended above on basis of contracted-opening measurements at 3,000 ft<sup>3</sup>/s and 6,200 ft<sup>3</sup>/s.

BANKFULL STAGE.--6 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1949	August 15, 1949	8.80	1,870	1963	March 12, 1963	5.97	565
1950	September 11, 1950	8.76	1,870	1964	July 13, 1964	6.75	840
1951		6.57	730 <sup>1</sup>	1965	February 7, 1965	6.31	690
1952	August 31, 1952	5.68	490	1966	February 28, 1966	4.80	310
1953	March 15, 1953	5.48	445	1967	July 20, 1967	6.50	750
1954	March 1, 1954	3.22	105	1968	December 10, 1967	3.89	170
1955	August 18, 1955	7.50	1,100	1969	August 20, 1969	8.70	6,200
1956	July 20, 1956	7.25	1,000	1971	May 30, 1971	4.60	
1957	April 5, 1957	5.15	370	1972	June 21, 1972	6.83	
1958	July 27, 1958	7.58	1,140	1973	February 2, 1973	4.62	
1959	September 30, 1959	8.86	3,050	1974	December 21, 1973	3.95	
1960	February 18, 1960	5.10	360	1975	September 26, 1975	7.35	
1961	April 13, 1961	5.37	420	1976	December 31, 1975	4.57	
1962	October 21, 1961	7.98	1,600				

<sup>1</sup>Month or day of occurrence is unknown or not exact.

**Table 291. 02029410 Sowell Branch near Charlottesville, Va.**

LOCATION.--Latitude 37°56'30", Longitude 078°32'16", NAD27, Albemarle County, Hydrologic Unit 02080203, at culvert on State Highway 20, 6.8 mi southwest of Charlottesville.

DRAINAGE AREA.--1.46 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 475.09 ft NGVD of 1929. June 6, 1966, to Apr. 4, 1975, flood-hydrograph recorder at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--4 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1967	August 24, 1967	3.96	140	1973		3.00 <sup>1</sup>	60.0 <sup>2,3</sup>
1968		3.00 <sup>1</sup>	60.0 <sup>2,3</sup>	1974		3.00 <sup>1</sup>	60.0 <sup>2,3</sup>
1969	August 20, 1969	14.60	1,500 <sup>4</sup>	1975	September 26, 1975	7.03	453
1970		3.00 <sup>1</sup>	60.0 <sup>2,3</sup>	1976		3.00 <sup>1</sup>	60.0 <sup>2,3</sup>
1971	May 30, 1971	3.50		1977		3.00 <sup>1</sup>	60.0 <sup>2,3</sup>
1972	June 21, 1972	12.67	1,200 <sup>4</sup>				

<sup>1</sup>Gage height below minimum recordable elevation.

<sup>2</sup>Discharge is less than indicated value, which is minimum recordable discharge at this site.

<sup>3</sup>Month or day of occurrence is unknown or not exact.

<sup>4</sup>Discharge is a maximum daily average.

**Table 292.** 02029430 Harris Creek near Keene, Va.

LOCATION.--Latitude 37°53'05", Longitude 078°32'57", NAD27, Albemarle County, Hydrologic Unit 02080203, at bridge on State Highway 20, 1.4 mi north of Keene.

DRAINAGE AREA.--1.68 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 420 ft NVGD of 1929 from topographic map.

STAGE-DISCHARGE RELATION.--Not developed. Peak of August 1969 determined from contracted-opening measurement.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1967	March 7, 1967	3.80		1972	June 21, 1972	7.25	
1968		3.95		1973	October 5, 1972	5.70	
1969	August 20, 1969	8.00	2,200	1974	September 7, 1974	4.81	
1970	February 9, 1970	4.00		1975	September 26, 1975	6.99	
1971	May 30, 1971	4.72		1976		4.00 <sup>1</sup>	

<sup>1</sup>Gage height below minimum recordable elevation.

**Table 293.** 02029450 Thomas Creek at Keene, Va.

LOCATION.--Latitude 37°52'25", Longitude 078°33'10", NAD27, Albemarle County, Hydrologic Unit 02080203, at culvert on State Highway 20, 0.7 mi north of Keene.

DRAINAGE AREA.--0.28 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 470 ft NGVD of 1929, from topographic map. Prior to Apr. 4, 1975, flood-hydrograph recorder at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert and flow over road.

BANKFULL STAGE.--4 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1966	February 28, 1966	2.12	10.0	1971	May 30, 1971	2.60	21.0
1967	August 24, 1967	4.60	110	1972	June 21, 1972	6.96	325
1968		2.00 <sup>1</sup>	10.0 <sup>2,3</sup>	1973	October 5, 1972	2.60	22.0
1969	August 20, 1969	7.37	440	1974	September 7, 1974	2.45	19.0
1970		2.00 <sup>1</sup>	10.0 <sup>2,3</sup>	1975	September 26, 1975	4.07	74.0

<sup>1</sup>Gage height below minimum recordable elevation.

<sup>2</sup>Discharge is less than indicated value, which is minimum recordable discharge at this site.

<sup>3</sup>Month or day of occurrence is unknown or not exact.

**Table 294.** 02029500 Hardware River near Scottsville, Va.

LOCATION.--Latitude 37°50'24", Longitude 078°28'28", NAD27, Albemarle County, Hydrologic Unit 02080203, at bridge on Woodridge-Scottsville Highway, 2 mi upstream from Briery Run, 3 mi north of Scottsville, and 11.5 mi upstream from mouth.

DRAINAGE AREA.--104 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 308.50 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 4,000 ft<sup>3</sup>/s and extended above by logarithmic plotting.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1927	December 26, 1926	10.20	1,510	1933	October 17, 1932	16.00	4,470
1928	August 26, 1928	16.62	4,690	1934	June 19, 1934	8.90	1,150
1929	June 24, 1929	16.30	4,510	1935	September 5, 1935	19.60	6,150
1930	March 8, 1930	9.50	1,300	1936	March 17, 1936	16.45	4,550
1931	June 1, 1931	8.10	952	1937	April 25, 1937	20.10	6,440
1932	May 12, 1932	12.80	2,600	1938	October 19, 1937	16.00	4,350

**Table 295. 02030000 Hardware River below Briery Run near Scottsville, Va.**

LOCATION.--Latitude 37°48'45", Longitude 078°27'20", NAD27, Fluvanna County, Hydrologic Unit 02080203, on left bank 75 ft upstream from bridge on State Highway 637, 0.8 mi downstream from Briery Run, 2.4 mi northeast of Scottsville, and 10.8 mi upstream from mouth.

DRAINAGE AREA.--116 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 294.96 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 17,900 ft<sup>3</sup>/s and extended above on basis of slope-area measurement at 23,000 ft<sup>3</sup>/s and 52,000 ft<sup>3</sup>/s.

BANKFULL STAGE.--8 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Records were provided by the Virginia Department of Environmental Quality - Water Division from July 1, 1957, to Sept. 30, 1989.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1939	February 11, 1939	10.04	1,370	1973	October 6, 1972	15.72	6,030
1940	August 16, 1940	13.73	4,250	1974	December 21, 1973	12.00	2,800
1941	April 5, 1941	10.70	1,740	1975	March 19, 1975	16.96	7,300
1942	August 9, 1942	11.02	1,880	1976	January 28, 1976	12.13	2,880
1943	October 15, 1942	13.68	4,250	1977	October 9, 1976	12.90	3,560
1944	September 19, 1944	23.80	23,000	1978	January 26, 1978	14.17	4,680
1945	September 18, 1945	10.40	1,600	1979	September 22, 1979	15.50	5,850
1946	May 18, 1946	7.80	913	1980	October 5, 1979	8.78	1,500
1947	June 14, 1947	8.71	1,080	1981	August 8, 1981	7.54	1,190
1948	April 1, 1948	14.50	5,200	1982	February 3, 1982	11.28	2,540
1949	August 15, 1949	18.48	11,100	1983	April 3, 1983	13.65	4,200
1950	September 11, 1950	10.25	1,660	1984	July 21, 1984	14.52	4,970
1951	June 10, 1951	12.72	3,200	1985	August 19, 1985	11.45	2,640
1952	March 11, 1952	12.86	3,400	1986	November 4, 1985	14.57	5,010
1953	November 20, 1952	11.07	2,440	1987	September 8, 1987	21.39	12,400
1954	March 1, 1954	12.14	2,660	1988	November 29, 1987		1,500 <sup>1,2</sup>
1955	August 18, 1955	15.73	6,800	1989	May 6, 1989	16.60	6,900
1956	July 21, 1956	5.50	622	1990	January 1, 1990	10.92	2,460
1957	April 6, 1957	8.84	1,520	1991	October 23, 1990	14.51	4,910
1958	March 31, 1958	9.22	1,340	1992	April 22, 1992	11.30	2,630
1959	June 3, 1959	10.88	2,010	1993	March 4, 1993	15.67	5,920
1960	October 1, 1959	14.81	5,760	1994	March 28, 1994	14.02	4,520
1961	April 13, 1961	11.43	2,330	1995	January 15, 1995	11.88	2,900
1962	October 21, 1961	16.12	7,470	1997	December 2, 1996	10.24	2,160
1963	March 12, 1963	12.07	2,890	1998	January 28, 1998	14.43	4,840
1964	February 6, 1964	7.77	1,020	1999	September 30, 1999	15.73	5,970
1965	February 8, 1965	14.36	5,280	2000	July 6, 2000	6.61	964

1966	March 1, 1966	10.66	1,910	2001	March 30, 2001	9.37	1,790
1967	August 25, 1967	12.54	3,250	2002	April 22, 2002	3.91	408
1968	January 14, 1968	9.10	1,320	2003	July 3, 2003	17.36	9,760
1969	August 20, 1969	31.00	52,000	2004	December 11, 2003	11.00	2,290
1970	December 31, 1969	8.70	1,280	2005	January 14, 2005	13.28	3,890
1971	May 30, 1971	14.19	4,680	2006	June 28, 2006	12.83	3,530
1972	June 21, 1972	25.50	21,600	2007	October 7, 2006	14.07	4,560

---

<sup>1</sup>Discharge is a maximum daily average.

<sup>2</sup>Discharge is an estimate.

**Table 296.** 02030100 Frisby Branch near Buckingham, Va.

LOCATION.--Latitude 37°31'13", Longitude 078°37'04", NAD27, Buckingham County, Hydrologic Unit 02080203, at culvert on State Highway 24, 4 mi southwest of Buckingham.

DRAINAGE AREA.--4.33 mi<sup>2</sup>.

GAGE.--Water-stage recorder (flood-hydrograph recorder). Datum of gage is not determined.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--5 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1967	June 22, 1967	5.66	165	1971	May 13, 1971	7.80	800
1968	December 28, 1967	5.00	105	1972	June 21, 1972	16.50	2,110
1969	August 20, 1969	5.50	170	1973	October 6, 1972	6.65	500
1970	April 2, 1970	5.16	130				

**Table 297. 02030500 Slate River near Arvonion, Va.**

LOCATION.--Latitude 37°42'10", Longitude 078°22'40", NAD27, Buckingham County, Hydrologic Unit 02080203, on left bank 250 ft upstream from bridge on State Highway 676, 1.8 mi northwest of Arvonion, 2.9 mi upstream from Hunts Creek, and 3.8 mi upstream from mouth.

DRAINAGE AREA.--226 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 238.78 ft NGVD of 1929 (levels by U.S. Army Corps of Engineers). Prior to Feb. 15, 1936, nonrecording gage at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 5,900 ft<sup>3</sup>/s and extended above on basis of slope-area measurement at 42,000 ft<sup>3</sup>/s.

BANKFULL STAGE.--6 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1927	December 26, 1926	9.80	2,940	1963	March 12, 1963	9.16	2,800
1928	August 12, 1928	14.12	6,870	1964	February 16, 1964	8.86	2,620
1929	April 17, 1929	12.12	4,720	1965	February 8, 1965	10.47	3,580
1930	March 8, 1930	8.80	2,310	1966	February 13, 1966	10.77	3,780
1931	August 1, 1931	7.30	1,570	1967	August 24, 1967	10.11	3,340
1932	March 7, 1932	10.74	3,700	1968	May 27, 1968	9.61	3,040
1933	October 17, 1932	10.50	3,560	1969	August 20, 1969	13.00	5,400
1934	March 5, 1934	10.70	3,700	1970	April 2, 1970	8.60	2,440
1935	September 6, 1935	22.18	26,900	1971	May 31, 1971	13.66	6,360
1936	March 18, 1936	16.10	9,860	1972	June 22, 1972	25.10	42,200
1937	April 26, 1937	20.86	21,600	1973	October 5, 1972	14.48	7,370
1938	October 19, 1937	12.05	4,650	1974	September 8, 1974	13.89	6,590
1939	August 20, 1939	10.67	3,700	1975	September 26, 1975	16.38	10,300
1940	August 16, 1940	13.62	6,320	1976	January 1, 1976	12.14	4,840
1941	April 6, 1941	10.49	3,560	1977	October 20, 1976	12.19	4,890
1942	August 12, 1942	8.25	2,100	1978	January 27, 1978	14.52	7,420
1943	October 16, 1942	10.53	3,560	1979	February 26, 1979	17.02	11,500
1944	September 20, 1944	19.00	16,000	1980	January 18, 1980	10.10	3,290
1945	September 19, 1945	13.00	5,400	1981	August 8, 1981	9.61	2,820
1946	February 11, 1946	8.50	2,280	1982	February 3, 1982	12.91	5,640
1947	March 14, 1947	8.77	2,460	1983	April 24, 1983	11.43	4,250
1948	August 4, 1948	12.74	5,180	1984	March 29, 1984	13.51	6,270
1949	December 4, 1948	18.25	14,100	1985	August 18, 1985	12.19	4,940
1950	September 10, 1950	9.25	2,800	1986	November 5, 1985	14.10	6,930
1951	December 4, 1950	9.58	3,040	1987	September 8, 1987	14.60	7,620
1952	December 22, 1951	12.10	4,720	1988	November 29, 1987	8.82	2,290
1953	November 20, 1952	10.80	3,780	1989	September 26, 1989	12.10	4,860

1954	March 1, 1954	11.61	4,350	1990	May 29, 1990	10.46	3,450
1955	August 19, 1955	16.75	10,900	1991	July 27, 1991	11.47	4,290
1956	April 16, 1956	7.59	1,840	1992	June 6, 1992	8.64	2,180
1957	April 5, 1957	10.10	3,340	1993	March 4, 1993	14.75	7,840
1958	February 27, 1958	8.60	2,440	1994	November 28, 1993	15.95	9,690
1959	December 29, 1958	11.18	4,050	1995	July 11, 1995	12.63	5,360
1960	February 19, 1960	11.20	4,050	2006	September 5, 2006	9.96	3,070
1961	February 19, 1961	11.23	4,050	2007	October 7, 2006	13.35	6,100
1962	October 21, 1961	14.68	7,650				

---

**Table 298. 02030800 Stockton Creek near Afton, Va.**

LOCATION.--Latitude 38°01'48", Longitude 078°48'30", NAD27, Albemarle County, Hydrologic Unit 02080204, on left upstream wingwall of culvert on State Highway 6, 1.7 mi east of Afton, and 4.3 mi upstream from Stony Run.

DRAINAGE AREA.--2.70 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 835.27 ft NGVD of 1929. Prior to Dec. 13, 1977, flood-hydrograph recorder at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--5 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1967	March 7, 1967	5.65	262	1988		4.29 <sup>1</sup>	81.8 <sup>2,3</sup>
1968	December 10, 1967	4.50	112	1989	May 5, 1989	6.96	413
1969	August 20, 1969	9.30	654	1990		4.29 <sup>1</sup>	81.8 <sup>2,3</sup>
1970	April 14, 1970	5.12	194	1991	October 23, 1990	5.13	196
1971	May 30, 1971	6.29	336	1992	April 21, 1992	6.87	402
1972	June 21, 1972	9.68	684	1993	November 23, 1992	9.73	688
1973	October 5, 1972	5.95	299	1994	August 17, 1994	4.66	131
1974	May 12, 1974	5.35	224	1995	June 27, 1995	5.44	236
1975	March 19, 1975	6.10	315	1996	January 19, 1996	7.46	468
1976	December 31, 1975	4.75	143	1997	July 24, 1997	5.01	181
1977	October 9, 1976	5.72	270	1998	January 8, 1998	6.49	358
1978	January 26, 1978	5.91	294	1999	September 29, 1999	7.32	453
1979	September 6, 1979	7.99	529	2000	September 3, 2000	4.99	178
1980	April 9, 1980	5.77	276	2001	March 29, 2001	4.64	129
1981	July 4, 1981	4.52	114	2002		3.97 <sup>1</sup>	43.2 <sup>2,3</sup>
1982	June 13, 1982	4.74	142	2003	September 19, 2003	5.48	242
1983	April 3, 1983	9.09	637	2004	September 29, 2004	5.59	269
1984	February 14, 1984	6.11	317	2005	January 14, 2005	4.82	153
1985	August 19, 1985	4.50	112	2006	November 29, 2005	6.00	305
1986	November 4, 1985	8.18	548	2007	October 7, 2006	5.01	181
1987	April 17, 1987	4.86	158				

<sup>1</sup>Gage height below minimum recordable elevation.

<sup>2</sup>Discharge is less than indicated value, which is minimum recordable discharge at this site.

<sup>3</sup>Month or day of occurrence is unknown or not exact.

**Table 299.** 02030900 Powells Creek near Crozet, Va.

LOCATION.--Latitude 38°04'50", Longitude 078°43'07", NAD27, Albemarle County, Hydrologic Unit 02080204, at bridge on State Highway 684, 1.2 mi northwest of Crozet.

DRAINAGE AREA.--2.40 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is not determined.

STAGE-DISCHARGE RELATION.--Not fully developed; insufficient field data available, culvert rebuild in 1978.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1967	March 7, 1967	5.65	180	1973	October 5, 1972	5.13	
1968	December 10, 1967	4.50	70.0	1974		3.00 <sup>1</sup>	
1969	August 20, 1969	3.04		1975	March 19, 1975	3.41	
1970		3.00 <sup>1</sup>		1976		3.00 <sup>1</sup>	
1971	May 30, 1971	3.92		1977	October 9, 1976	3.04	
1972	June 21, 1972	5.21		1978	January 26, 1978	3.19	

<sup>1</sup>Gage height below minimum recordable elevation.

**Table 300. 02031000 Mechums River near White Hall, Va.**

(Formerly published as Mechum River near Ivy.)

LOCATION.--Latitude 38°06'09", Longitude 078°35'35", NAD27, Albemarle County, Hydrologic Unit 02080204, on right bank 20 ft downstream from bridge on State Highway 614, 1.5 mi downstream from Rocky Run, 4.0 mi southeast of White Hall, and 4.9 mi upstream from confluence with Moormans River.

DRAINAGE AREA.--95.3 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 429.75 ft NGVD of 1929. Oct. 1, 1942, to Sep. 30, 1951, water-stage recorder on right bank 20 ft downstream from former highway bridge at different datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 8,250 ft<sup>3</sup>/s and extended above by logarithmic plotting.

BANKFULL STAGE.--9 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Subsequent to Sept. 30, 1979, records were provided by the Virginia Department of Environmental Quality - Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1943	October 15, 1942	30.30 <sup>1</sup>	20,000	1987	September 8, 1987	19.24	8,060
1944	September 18, 1944	21.90 <sup>1</sup>	10,600	1988	November 29, 1987	10.55	2,080
1945	September 18, 1945	9.32 <sup>1</sup>	2,360	1989	May 6, 1989	11.78	2,690
1946	December 6, 1945	4.80 <sup>1</sup>	686	1990	May 10, 1990	11.05	2,320
1947	July 9, 1947	5.58 <sup>1</sup>	878	1991	October 23, 1990	16.69	5,770
1948	August 4, 1948	10.90 <sup>1</sup>	3,490	1992	April 22, 1992	18.13	6,960
1949	December 4, 1948	14.70 <sup>1</sup>	5,340	1993	March 4, 1993	18.00	6,820
1950	September 13, 1950	16.80 <sup>1</sup>	6,330	1994	December 5, 1993	11.12	2,360
1951	December 4, 1950	16.28 <sup>1</sup>	5,980	1995	June 29, 1995	13.73	3,930
1959	September 30, 1959	18.05	7,200 <sup>2</sup>	1996	September 6, 1996	24.79	14,200
1979	September 6, 1979	24.50	13,500	1998	February 17, 1998	16.60	6,040
1980	April 9, 1980	15.26	4,540	1999	September 30, 1999	15.26	5,000
1981	February 20, 1981	9.01	1,300	2002	April 22, 2002	5.95	257
1982	June 13, 1982	11.77	2,680	2003	September 19, 2003	19.43	9,620
1983	April 3, 1983	20.68	9,500	2004	September 28, 2004	17.83	8,110
1984	February 14, 1984	17.54	6,420	2005	December 23, 2004	11.81	3,610
1985	February 12, 1985	9.89	1,740	2006	November 30, 2005	14.12	5,260
1986	November 5, 1985	21.11	9,960	2007	October 7, 2006	16.19	6,850

<sup>1</sup>Gage height at different site and (or) datum.

<sup>2</sup>Discharge is a historic peak.

**Table 301. 02031500 North Fork Moormans River near White Hall, Va.**

LOCATION.--Latitude 38°08'25", Longitude 078°45'05", NAD27, Albemarle County, Hydrologic Unit 02080204, on left bank 0.5 mi upstream from confluence with South Fork, 0.8 mi upstream from city of Charlottesville dam, and 5.1 mi west of White Hall.

DRAINAGE AREA.--11.2 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 999 ft NGVD of 1929, by barometer. Prior to October 1963 and July 1982 to September 1984, water-stage recorder at present site and datum. June 1966 to September 1975, nonrecording gage (crest-stage gage) at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 350 ft<sup>3</sup>/s and extended above by slope-area measurements at 2,400 ft<sup>3</sup>/s and 7,620 ft<sup>3</sup>/s. Shift occurred in August 1955, below 1,000 ft<sup>3</sup>/s.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1943	October 15, 1942	11.70	7,620 <sup>1</sup>	1965	February 7, 1965	3.94	344
1952	February 4, 1952	4.40	437	1966	September 21, 1966	4.84	662
1953	March 24, 1953	4.61	492	1967	August 24, 1967	5.02	720
1954	March 1, 1954	4.93	603	1968	May 27, 1968	5.16	780
1955	August 18, 1955	7.94	2,400	1969	July 7, 1969	4.12	407
1956	July 20, 1956	3.33	158	1970	December 30, 1969	3.90	330
1957	February 26, 1957	4.70	520	1971	May 30, 1971	6.98	1,840
1958	April 23, 1958	4.11	350	1972	June 21, 1972	7.42	2,190
1959	September 30, 1959	5.97	1,180	1973	October 6, 1972	6.44	1,460
1960	May 8, 1960	5.72	1,050	1974	December 21, 1973	4.66	596
1961	April 13, 1961	4.02	372	1975	September 26, 1975	5.42	910
1962	October 21, 1961	4.41	505	1983	March 19, 1983	6.69	1,670
1963	November 10, 1962	4.17	424	1984	February 14, 1984	6.10	1,290
1964		3.62	241 <sup>2</sup>				

<sup>1</sup>Discharge is a historic peak.

<sup>2</sup>Month or day of occurrence is unknown or not exact.

**Table 302.** 02032000 Moormans River near White Hall, Va.

LOCATION.--Latitude 38°08'05", Longitude 078°44'10", NAD27, Albemarle County, Hydrologic Unit 02080204, 0.2 mi downstream from Charlottesville Reservoir, 4 mi west of White Hall, and 4.2 mi upstream from Doyles River.

DRAINAGE AREA.--17.8 mi<sup>2</sup>.

GAGE.--Nonrecording gage (staff gage). Datum of gage is 890 ft NGVD of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 1,600 ft<sup>3</sup>/s and extended above on basis of slope-area and flow-over-dam computations.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1944	September 19, 1944	4.40	1,990	1946	January 1, 1946	2.40	190
1945	September 18, 1945	4.30	1,700				

**Table 303.** 02032200 Doyles River near White Hall, Va.

LOCATION.--Latitude 38°12'10", Longitude 078°40'17", NAD27, Albemarle County, Hydrologic Unit 02080204, on right downstream abutment of bridge on State Highway 810, 5.5 mi upstream from mouth, and 5.9 mi north of White Hall.

DRAINAGE AREA.--6.76 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 928.08 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by slope-area measurements at 230 ft<sup>3</sup>/s and 1,780 ft<sup>3</sup>/s.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1967		10.10 <sup>1</sup>	220 <sup>2,3</sup>	1981		10.10 <sup>1</sup>	220 <sup>2,3</sup>
1968		10.10 <sup>1</sup>	220 <sup>2,3</sup>	1983	August 10, 1983	10.21	242
1969		10.10 <sup>1</sup>	220 <sup>2,3</sup>	1984		10.10 <sup>1</sup>	220 <sup>2,3</sup>
1970		10.10 <sup>1</sup>	220 <sup>2,3</sup>	1985		10.10 <sup>1</sup>	220 <sup>2,3</sup>
1971	May 30, 1971	12.04	954	1986	November 4, 1985	13.06	1,780
1972	June 21, 1972	12.90	1,580	1987	September 8, 1987	10.16	232
1973	October 5, 1972	10.99	461	1988		10.10 <sup>1</sup>	220 <sup>2,3</sup>
1974		10.10 <sup>1</sup>	220 <sup>2,3</sup>	1989		10.10 <sup>1</sup>	220 <sup>2,3</sup>
1975	September 26, 1975	11.84	844	1990		10.10 <sup>1</sup>	220 <sup>2,3</sup>
1976		10.10 <sup>1</sup>	220 <sup>2,3</sup>	1991	October 23, 1990	10.43	298
1977	October 9, 1976	11.35	598	1992	April 21, 1992	12.77	1,450
1978	January 26, 1978	12.09	984	1993	November 23, 1992	11.69	765
1979	September 22, 1979	13.73	2,560	1995	June 27, 1995	12.04	954 <sup>4</sup>
1980		10.10 <sup>1</sup>	220 <sup>2,3</sup>				

<sup>1</sup>Gage height below minimum recordable elevation.

<sup>2</sup>Discharge is less than indicated value, which is minimum recordable discharge at this site.

<sup>3</sup>Month or day of occurrence is unknown or not exact.

<sup>4</sup>Discharge is a historic peak.

**Table 304. 02032250 Moormans River near Free Union, Va.**

LOCATION.--Latitude 38°08'26", Longitude 078°33'22", NAD27, Albemarle County, Hydrologic Unit 02080204, on right bank 130 ft upstream from bridge on State Highway 601, 0.4 mi upstream from confluence with Mechums River, 0.8 mi downstream from Wards Creek, and 1.1 mi southeast of Free Union.

DRAINAGE AREA.--77.0 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 403.11 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 5,540 ft<sup>3</sup>/s and extended above on basis of slope-area measurement at 15,500 ft<sup>3</sup>/s.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated. Flow regulated by Rivanna Water and Sewer Authority at Sugar Hollow Reservoir 12.0 mi upstream from station, capacity 1,320 acre-ft.

REMARKS.--Records were provided by the Virginia Department of Environmental Quality - Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1972	June 21, 1972	20.20	15,100 <sup>1</sup>	1989	May 5, 1989	9.43	2,850
1979	September 6, 1979	21.55	16,500 <sup>1</sup>	1990	May 10, 1990	7.12	1,580
1980	April 9, 1980	12.31	3,800 <sup>2</sup>	1991	October 23, 1990	14.33	6,540
1981	February 20, 1981	6.05	802	1992	April 21, 1992	20.86	16,300
1982	June 13, 1982	12.73	4,030	1993	November 23, 1992	17.84	11,200
1983	April 3, 1983	15.48	5,670	1994	November 28, 1993	8.47	2,320
1984	February 14, 1984	15.48	5,670	1995	June 28, 1995	22.28	19,100
1985	August 18, 1985	6.91	1,190	1996	September 6, 1996	21.67	17,800
1986	November 4, 1985	20.41	15,500	1997	July 24, 1997	6.70	1,080
1987	September 8, 1987	14.78	7,070	2006	November 29, 2005	15.46	7,890
1988	November 29, 1987	7.97	2,050	2007	October 7, 2006	10.52	3,280

<sup>1</sup>Discharge is a historic peak.

<sup>2</sup>Discharge is a maximum daily average.

**Table 305. 02032300 Muddy Run near Stanardsville, Va.**

LOCATION.--Latitude 38°14'05", Longitude 078°37'02", NAD27, Albemarle County, Hydrologic Unit 02080204, on right downstream abutment of bridge on State Highway 810, 0.7 mi upstream from mouth, and 11 mi southwest of Stanardsville.

DRAINAGE AREA.--3.21 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 756.79 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Preliminary rating developed by step-backwater computations not confirmed by current-meter measurements.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1967		6.00 <sup>1</sup>		1988		6.06 <sup>1</sup>	
1968		6.00 <sup>1</sup>		1989		6.06 <sup>1</sup>	
1969		6.00 <sup>1</sup>		1990		6.06 <sup>1</sup>	
1970		6.00 <sup>1</sup>		1991	October 23, 1990	6.81	
1971	May 30, 1971	6.77		1992	April 21, 1992	7.27	
1972	June 21, 1972	7.20		1993	November 23, 1992	7.48	
1973	October 5, 1972	7.05		1995	January 15, 1995	6.89	
1974		6.00 <sup>1</sup>		1996	September 6, 1996	7.22	
1975	March 19, 1975	6.15		1997		6.06 <sup>1</sup>	
1976		6.00 <sup>1</sup>		1998	May 8, 1998	6.24	
1977	October 9, 1976	6.75		1999	September 29, 1999	7.48	
1978	May 13, 1978	8.33	92 <sup>2</sup>	2000	June 29, 2000	7.31	
1980	October 6, 1979	7.00		2001		6.01 <sup>1</sup>	35 <sup>3,4</sup>
1981	February 19, 1981	6.38		2002		6.01 <sup>1</sup>	35 <sup>3,4</sup>
1982	June 13, 1982	7.11		2003	September 19, 2003	7.11	62.9
1983	April 3, 1983	6.87		2004	September 28, 2004	7.26	66
1984	February 14, 1984	8.03		2005		5.00 <sup>1</sup>	9.3 <sup>3,4</sup>
1985	February 12, 1985	6.39		2006	November 29, 2005	7.31	67.7
1986	November 4, 1985	7.22		2007	November 23, 2006	6.30	39.7
1987	September 8, 1987	6.72					

<sup>1</sup>Gage height below minimum recordable elevation.

<sup>2</sup>Discharge is a historic peak.

<sup>3</sup>Discharge is less than indicated value, which is minimum recordable discharge at this site.

<sup>4</sup>Month or day of occurrence is not known or not exact.

**Table 306. 02032400 Buck Mountain Creek near Free Union, Va.**

LOCATION.--Latitude 38°09'16", Longitude 078°32'22", NAD27, Albemarle County, Hydrologic Unit 02080204, on left bank at downstream side of bridge on State Highway 665, 0.2 mi downstream from Piney Creek, 1.6 mi east of Free Union, and 2.0 mi upstream from mouth.

DRAINAGE AREA.--34.5 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 408.71 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 1,510 ft<sup>3</sup>/s and extended above on basis of contracted-opening measurement at 5,800 ft<sup>3</sup>/s.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Records were provided by the Virginia Department of Environmental Quality - Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1979	August 22, 1979	11.12	6,600 <sup>1</sup>	1989	May 5, 1989	6.20	1,780
1980	April 9, 1980	7.91	3,120	1990	October 2, 1989	6.20	1,170
1981	August 31, 1981	5.18	1,190	1991	October 23, 1990	9.61	4,850
1982	June 13, 1982	7.32	2,610	1992	April 21, 1992	10.57	6,920
1983	April 2, 1983	8.57	3,770	1993	November 23, 1992	10.14	5,870
1984	August 9, 1984	7.78	3,000	1994	November 28, 1993	7.88	2,510
1985	February 12, 1985	5.12	1,160	1995	January 15, 1995	8.76	3,580
1986	November 4, 1985	9.30	5,800	1996	September 6, 1996	10.53	6,820
1987	September 8, 1987	9.50	6,200	1997	July 24, 1997	6.95	1,650
1988	November 29, 1987	5.56	1,390				

<sup>1</sup>Discharge is an estimate.

**Table 307. 02032500 South Fork Rivanna River near Earlysville, Va.**

LOCATION.--Latitude 38°07'27", Longitude 078°31'03", NAD27, Albemarle County, Hydrologic Unit 02080204, on left bank 0.3 mi upstream from Fishing Creek, 3.0 mi southwest of Earlysville, and 8.7 mi upstream from confluence with North Fork.

DRAINAGE AREA.--215 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 367.64 ft NGVD of 1929. Prior to September 1964, water-stage recorder at present site and datum of 369 ft NGVD of 1929 by barometer.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 6,600 ft<sup>3</sup>/s and extended above on basis of contracted-opening measurement at 30,200 ft<sup>3</sup>/s.

BANKFULL STAGE.--10 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1943	October 1942	33.00 <sup>1</sup>	36,000 <sup>2,3,4</sup>	1959	September 30, 1959	24.35 <sup>1</sup>	25,500
1952	March 11, 1952	13.55 <sup>1</sup>	7,480	1960	February 18, 1960	11.97 <sup>1</sup>	6,010
1953	March 25, 1953	11.71 <sup>1</sup>	5,750	1961	April 13, 1961	11.84 <sup>1</sup>	5,340
1954	March 1, 1954	15.55 <sup>1</sup>	9,560	1962	October 21, 1961	14.00 <sup>1</sup>	7,200
1955	August 18, 1955	26.10 <sup>1</sup>	30,200	1963	November 10, 1962	11.47 <sup>1</sup>	5,570
1956	July 20, 1956	9.04 <sup>1</sup>	3,480	1964	July 12, 1964	8.09 <sup>1</sup>	2,760
1957	February 26, 1957	8.75 <sup>1</sup>	3,300	1965	February 7, 1965	14.05	7,200
1958	March 31, 1958	8.22 <sup>1</sup>	2,860	1966	February 13, 1966	11.10	4,780

<sup>1</sup>Gage height at different site and (or) datum.

<sup>2</sup>Discharge is an estimate.

<sup>3</sup>Discharge is a historic peak.

<sup>4</sup>Month or day of occurrence is unknown or not exact.

**Table 308.** 02032515 South Fork Rivanna River near Charlottesville, Va.

LOCATION.--Latitude 38°06'06", Longitude 078°27'39", NAD27, Albemarle County, Hydrologic Unit 02080204, on left bank 10 ft downstream from upstream bridge on U.S. Highway 29, 0.4 mi downstream from South Fork Rivanna River dam, 2.5 mi northeast of Charlottesville city limits, and 2.9 mi upstream from mouth.

DRAINAGE AREA.--259 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 330 ft NGVD of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 11,100 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated. Flow regulated by Rivanna Water and Sewer Authority at South Fork Rivanna River and Sugar Hollow Reservoirs, combined capacity 6,540 acre-ft.

REMARKS.--Records were provided by the Virginia Department of Environmental Quality - Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1979	September 6, 1979	23.50	15,200 <sup>1</sup>	1989	May 6, 1989	13.29	5,820 <sup>1</sup>
1980	April 9, 1980	15.46	7,540 <sup>1</sup>	1990	October 2, 1989	11.16	4,260 <sup>1</sup>
1981	February 20, 1981	8.34	2,450 <sup>1</sup>	1991	October 2, 1990	11.16	4,260 <sup>1</sup>
1982	June 13, 1982	16.23	8,200 <sup>1</sup>	1992	April 22, 1992	21.96	13,600 <sup>1</sup>
1983	April 3, 1983	20.50	12,100 <sup>1</sup>	1993	November 23, 1992	20.55	12,100 <sup>1</sup>
1984	February 14, 1984	19.80	11,400 <sup>1</sup>	1994	November 28, 1993	14.52	6,760 <sup>1</sup>
1985	February 12, 1985	10.24	3,660 <sup>1</sup>	1995	June 28, 1995	20.41	12,000 <sup>1</sup>
1986	November 5, 1985	22.70	14,300 <sup>1</sup>	1996	September 6, 1996	24.39	16,100 <sup>1</sup>
1987	September 8, 1987	22.52	14,200 <sup>1</sup>	1997	December 1, 1996	10.06	3,500 <sup>1</sup>
1988	November 29, 1987	11.42	4,440 <sup>1</sup>				

<sup>1</sup>Discharge is affected by regulation or diversion.

**Table 309.** 02032530 Parker Branch near Stanardsville, Va.

LOCATION.--Latitude 38°17'07", Longitude 078°30'50", NAD27, Greene County, Hydrologic Unit 02080204, at culvert on State Highway 810, 4.3 mi west of Stanardsville.

DRAINAGE AREA.--3.21 mi<sup>2</sup>.

GAGE.--Water-stage recorder (flood-hydrograph recorder). Datum of gage is 623.13 ft NGVD of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--6 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1967	August 24, 1967	6.40	560	1972	June 21, 1972	8.44	1,270
1968	September 10, 1968	6.28	524	1973	October 5, 1972	9.94	2,000 <sup>1</sup>
1969	July 23, 1969	8.54	1,300	1974	October 29, 1973	6.19	497
1970	April 14, 1970	5.79	472	1975	March 19, 1975	8.20	1,180
1971	May 30, 1971	5.77	371	1976	October 18, 1975	5.36	272

<sup>1</sup>Discharge is an estimate.

**Table 310. 02032540 Haneytown Creek near Stanardsville, Va.**

LOCATION.--Latitude 38°16'48", Longitude 078°30'50", NAD27, Greene County, Hydrologic Unit 02080204, on left downstream wingwall of bridge on State Highway 810, 0.2 mi upstream from mouth, and 4.5 mi west of Stanardsville.

DRAINAGE AREA.--4.02 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 616.34 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by step-backwater computations.

BANKFULL STAGE.--11 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1967	March 7, 1967	12.00	290	1981		12.33 <sup>1</sup>	389 <sup>2,3</sup>
1968		12.00 <sup>1</sup>	290 <sup>2,3</sup>	1982	June 13, 1982	12.61	484
1969	July 7, 1969	12.36	398	1983		12.33 <sup>1</sup>	389 <sup>2,3</sup>
1970	December 30, 1969	12.18	344	1984	February 14, 1984	12.55	460
1971	May 30, 1971	12.70	520	1985		12.33 <sup>1</sup>	389 <sup>2,3</sup>
1972	June 21, 1972	13.72	1,120	1986	November 4, 1985	13.34	854
1973	October 5, 1972	13.50	950	1987	September 8, 1987	12.58	472
1974		12.33 <sup>1</sup>	389 <sup>2,3</sup>	1988		12.33 <sup>1</sup>	389 <sup>2,3</sup>
1975	March 19, 1975	13.85	1,220	1989		12.33 <sup>1</sup>	389 <sup>2,3</sup>
1976		12.33 <sup>1</sup>	389 <sup>2,3</sup>	1990		12.33 <sup>1</sup>	389 <sup>2,3</sup>
1977	October 9, 1976	13.76	1,150	1991	October 23, 1990	12.61	484
1978	January 26, 1978	12.81	565	1992	April 21, 1992	13.18	758
1979	September 22, 1979	13.61	1,030	1993	November 23, 1992	13.44	914
1980	April 9, 1980	12.83	575	1995	January 15, 1995	12.91	615 <sup>4</sup>

<sup>1</sup>Gage height below minimum recordable elevation.

<sup>2</sup>Discharge is less than indicated value, which is minimum recordable discharge at this site.

<sup>3</sup>Month or day of occurrence is unknown or not exact.

<sup>4</sup>Discharge is a historic peak.

**Table 311. 02032550 Lynch River at Nortonville, Va.**

LOCATION.--Latitude 38°14'12", Longitude 078°32'34", NAD27, Albemarle County, Hydrologic Unit 02080204, on right downstream abutment of bridge on State Highway 810, 4 mi upstream from mouth, and 7 mi southwest of Stanardsville.

DRAINAGE AREA.--13.6 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 591.70 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by step-backwater computations.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1967	March 7, 1967	12.55	1,820	1982	June 13, 1982	13.21	3,300
1968		12.00 <sup>1</sup>	1,100 <sup>2,3</sup>	1983	April 3, 1983	13.63	4,700
1969	July 7, 1969	12.06	1,170	1984	February 14, 1984	14.22	6,880
1970	December 30, 1969	12.12	1,230	1985		12.00 <sup>1</sup>	1,100 <sup>2,3</sup>
1971	May 30, 1971	14.35	6,500	1986	November 4, 1985	15.60	13,000
1972	June 21, 1972	16.50	18,000	1987	September 8, 1987	14.96	9,840
1973	October 5, 1972	16.45	18,000	1988		12.00 <sup>1</sup>	1,100 <sup>2,3</sup>
1974	June 2, 1974	12.40	1,600	1989	May 5, 1989	12.73	2,160
1975	March 19, 1975	15.24	11,200	1990		12.01 <sup>1</sup>	1,100 <sup>2,3</sup>
1976	December 31, 1975	12.31	1,470	1991	October 23, 1990	14.04	6,160
1977	October 9, 1976	14.93	9,720	1992	April 21, 1992	16.00	
1978	May 13, 1978	16.16	16,000	1993	November 23, 1992	15.74	
1979	September 22, 1979	16.08	15,500	1994	November 28, 1993	12.48	
1980	October 6, 1979	16.00	15,000	1995	January 15, 1995	14.67	
1981		12.00 <sup>1</sup>	1,100 <sup>2,3</sup>				

<sup>1</sup>Gage height below minimum recordable elevation.

<sup>2</sup>Discharge is less than indicated value, which is minimum recordable discharge at this site.

<sup>3</sup>Month or day of occurrence is unknown or not exact.

**Table 312.** 02032600 Swift Run tributary near Stanardsville, Va.

LOCATION.--Latitude 38°20'33", Longitude 078°30'37", NAD27, Greene County, Hydrologic Unit 02080204, at culvert on U.S. Highway 33, 4.9 mi northwest of Stanardsville.

DRAINAGE AREA.--0.31 mi<sup>2</sup>.

GAGE.--Water-stage recorder (flood-hydrograph recorder). Datum of gage is 1,345.84 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--5 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1966	February 13, 1966	5.60	14.0	1970	February 2, 1970	5.70	15.0
1967	March 7, 1967	5.06	9.00	1971	May 30, 1971	6.20	19.0
1968	January 14, 1968	4.75	6.00	1972	June 21, 1972	8.50	63.0
1969	June 9, 1969	5.15	9.00	1973	October 5, 1972	8.52	65.0

**Table 313. 02032640 North Fork Rivanna River near Earlysville, Va.**

LOCATION.--Latitude 38°09'48", Longitude 078°25'30", NAD27, Albemarle County, Hydrologic Unit 02080204, on right bank at downstream side of bridge on State Highway 606, 0.4 mi upstream from mouth of Jacobs Run, 1.9 mi downstream from mouth of Marsh Run, and 2.1 mi southeast of Advance Mills.

DRAINAGE AREA.--108 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 365 ft NGVD of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by current meter measurement below 6,730 ft<sup>3</sup>/s and extended above on basis of slope-area measurement at 30,100 ft<sup>3</sup>/s.

BANKFULL STAGE. --Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Maximum discharge, 30,100 ft<sup>3</sup>/s, from rating curve extended above 2,150 ft<sup>3</sup>/s on basis of slope-area measurement of peak flow. Records were provided by the Virginia Department of Environmental Quality - Water Division.

<b>Water year</b>	<b>Date</b>	<b>Gage height (ft)</b>	<b>Discharge (ft<sup>3</sup>/s)</b>	<b>Water year</b>	<b>Date</b>	<b>Gage height (ft)</b>	<b>Discharge (ft<sup>3</sup>/s)</b>
Annual maximum stages and discharges							
1994	November 28, 1993	11.20	5,370	2002	June 19, 2002	8.90	3,460
1995	January 15, 1995	12.12	6,210	2003	September 19, 2003	14.24	8,340
1996	September 6, 1996	23.56	30,100	2004	September 28, 2004	11.92	6,030
1997	July 24, 1997	8.77	3,360	2005	December 23, 2004	9.47	3,910
1998	January 8, 1998	13.06	7,130	2006	November 29, 2005	14.65	8,770
1999	September 30, 1999	20.13	19,600	2007	November 23, 2006	8.55	3,190

**Table 314. 02032680 North Fork Rivanna River near Proffit, Va.**

LOCATION.--Latitude 38°05'16", Longitude 078°24'44", NAD27, Albemarle County, Hydrologic Unit 02080204, on left bank 50 ft downstream from bridge on State Highway 649, 1.9 mi southeast of Proffit, and 2.2 mi upstream from confluence with South Fork.

DRAINAGE AREA.--174 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 323.43 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 8,820 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Records were provided by the Virginia Department of Environmental Quality - Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1971	May 30, 1971	16.67	5,000	1984	February 14, 1984	18.73	9,790
1972	June 21, 1972	30.40	31,800	1985	February 12, 1985	12.37	3,300
1973	October 6, 1972	27.80	22,400	1986	November 5, 1985	18.64	10,900
1974	December 21, 1973	15.79	4,290	1987	September 8, 1987	18.17	10,100
1975	March 19, 1975	20.90	14,100	1988	November 29, 1987	12.11	4,140
1976	January 28, 1976	13.99	4,220	1989	May 6, 1989	16.80	8,100
1977	October 9, 1976	19.11	10,500	1990	May 26, 1990	12.21	4,180
1978	January 26, 1978	17.70	7,950	1991	January 12, 1991	19.89	13,100
1979	September 6, 1979	20.50	13,300	1992	April 22, 1992	18.74	11,000
1980	April 9, 1980	15.16	5,010	1993	November 23, 1992	18.16	10,100
1981	February 20, 1981	7.70	1,520	1994	November 28, 1993	13.87	5,120
1982	May 28, 1982	18.22	8,830	1995	January 15, 1995	13.60	4,940
1983	April 3, 1983	17.20	7,210				

**Table 315. 02032700 Schenks Branch at Charlottesville, Va.**

LOCATION.--Latitude 38°02'32", Longitude 078°28'30", NAD27, Charlottesville City, Hydrologic Unit 02080204, on right downstream retaining wall of small road culvert 25 ft upstream from U.S. Highway 250 bypass culvert, 200 ft southeast of intersection of U.S. Highway 250 bypass and McIntire Road, and 1.2 mi upstream from mouth.

DRAINAGE AREA.--1.39 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 371.63 ft NGVD of 1929. Jan. 8, 1965, to Aug. 18, 1978, flood-hydrograph recorder at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements, slope-area measurement, and computation of flow through culvert.

BANKFULL STAGE.--5 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1950	September 13, 1950		692	1974	September 7, 1974	4.52	240
1951	December 4, 1950		175	1975	September 26, 1975	7.00	710
1952	August 31, 1952		220	1976	July 29, 1976	4.85	275 <sup>2</sup>
1953	May 20, 1953		510	1977	April 4, 1977	5.00	290
1955	August 18, 1955	6.47	400	1978	May 13, 1978	5.97	800 <sup>1</sup>
1956	July 20, 1956	8.60	650	1979	September 22, 1979	9.76 <sup>3</sup>	1,250
1957	September 17, 1957	4.75	210	1980	July 29, 1980	4.77	280
1958	July 27, 1958	6.45	400	1981	July 4, 1981	5.49	400
1959	September 30, 1959	7.99	580	1982	May 28, 1982	6.27	560
1960	July 25, 1960	6.81	390	1983	April 3, 1983	6.00	500 <sup>1</sup>
1961	August 8, 1961	5.30	235	1984	February 14, 1984	6.47	530
1962	May 1, 1962	9.41	900	1985	May 23, 1985	4.96	315
1963	June 30, 1963	5.90	300	1986	November 4, 1985	5.20	340
1964	July 12, 1964	6.90	400	1987	September 8, 1987	12.54	1,670
1965	November 25, 1964	6.40	354	1988	June 20, 1988	7.31	620
1966	March 1, 1966	5.71	280	1989	May 5, 1989	6.63	
1967	July 14, 1967	5.70	280	1990	May 10, 1990	6.32	
1968	July 11, 1968	7.74	504	1991	July 4, 1991	8.48	
1969	August 20, 1969	7.15	1,100 <sup>1</sup>	1992	April 21, 1992	8.53	
1970	July 24, 1970	5.00		1993	April 16, 1993	5.08	
1971	July 11, 1971	6.51	600	1994	July 26, 1994	6.32	
1972	June 21, 1972	8.02	920	1995	September 17, 1995	6.21	472
1973	June 28, 1973	4.43	230				

<sup>1</sup>Discharge actually greater than indicated value.

<sup>2</sup>Month or day of occurrence is unknown or not exact.

<sup>3</sup>Gage height below minimum recordable elevation.

**Table 316. 02033300 Moores Creek near Charlottesville, Va.**

LOCATION.--Latitude 38°00'25", Longitude 078°34'25", NAD27, Albemarle County, Hydrologic Unit 02080204, on right downstream wingwall of culvert on access road, 30 ft north of U.S. Highway 29, 2.8 mi upstream from Morey Creek, and 4 mi southeast of Charlottesville.

DRAINAGE AREA.--3.37 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 505.40 ft NGVD of 1929. May 16, 1972, to Aug. 18, 1978, flood-hydrograph recorder at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--11 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1967	July 14, 1967	14.85	235	1988		13.82 <sup>1</sup>	80.0 <sup>2,3</sup>
1968	July 2, 1968	14.96	255	1989	May 5, 1989	14.24	131
1969	August 20, 1969	16.85	2,000	1990		13.82 <sup>1</sup>	80.0 <sup>2,3</sup>
1970	July 10, 1970	15.28	370	1991	July 4, 1991	16.92	2,270
1971	September 11, 1971	15.04	292	1993	March 4, 1993	14.61	192
1972	June 21, 1972	16.30	900	1994	November 28, 1993	14.24	131
1973	October 5, 1972	14.47	165	1995	June 23, 1995	14.18	122
1974		13.82 <sup>1</sup>	80.0 <sup>2,3</sup>	1996	September 6, 1996	15.36	396
1975	March 19, 1975	15.66	499	1997	September 10, 1997	14.31	142
1976		13.80 <sup>1</sup>	80.0 <sup>2,3</sup>	1998	May 8, 1998	14.68	206
1977	October 9, 1976	15.78	561	1999	September 29, 1999	15.11	313
1978	May 13, 1978	15.03	289	2000	June 28, 2000	14.20	125
1979	June 2, 1979	18.74		2001	June 22, 2001	14.08	108
1980		13.81 <sup>1</sup>	80.0 <sup>2,3</sup>	2002		13.76 <sup>1</sup>	75 <sup>2,3</sup>
1981	July 4, 1981	13.97	95.0	2003	September 19, 2003	15.47	434
1982		13.82 <sup>1</sup>	80.0 <sup>2,3</sup>	2004	September 28, 2004	14.76	222
1984	February 14, 1984	14.09	109	2005	January 14, 2005	14.38	152
1985		13.82 <sup>1</sup>	80.0 <sup>2,3</sup>	2006	November 29, 2005	14.13	114
1986	November 4, 1985	14.38	152				

<sup>1</sup>Gage height below minimum recordable elevation.

<sup>2</sup>Discharge is less than indicated value, which is minimum recordable discharge at this site.

<sup>3</sup>Month or day of occurrence is unknown or not exact.

**Table 317. 02033500 Rivanna River below Moores Creek near Charlottesville, Va.**

LOCATION.--Latitude 38°01'09", Longitude 078°27'13", NAD27, Albemarle County, Hydrologic Unit 02080204, 200 ft downstream from Moores Creek and 500 ft upstream from Virginia Public Service Company powerplant near Charlottesville.

DRAINAGE AREA.--503 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 292.90 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 6,400 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1926	August 25, 1926	9.68	6,390	1931	July 25, 1931	11.00	7,690
1927	November 16, 1926	11.96	8,790	1932	March 6, 1932	10.37	7,100
1928	October 4, 1927	11.83	8,570	1933	April 17, 1933	16.50	13,800
1929	April 16, 1929	14.15	11,200	1934	September 17, 1934	19.00	18,000
1930	October 22, 1929	10.56	7,290	1943	October 1942		63,000 <sup>1,2</sup>

<sup>1</sup>Discharge is a historic peak.

<sup>2</sup>Month or day of occurrence is unknown or not exact.

**Table 318.** 02033700 Henderson Creek near Shadwell, Va.

LOCATION.--Latitude 37°59'05", Longitude 078°24'05", NAD27, Albemarle County, Hydrologic Unit 02080204, at culvert on State Highway 729, 2.0 mi south of Shadwell.

DRAINAGE AREA.--1.75 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 280.20 ft NGVD of 1929. Prior to Apr. 4, 1974, flood-hydrograph recorder at present site and datum.

STAGE-DISCHARGE RELATION.--Not developed. Peak of August 1969 determined from indirect measurement of flow through culvert and over road.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1966	February 13, 1966	5.41		1971	May 30, 1971	7.55	
1967	January 27, 1967	5.51		1972	June 21, 1972	11.59	
1968	December 10, 1967	3.87		1973	October 5, 1972	8.85	
1969	August 20, 1969	9.60	2,000	1974	September 7, 1974	4.85	
1970	March 29, 1970	4.02		1975	March 19, 1975	7.53	

**Table 319. 02034000 Rivanna River at Palmyra, Va.**

LOCATION.--Latitude 37°51'28", Longitude 078°15'58", NAD27, Fluvanna County, Hydrologic Unit 02080204, on left bank 10 ft upstream from bridge on U.S. Highway 15 at Palmyra, 0.5 mi upstream from Cunningham Creek, and 15 mi upstream from mouth.

DRAINAGE AREA.--663 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 210.39 ft NGVD of 1929. Prior to Oct. 24, 1942 water-stage recorder at site 200 ft downstream at present datum. Oct. 24, 1942, to Dec. 18, 1947, nonrecording gage 10 ft downstream at present datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 76,000 ft<sup>3</sup>/s and extended above on the basis of contracted-opening measurement at 86,000 ft<sup>3</sup>/s.

BANKFULL STAGE.--17 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1934	September 17, 1934	24.75 <sup>1</sup>	24,000	1970	April 3, 1970	12.53	6,920
1935	September 6, 1935	26.27 <sup>1</sup>	29,000	1971	May 31, 1971	23.39	21,000
1936	March 18, 1936	29.26 <sup>1</sup>	39,900	1972	June 22, 1972	37.34	73,400
1937	April 26, 1937	33.35 <sup>1</sup>	56,700	1973	October 6, 1972	31.07	45,800
1938	October 20, 1937	23.45 <sup>1</sup>	20,000	1974	December 21, 1973	20.32	14,900
1939	February 11, 1939	13.75 <sup>1</sup>	6,800	1975	March 20, 1975	26.38	28,100
1940	August 17, 1940	21.78 <sup>1</sup>	16,300	1976	January 1, 1976	18.99	13,200
1941	April 6, 1941	14.87 <sup>1</sup>	7,560	1977	October 10, 1976	22.41	18,100
1942	August 9, 1942	18.59 <sup>1</sup>	11,400	1978	January 26, 1978	23.51	20,800
1943	October 16, 1942	36.50 <sup>1</sup>	78,000	1979	September 6, 1979	25.50	25,800
1944	September 19, 1944	30.50 <sup>1</sup>	39,600	1980	April 9, 1980	17.19	11,000
1945	September 18, 1945	15.38 <sup>1</sup>	8,270	1981	February 20, 1981	9.57	4,700
1946	March 20, 1946	10.00 <sup>1</sup>	4,940	1982	June 14, 1982	19.53	13,800
1947	March 14, 1947	11.50 <sup>1</sup>	6,140	1983	April 3, 1983	22.02	17,300
1948	August 4, 1948	22.90	19,800	1984	February 15, 1984	24.42	22,800
1949	December 4, 1948	26.78	28,800	1985	August 19, 1985	19.57	12,900
1950	September 14, 1950	15.02	8,060	1986	November 5, 1985	26.53	31,800
1951	December 5, 1950	21.55	17,000	1987	September 9, 1987	26.65	32,200
1952	March 12, 1952	17.80	11,400	1988	November 30, 1987	16.92	10,300
1953	November 20, 1952	16.23	9,800	1989	May 6, 1989	26.33	31,100
1954	March 2, 1954	16.24	9,800	1990	May 27, 1990	18.73	12,700
1955	August 19, 1955	29.00	34,800	1991	October 24, 1990	21.94	18,500
1956	July 21, 1956	8.95	4,400	1992	April 22, 1992	23.77	23,200
1957	April 6, 1957	14.15	7,930	1993	March 5, 1993	26.25	30,800
1958	March 31, 1958	13.91	7,670	1994	November 28, 1993	22.48	19,800
1959	June 3, 1959	15.78	9,900	1995	June 29, 1995	19.36	13,700
1960	October 1, 1959	20.41	15,700	1996	September 7, 1996	31.54	50,900

1961	April 13, 1961	17.83	12,100	1997	July 24, 1997	14.74	8,460
1962	October 21, 1961	24.27	22,900	1998	February 18, 1998	23.96	23,800
1963	March 12, 1963	18.63	13,100	1999	September 30, 1999	23.31	22,700
1964	January 9, 1964	9.45	4,780	2002	April 22, 2002	6.38	2,740
1965	February 8, 1965	21.77	18,000	2003	September 19, 2003	25.91	30,000
1966	February 14, 1966	14.92	9,010	2004	December 11, 2003	19.59	14,400
1967	March 8, 1967	18.41	12,800	2005	January 14, 2005	20.78	16,800
1968	January 14, 1968	13.40	7,660	2006	November 30, 2005	19.53	14,300
1969	August 20, 1969	39.85	86,000	2007	October 7, 2006	19.09	13,500

---

<sup>1</sup>Gage height at different site and (or) datum.

**Table 320.** 02034050 Hunters Branch near Palmyra, Va.

LOCATION.--Latitude 37°56'48", Longitude 078°14'30", NAD27, Fluvanna County, Hydrologic Unit 02080204, at culvert on U.S. Highway 15, 6.1 mi north of Palmyra.

DRAINAGE AREA.--1.59 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 398.68 ft NGVD of 1929. Prior to Nov. 1, 1976, flood-hydrograph recorder at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--5 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1967	March 7, 1967	2.78	46.0	1972	June 21, 1972	10.50	1,400
1968	January 14, 1968	3.47	100	1973	October 5, 1972	10.12	1,290
1969	August 20, 1969	10.82	1,500	1974	December 21, 1973	4.15	154
1970	April 2, 1970	3.60	108	1975	March 19, 1975	4.20	158
1971	May 30, 1971	3.42	94.0	1976	March 31, 1976	3.80	124

**Table 321.** 02034200 Willis River at Curdsville, Va.

LOCATION.--Latitude 37°25'44", Longitude 078°27'18", NAD27, Buckingham County, Hydrologic Unit 02080205, 1 mi north of Curdsville.

DRAINAGE AREA.--40.7 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is not determined.

STAGE-DISCHARGE RELATION.--Not developed.

BANKFULL STAGE.--6 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1950	September 10, 1950	5.06		1956	February 7, 1956	6.15	
1951	March 20, 1951	4.90		1957	April 11, 1957	5.63	
1952	December 23, 1951	7.10		1958	May 8, 1958	6.02	
1953	November 20, 1952	7.45		1959	December 30, 1958	6.43	
1954	May 22, 1954	6.28		1960	April 6, 1960	6.87	
1955	August 18, 1955	9.67		1961	February 24, 1961	6.81	

**Table 322.** 02034250 Whispering Creek at Sprouses Corner, Va.

LOCATION.--Latitude 37°31'31", Longitude 078°29'03", NAD27, Buckingham County, Hydrologic Unit 02080205, at culvert on U.S. Highway 60, 0.5 mi southeast of Sprouses Corner.

DRAINAGE AREA.--0.37 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 545 ft NGVD of 1929, from topographic map. June 7, 1972, to May 24, 1978, flood-hydrograph recorder at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1962	June 13, 1962	3.58	56.0	1970	December 31, 1969	2.15	6.50
1963		2.00 <sup>1</sup>	5.00 <sup>2,3</sup>	1971	May 20, 1971	3.11	31.0
1964		2.00 <sup>1</sup>	5.00 <sup>2,3</sup>	1972	June 21, 1972	4.44	161
1965	March 25, 1965	2.13	6.30	1973	October 5, 1972	3.90	85.0
1966	February 13, 1966	3.29	40.0	1974	May 10, 1974	3.29	40.0
1967	June 23, 1967	4.00	95.0	1975	March 19, 1975	3.37	44.0
1968	June 11, 1968	2.71	17.0	1976	December 31, 1975	3.70	18.0
1969	July 7, 1969	4.87	248	1977	October 9, 1976	3.13	32.0

<sup>1</sup>Gage height below minimum recordable elevation.

<sup>2</sup>Discharge is less than indicated value, which is minimum recordable discharge at this site.

<sup>3</sup>Month or day of occurrence is unknown or not exact.

**Table 323.** 02034300 Little Willis River at Curdsville, Va.

LOCATION.--Latitude 37°24'38", Longitude 078°27'35", NAD27, Buckingham County, Hydrologic Unit 02080205, at bridge on U.S. Highway 60, 0.5 mi south of Curdsville, and 2 mi north of Sheppards.

DRAINAGE AREA.--6.85 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 380 ft NGVD of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 38 ft<sup>3</sup>/s and extended above on basis of slope-area measurement at 337 ft<sup>3</sup>/s and contracted-opening measurement at 563 ft<sup>3</sup>/s.

BANKFULL STAGE.--5 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1951	March 20, 1951	5.42	420	1957	April 11, 1957	5.30	390
1952	December 23, 1951	5.50	430	1958	May 8, 1958	4.70	305
1953	November 20, 1952	5.69	450	1959	September 30, 1959	4.68	300
1954	May 22, 1954	5.54	430	1960	April 6, 1960	5.56	430
1955	August 18, 1955	6.26	563	1961	February 24, 1961	5.40	400
1956	February 7, 1956	3.64	150				

**Table 324. 02034500 Willis River at Lakeside Village, Va.**

(Formerly published as Willis River at Flanagan Mills.)

LOCATION.--Latitude 37°40'00", Longitude 078°10'00", NAD27, Cumberland County, Hydrologic Unit 02080205, on left bank 15 ft upstream from bridge on State Highway 690, 0.4 mi east of Lakeside Village, 6.9 mi upstream from mouth, and 7.7 mi downstream from Reynolds Creek.

DRAINAGE AREA.--262 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 178.98 ft NGVD of 1929 (levels by U.S. Army Corps of Engineers). Prior to Jan. 3, 1935, nonrecording gage at site 1,300 ft upstream at present datum. Jan. 3, 1935, to Oct. 1, 1986, water-stage recorder at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 5,770 ft<sup>3</sup>/s and extended above by logarithmic plotting.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated. Regulation of flow from Trice Lake 0.4 mi upstream, capacity about 1,100 acre-ft. Tributary to Willis River, slightly affects flow at gage.

REMARKS.--Records were provided by the Virginia Department of Environmental Quality - Water Division from July 1, 1957, to Dec. 31, 1986.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1927	December 28, 1926		1,600	1963	March 15, 1963	12.05	1,470
1928	August 13, 1928		7,350	1964	February 19, 1964	11.83	1,430
1929	March 1, 1929		1,790	1965	March 7, 1965	13.05	1,720
1930	February 5, 1930		1,620	1966	March 3, 1966	12.88	1,690
1931	May 23, 1931		1,760	1967	August 27, 1967	12.42	1,550
1932	March 8, 1932		2,310	1968	January 15, 1968	12.92	1,690
1933	October 19, 1932		2,000	1969	July 24, 1969	13.80	2,000
1934	March 6, 1934		2,000	1970	January 2, 1970	10.08	991
1935	September 6, 1935		8,000	1971	May 31, 1971	18.64	5,760
1936	March 19, 1936	20.44 <sup>1</sup>	5,300	1972	June 22, 1972	29.80 <sup>1</sup>	24,000 <sup>2</sup>
1937	April 27, 1937	23.86 <sup>1</sup>	9,580	1973	October 6, 1972	21.12	7,880
1938	October 21, 1937	14.67	2,680	1974	September 8, 1974	15.68	3,300
1939	February 13, 1939	13.84	2,160	1975	March 20, 1975	16.75	4,230
1940	August 17, 1940	21.94 <sup>1</sup>	7,380	1977	October 23, 1976	13.30	1,810
1941	April 7, 1941	13.55	2,080	1978	January 27, 1978	19.28	6,360
1942	August 10, 1942	14.85	2,800	1979	February 26, 1979	21.92	8,560
1943	October 17, 1942	16.66 <sup>1</sup>	2,510	1980	October 1, 1979	15.26	2,960
1944	September 20, 1944	21.80 <sup>1</sup>	7,500	1981	February 12, 1981	8.04	585
1945	September 20, 1945	15.67	3,300	1982	June 6, 1982	15.57	3,180
1946	December 28, 1945	13.02	1,720	1983	April 16, 1983	14.07	2,140
1947	March 16, 1947	12.94	1,690	1984	March 30, 1984	16.24	3,750

1948	August 6, 1948	18.70	5,840	1985	August 19, 1985	14.41	2,330
1949	December 5, 1948	20.59 <sup>1</sup>	6,800	1986	November 6, 1985	22.97	9,470
1950	November 3, 1949	12.91	1,690	1987	April 16, 1987	20.35	7,250
1951	March 20, 1951	9.97	1,040	1988	May 6, 1988	13.06	1,740
1952	December 23, 1951	16.05	3,550	1989	May 6, 1989	14.17	2,185
1953	November 20, 1952	14.54	2,380	1990	October 19, 1989	16.16	3,690
1954	May 22, 1954	14.45	2,320	1991	July 27, 1991	15.29	2,950
1955	August 19, 1955	21.35	8,100	1992	April 22, 1992	14.59	2,430
1956	February 7, 1956	9.41	920	1993	March 4, 1993	18.75	5,890
1957	April 11, 1957	11.32	1,320	1994	March 29, 1994	19.19	6,260
1958	May 8, 1958	13.34	1,810	1995	March 29, 1995	19.19	6,260
1959	December 31, 1958	14.22	2,200	1996	September 6, 1996	20.01	6,960
1960	April 7, 1960	15.27	2,960	1997	December 2, 1996	13.42	1,850
1961	February 25, 1961	14.12	2,150	1998	January 28, 1998	17.04	4,430
1962	October 22, 1961	18.78	5,930	1999	September 16, 1999	10.32	1,040

<sup>1</sup>Gage height affected by backwater.

<sup>2</sup>Discharge is a maximum daily average.

**Table 325. 02035000 James River at Cartersville, Va.**

LOCATION.--Latitude 37°40'15", Longitude 078°05'10", NAD27, Goochland County, Hydrologic Unit 02080205, on left bank 200 ft downstream from bridge on State Highway 45 at Cartersville, 1.8 mi downstream from Willis River, and at mile 156.4.

DRAINAGE AREA.--6,252 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 163.90 ft NGVD of 1929. Prior to June 4, 1927, nonrecording gage at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 160,000 ft<sup>3</sup>/s and extended above on basis of slope-conveyance study.

BANKFULL STAGE.--16 ft.

REGULATION.--High-flow conditions at this site are considered unregulated. Flow regulated since December 1979 by Lake Moomaw; since October 1984 by Back Creek Lake, and since January 1985 by Little Back Creek Lake, and smaller reservoirs. Usable capacity 534,900 acre-ft.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1870	October 1869	32.00		1953	March 26, 1953	20.90	75,600
1878	November 1877	30.40		1954	March 3, 1954	18.75	63,600
1899	March 6, 1899	25.20	111,000	1955	August 19, 1955	24.48	104,000
1900	March 2, 1900	16.00	49,200	1956	March 16, 1956	9.93	23,800
1901	May 23, 1901	27.00	134,000	1957	April 7, 1957	19.47	67,400
1902	December 30, 1901	26.70	130,000	1958	April 1, 1958	16.46	51,700
1903	June 7, 1903	22.00	82,800	1959	June 3, 1959	14.47	42,300
1904	March 8, 1904	14.00	40,200	1960	April 6, 1960	20.13	70,800
1905	July 14, 1905	17.00	54,200	1961	April 14, 1961	15.10	45,000
1906	January 4, 1906	17.10	54,700	1962	October 22, 1961	23.13	91,200
1907	October 21, 1906	23.80	97,200	1963	March 14, 1963	21.33	78,000
1908	February 17, 1908	19.80	69,100	1964	January 26, 1964	13.02	35,900
1909	April 16, 1909	15.80	48,200	1965	February 8, 1965	19.83	69,100
1910	June 17, 1910	20.30	72,000	1966	February 14, 1966	16.82	53,200
1911	January 4, 1911	16.30	50,700	1967	March 8, 1967	19.61	68,100
1912	May 13, 1912	22.50	86,400	1968	December 12, 1967	12.81	35,100
1913	March 29, 1913	23.40	93,600	1969	August 21, 1969	33.75	250,000
1914	November 10, 1913	13.60	39,000	1970	January 2, 1970	19.03	64,900
1915	February 4, 1915	20.60	69,300	1971	June 1, 1971	21.51	79,400
1916	October 2, 1915	18.40	59,000	1972	June 22, 1972	37.87	362,000
1917	March 6, 1917	19.90	66,300	1973	October 6, 1972	27.12	131,000
1918	April 22, 1918	17.00	52,800	1974	December 29, 1973	20.89	75,500
1919	January 4, 1919	23.00	82,900	1975	March 20, 1975	26.04	120,000
1920	February 4, 1920	20.20	67,300	1976	January 1, 1976	17.26	54,400
1921	December 1, 1920	14.70	43,300	1977	October 10, 1976	20.60	73,900
1922	March 16, 1922	15.50	46,600	1978	January 27, 1978	25.08	109,000
1923	March 17, 1923	18.50	60,200	1979	February 26, 1979	26.33	123,000

1924	May 13, 1924	24.70	106,000	1980	April 16, 1980	18.86	64,000
1925	October 1, 1924	24.38	103,000	1981	May 30, 1981	11.48	29,700
1926	January 20, 1926	15.25	45,300	1982	June 15, 1982	20.91	76,000
1927	December 28, 1926	16.20	49,800	1983	April 11, 1983	20.26	71,900
1928	August 18, 1928	23.80	97,200	1984	February 16, 1984	22.42	86,800
1929	April 17, 1929	17.66	56,600	1985	August 19, 1985	18.17	60,400
1930	November 20, 1929	15.82	48,000	1986	November 6, 1985	32.60	225,000
1931	August 23, 1931	11.14	28,400	1987	April 18, 1987	27.96	142,000
1932	March 7, 1932	17.13	54,800	1988	November 30, 1987	12.21	32,600
1933	October 18, 1932	21.54	75,400	1989	May 7, 1989	23.38	93,800
1934	March 5, 1934	15.93	49,000	1990	May 30, 1990	16.57	52,300
1935	September 6, 1935	27.80	134,000	1991	October 24, 1990	20.36	72,700
1936	March 19, 1936	28.77	166,000	1992	April 23, 1992	25.39	113,000
1937	April 26, 1937	27.73	133,000	1993	March 5, 1993	24.18	101,000
1938	October 21, 1937	24.34	98,400	1994	March 30, 1994	22.29	85,100
1939	August 20, 1939	19.12	65,500	1995	January 17, 1995	21.96	82,500
1940	August 17, 1940	28.34	145,000	1996	September 7, 1996	28.96	158,000
1941	April 6, 1941	13.88	39,700	1997	December 3, 1996	20.73	74,900
1942	May 24, 1942	20.80	75,000	1998	February 18, 1998	21.91	82,200
1943	October 16, 1942	27.14	135,000	1999	September 30, 1999	21.73	81,100
1944	September 20, 1944	29.60	180,000	2000	April 19, 2000	12.33	33,100
1945	September 19, 1945	19.50	67,400	2001	March 30, 2001	13.44	37,800
1946	January 9, 1946	14.80	43,700	2002	April 24, 2002	10.52	26,000
1947	March 16, 1947	13.68	38,900	2003	February 24, 2003	24.47	104,000
1948	April 2, 1948	22.14	83,500	2004	September 30, 2004	20.49	73,500
1949	December 5, 1948	27.00	134,000	2005	January 15, 2005	17.78	58,300
1950	September 11, 1950	19.73	68,600	2006	June 28, 2006	21.15	77,500
1951	December 9, 1950	19.42	66,900	2007	October 8, 2006	19.97	70,300
1952	December 22, 1951	18.16	60,300				

---

**Table 326.** 02035400 Big Lickinghole Creek tributary near Ferncliff, Va.

LOCATION.--Latitude 37°49'34", Longitude 077°58'23", NAD27, Goochland County, Hydrologic Unit 02080205, at bridge on U.S. Highway 250, 10.5 mi southeast of Ferncliff.

DRAINAGE AREA.--0.54 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 253.68 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by contracted-opening measurements at 150 ft<sup>3</sup>/s and 600 ft<sup>3</sup>/s and computation of flow through culvert.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1962	October 21, 1961	4.28	150	1970		2.55 <sup>1</sup>	50.0 <sup>2,3</sup>
1963	March 12, 1963	2.85	55.0	1971	May 30, 1971	3.35	76.0
1964		2.55 <sup>1</sup>	50.0 <sup>2,3</sup>	1973	October 5, 1972	3.88	140
1965		2.55 <sup>1</sup>	50.0 <sup>2,3</sup>	1974		2.55 <sup>1</sup>	50.0 <sup>2,3</sup>
1966		2.55 <sup>1</sup>	50.0 <sup>2,3</sup>	1975	June 25, 1975	3.40	79.0
1967		2.55 <sup>1</sup>	50.0 <sup>2,3</sup>	1976	March 31, 1976	3.01	60.0
1968	January 14, 1968	3.09	70.0	1977		2.55 <sup>1</sup>	50.0 <sup>2,3</sup>
1969	August 20, 1969	5.55	600				

<sup>1</sup>Gage height below minimum recordable elevation.

<sup>2</sup>Discharge is less than indicated value, which is minimum recordable discharge at this site.

<sup>3</sup>Month or day of occurrence is unknown or not exact.

**Table 327. 02035450 Rocketts Creek tributary near Gum Spring, Va.**

(Formerly published as Mill Creek near Gum Springs.)

LOCATION.--Latitude 37°47'13", Longitude 077°54'50", NAD27, Goochland County, Hydrologic Unit 02080205, at culvert on U.S. Highway 250, 1.2 mi northwest of Gum Springs.

DRAINAGE AREA.--0.31 mi<sup>2</sup>.

GAGE.--Water-stage recorder (flood-hydrograph recorder). Datum of gage is 291.65 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--3 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1966		3.00 <sup>1</sup>	14.0 <sup>2,3</sup>	1971	May 20, 1971	5.85	88.0
1967		3.00 <sup>1</sup>	14.0 <sup>2,3</sup>	1972	June 21, 1972	9.58	187
1968	August 19, 1968	7.59	142	1973	October 5, 1972	4.75	56.0
1969	August 20, 1969	9.72	190	1974	September 6, 1974	4.10	36.0
1970		3.00 <sup>1</sup>	14.0 <sup>2,3</sup>	1975	July 14, 1975	4.66	53.0

<sup>1</sup>Gage height below minimum recordable elevation.

<sup>2</sup>Discharge is less than indicated value, which is minimum recordable discharge at this site.

<sup>3</sup>Month or day of occurrence is unknown or not exact.

**Table 328.** 02035500 Big Lickinghole Creek near Goochland, Va.

LOCATION.--Latitude 37°41'31", Longitude 077°57'22", NAD27, Goochland County, Hydrologic Unit 02080205, at highway bridge 0.25 mi downstream from confluence of Big and Little Lickinghole Creeks, 1.75 mi upstream from mouth, and 4.0 mi west of Goochland.

DRAINAGE AREA.--68.4 mi<sup>2</sup>.

GAGE.--Nonrecording gage (chain gage). Datum of gage is 161.69 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 220 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1945	July 20, 1945	10.70	729	1946	May 5, 1946	9.20	557

**Table 329.** 02036000 Beaverdam Creek at State Farm, Va.

LOCATION.--Latitude 37°38'50", Longitude 077°49'34", NAD27, Goochland County, Hydrologic Unit 02080205, 75 ft upstream from highway bridge at State Farm, 0.75 mi upstream from mouth, and 4 mi southeast of Goochland Courthouse.

DRAINAGE AREA.--39.8 mi<sup>2</sup>.

GAGE.--Nonrecording gage (staff gage). Datum of gage is 136.59 ft NGVD of 1929 (levels by State Farm surveyors).

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 280 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1945	July 19, 1945	5.60	750	1947	January 20, 1947	4.60	478
1946	May 4, 1946	5.60	750				

**Table 330. 02036500 Fine Creek at Fine Creek Mills, Va.**

LOCATION.--Latitude 37°35'52", Longitude 077°49'12", NAD27, Powhatan County, Hydrologic Unit 02080205, on right bank 75 ft downstream from bridge on State Highway 711 at Fine Creek Mills, 0.8 mi upstream from mouth, and 6.7 mi northeast of Powhatan.

DRAINAGE AREA.--22.4 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 156.59 ft NGVD of 1929. Prior to Oct. 28, 1953, nonrecording gage and crest-stage gage at site 75 ft upstream at present datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 2,560 ft<sup>3</sup>/s and extended above by logarithmic plotting.

BANKFULL STAGE.--3 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Subsequent to June 30, 1957, records were provided by the Virginia Department of Environmental Quality - Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1945	September 18, 1945	4.00 <sup>1</sup>	550	1977	October 21, 1976	3.89	530
1946	May 5, 1946	3.33 <sup>1</sup>	370	1978	January 26, 1978	4.90	1,030
1947	April 17, 1947	3.54 <sup>1</sup>	224	1979	February 25, 1979	6.10	1,780
1948	August 4, 1948	7.00 <sup>1</sup>	1,650	1980	October 1, 1979	6.42	2,120
1949	July 17, 1949	3.80 <sup>1</sup>	440	1981	August 13, 1981	2.41	86
1950	September 13, 1950	4.60 <sup>1</sup>	718	1982	March 20, 1982	3.09	270
1951	February 17, 1951	3.10 <sup>1</sup>	204	1983	April 16, 1983	5.07	1,280
1952	December 21, 1951	6.40 <sup>1</sup>	1,410	1984	February 14, 1984	6.21	2,000
1953	January 25, 1953	3.25 <sup>1</sup>	253	1985	August 19, 1985	4.17	775
1954	June 15, 1954	3.16	266	1986	November 4, 1985	7.65	3,000
1955	August 18, 1955	6.98	2,010	1987	April 16, 1987	3.90	640
1956	October 15, 1955	2.71	138	1988	December 11, 1987	3.16	295
1957	April 9, 1957	2.84	150	1989	May 6, 1989	3.10	273
1958	May 7, 1958	3.44	302	1990	May 29, 1990	4.74	1,090
1959	December 29, 1958	4.84	1,000	1991	January 12, 1991	2.80	182
1960	April 5, 1960	3.52	381	1992	February 27, 1992	2.44	95
1961	June 24, 1961	3.82	499	1993	April 16, 1993	4.54	977
1962	October 21, 1961	8.35	3,640	1994	March 3, 1994	4.15	758
1963	June 3, 1963	2.97	209	1995	March 9, 1995	3.13	284
1964	February 16, 1964	2.71	148	1996	September 6, 1996	5.03	1,250
1965	February 8, 1965	2.77	152	1997	December 8, 1996	3.02	247
1966	February 13, 1966	2.87	180	1998	March 19, 1998	4.14	742
1967	March 7, 1967	2.80	171	1999	September 17, 1999	3.35	372
1968	January 15, 1968	2.88	191	2000	April 18, 2000	3.82	582
1969	August 20, 1969	3.55	392	2001	March 30, 2001	3.51	440
1970	December 31, 1969	2.51	104	2002	March 18, 2002	2.25	46

1971	August 27, 1971	4.76	955	2003	September 19, 2003	4.89	1,160
1972	June 22, 1972	6.60	2,140	2004	December 11, 2003	3.93	636
1973	October 6, 1972	9.02	4,180	2005	January 14, 2005	3.52	445
1974	December 21, 1973	4.65	905	2006	September 2, 2006	4.06	701
1975	September 26, 1975	3.71	454	2007	January 1, 2007	4.17	758
1976	January 27, 1976	3.84	508				

---

<sup>1</sup>Gage height at different site and (or) datum.

**Table 331.** 0203667510 Tuckahoe Creek tributary 1 at Route 288 near Centerville, Va.

LOCATION.--Latitude 37°39'22", Longitude 077°39'47", NAD27, Goochland County, Hydrologic Unit 02080205, on east side of south-bound lane of Route 288, 1.7 mi southeast of Centerville.

DRAINAGE AREA.--0.004 mi<sup>2</sup>.

GAGE.--Water-stage recorder and H-flume. Datum of gage is not determined.

STAGE-DISCHARGE RELATION.--Defined by volumetric measurements below 1.22 ft<sup>3</sup>/s and extended above based on theoretical flume rating.

BANKFULL STAGE.--Not determined.

REGULATION.--High flow conditions at this site are considered unregulated.

REMARKS.--Gage destroyed June 11, 2001 because of road construction.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1999	June 30, 1999	1.61	6.40	2000	March 16, 2000	1.59	6.20

**Table 332.** 0203667525 Tuckahoe Creek tributary 2 at Route 288 near Centerville, Va.

LOCATION.--Latitude 37°38'53", Longitude 077°39'58", NAD27, Goochland County, Hydrologic Unit 02080205, at culvert on west side of south-bound lane of Route 288, 2.0 mi southeast of Centerville.

DRAINAGE AREA.--0.010 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage) and V-notch sharp-crested weir. Datum of gage is not determined. Prior to June 24, 2004, water-stage recorder at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 1.14 ft<sup>3</sup>/s and extended above based on theoretical weir rating.

BANKFULL STAGE.--Not determined.

REGULATION.--High flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1999	September 16, 1999	0.500	1.18	2004	August 31, 2004	1.37	5.80
2000	March 16, 2000	0.620	1.48	2005	July 8, 2005	1.19	4.08
2001	August 12, 2001	0.610	1.46	2006	January 23, 2006	0.620	0.800
2002	August 28, 2002	0.460	1.08	2007	March 17, 2007	0.650	0.900
2003	September 23, 2003	1.37	5.78				

**Table 333.** 0203667530 Tuckahoe Creek tributary to tributary 3 near Centerville, Va.

LOCATION.--Latitude 37°38'44", Longitude 077°39'57", NAD27, Goochland County, Hydrologic Unit 02080205, on east side of south-bound lane of Route 288, 2.1 mi southeast of Centerville.

DRAINAGE AREA.--0.036 mi<sup>2</sup>.

GAGE.--Water-stage recorder and H-flume. Datum of gage is not determined.

STAGE-DISCHARGE RELATION.--Defined by current meter measurements below 4.15 ft<sup>3</sup>/s and extended above based on theoretical flume rating.

BANKFULL STAGE.--Not determined.

REGULATION.--High flow conditions at this site are considered unregulated.

REMARKS.--Gage destroyed June 11, 2001 because of road construction.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1999	September 16, 1999	1.39	5.34	2000	June 28, 2000	1.11	3.28

**Table 334. 0203668010 Stony Run tributary to tributary at Short Pump, Va.**

LOCATION.--Latitude 37°38'57", Longitude 077°36'03", NAD27, Henrico County, Hydrologic Unit 02080205, at Route 250, at Short Pump.

DRAINAGE AREA.--0.006 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage) and Palmer-Bowlus flume. Datum of gage is not determined. Prior to Nov. 12, 2003, water-stage recorder at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by theoretical flume rating.

BANKFULL STAGE.--Not determined.

REGULATION.--High flow conditions at this site are considered unregulated.

REMARKS.--Peak flows affected by urbanization. Prior to Sept. 2006, land use consisted primarily of pasture.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
2001	March 30, 2001	0.390	0.820	2005	January 23, 2005	0.580	1.64
2002	July 27, 2002	0.040	0.020	2006	January 28, 2006	0.400	0.860 <sup>1</sup>
2003	September 23, 2003	1.19	6.52	2007	October 7, 2006	0.960	4.24 <sup>1</sup>
2004	September 18, 2004	0.830	3.12				

<sup>1</sup>All or part of the record affected by urbanization, mining, agricultural changes, channelization, or other changes.

**Table 335. 02037000 James River and Kanawha Canal near Richmond, Va.**

LOCATION.--Latitude 37°33'52", Longitude 077°34'28", NAD27, Henrico County, Hydrologic Unit 02080205, on left bank 75 ft downstream from Canal bridge, 400 ft downstream from head gates, 1,200 ft north of north end of Boshier Dam on James River, 1.6 mi upstream from Huguenot Memorial Bridge, and 2.0 mi west of Richmond city limits.

DRAINAGE AREA.--Not available for canals.

GAGE.--Water-stage recorder. Datum of gage is 106.07 ft NGVD of 1929. Prior to Oct. 1, 1938 water-stage recorder at datum of 109.13 ft NGVD 1029.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 2,020 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Canal diverts from James River 1,200 ft upstream from Boshier Dam and discharges into river at several points downstream from gaging station near Richmond. Above 2,540 ft<sup>3</sup>/s, gage height, 14.5 ft, there is interchange of flow with James River; discharge above 2,540 ft<sup>3</sup>/s included in discharge for James River near Richmond (station 02037500). Subsequent to June 30, 1957, records were provided by the Virginia Department of Environmental Quality - Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1938	October 21, 1937		2,200	1973	October 7, 1972	20.80	
1939	February 21, 1939		1,010	1974	October 3, 1973	8.30	1,020
1941	April 5, 1941		1,130	1975	March 31, 1975	17.51	
1942	March 10, 1942		1,130	1976	October 19, 1975	8.33	1,040
1943	October 17, 1942		3,220	1977	April 10, 1977	8.21	1,020
1945	July 18, 1945		1,370	1978	January 28, 1978	16.68	
1946	December 26, 1945		1,230	1979	February 27, 1979	18.75	
1947	June 15, 1947		1,150	1980	October 1, 1979		859
1948	April 2, 1948		1,260	1981	June 6, 1981	8.83	1,080
1950	October 31, 1949		1,230	1982	June 15, 1982	12.20	1,780
1951	December 4, 1950		1,360	1983	April 15, 1983	7.85	
1952	September 2, 1952		1,390	1984	February 15, 1984	10.68	1,340
1953	February 22, 1953		1,230	1985	August 19, 1985	14.72	
1954	March 2, 1954		1,390	1986	November 7, 1985	24.50	
1955	August 20, 1955		2,340	1987	April 18, 1987	20.74	
1956	April 17, 1956		1,120	1988	July 9, 1988	6.01	536
1957	April 6, 1957		1,100	1989	May 7, 1989	10.32	1,340
1958	April 24, 1958		1,220	1990	April 2, 1990	8.59	988
1959	April 26, 1959		1,060	1991	June 22, 1991	6.93	683
1960	October 1, 1959		1,180	1994	March 30, 1994	9.67	1,120
1961	February 28, 1961	9.05	1,160	1995	November 21, 1994	7.51	647
1962	October 23, 1961	13.10	2,240	1997	July 25, 1997	7.92	383
1963	November 11, 1962	9.06	1,180	1998	March 21, 1998	8.61	340
1964	March 5, 1964	8.92	1,140	1999	September 16, 1999	8.49	727

1965	November 27, 1964	8.79	1,060	2000	May 24, 2000	6.84	504
1966	March 1, 1966	8.54	1,000	2001	August 12, 2001	7.65	589
1967	March 18, 1967	9.07	1,140	2002	May 9, 2002	7.70	239
1968	January 15, 1968	9.13	1,140	2003	February 25, 2003	14.88	
1969	August 21, 1969	24.70		2004	August 30, 2004	14.13 <sup>1</sup>	
1970	December 12, 1969	8.61	1,020	2005	July 5, 2005	7.60	162
1971	May 30, 1971	9.23	1,160	2006	May 17, 2006	4.21 <sup>2</sup>	133
1972	June 23, 1972	29.10		2007	October 1, 2006	4.65	97

---

<sup>1</sup>Gage height affected by backwater.

<sup>2</sup>Gage height is not the maximum for the year.

**Table 336. 02037500 James River near Richmond, Va.**

LOCATION.--Latitude 37°33'47", Longitude 077°32'50", NAD27, Henrico County, Hydrologic Unit 02080205, on left bank 0.2 mi upstream from Huguenot Memorial Bridge, 0.5 mi southwest of Richmond city limits, 1.7 mi downstream from Boshier Dam, 3.3 mi upstream from Powhite Creek, and at mile 116.6.

DRAINAGE AREA.--6,753 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Control is Williams Island dams which divert flow for city of Richmond water supply. Datum of gage is 98.82 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 318,700 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--11 ft.

REGULATION.--High-flow conditions at this site are considered unregulated. Flow regulated since December 1979 by Lake Moomaw; since October 1984 by Back Creek Lake, and since January 1985 by Little Back Creek Lake, and smaller reservoirs. Usable capacity 534,900 acre-ft.

REMARKS.--Subsequent to June 30, 1957, records were provided by the Virginia Department of Environmental Quality - Water Division. Records below 120,000 ft<sup>3</sup>/s do not include the flow of the James River and Kanawha Canal.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1935	September 7, 1935	21.01	127,000	1972	June 23, 1972	28.62	313,000
1936	March 19, 1936	23.42	175,000	1973	October 7, 1972	21.76	162,000
1937	April 27, 1937	22.65	152,000 <sup>12</sup>	1974	December 29, 1973	15.94	76,100
1938	October 21, 1937	18.20	92,500	1975	March 21, 1975	20.08	133,000
1939	August 20, 1939	14.37	57,900	1976	January 2, 1976	14.08	57,900
1940	August 18, 1940	21.80	151,000	1977	October 11, 1976	15.63	72,800
1941	April 6, 1941	11.93	39,100	1978	January 28, 1978	19.36	122,000
1942	May 24, 1942	15.74	68,600	1979	February 27, 1979	20.38	138,000
1943	October 17, 1942	19.80	119,000	1980	April 16, 1980	14.74	63,600
1944	September 20, 1944	21.80	150,000	1981	May 30, 1981	9.85	25,700
1945	September 20, 1945	14.82	61,100	1982	June 15, 1982	15.65	73,400
1946	January 9, 1946	12.20	41,300	1983	April 12, 1983	15.66	73,500
1947	March 17, 1947	11.65	37,000	1984	February 16, 1984	17.27	91,700
1948	April 2, 1948	16.45	75,000	1985	August 19, 1985	14.94	66,000
1949	December 5, 1948	20.90	136,000	1986	November 7, 1985	24.77	218,000
1950	September 12, 1950	14.60	59,500	1987	April 18, 1987	21.91	163,000
1951	December 10, 1950	14.85	61,100	1988	November 30, 1987	10.72	31,100
1952	December 22, 1951	14.53	58,700	1989	May 7, 1989	17.70	96,900
1953	March 27, 1953	15.95	71,100	1990	May 30, 1990	14.01	57,100
1954	March 3, 1954	14.54	58,700	1991	October 24, 1990	15.17	68,300
1955	August 20, 1955	18.36	98,700	1992	April 24, 1992	19.24	119,000
1956	March 17, 1956	9.32	22,600	1993	March 6, 1993	18.87	114,000
1957	April 8, 1957	15.00	62,700	1994	March 30, 1994	17.48	94,300
1958	April 2, 1958	13.35	50,100	1995	January 18, 1995	16.42	81,800
1959	June 4, 1959	12.05	39,800	1996	September 8, 1996	21.23	152,000

1960	April 7, 1960	15.70	68,600	1997	December 3, 1996	15.72	74,500
1961	April 14, 1961	12.63	44,200	1998	January 29, 1998	16.77	87,000
1962	October 23, 1961	17.98	94,000	1999	January 25, 1999	9.46	24,900
1963	March 15, 1963	16.42	81,600	2000	October 1, 1999	15.43	73,200
1964	January 27, 1964	11.22	34,300	2001	March 31, 2001	11.82	40,700
1965	February 9, 1965	15.32	69,600	2002	April 24, 2002	9.31	24,300
1966	February 15, 1966	13.75	55,200	2003	February 25, 2003	18.73	113,000
1967	March 9, 1967	15.37	70,600	2004	November 21, 2003	14.57	62,400
1968	December 12, 1967	11.24	34,300	2005	October 1, 2004	15.50	72,000
1969	August 21, 1969	24.95	222,000	2006	June 29, 2006	15.81	75,500
1970	January 2, 1970	14.92	65,600	2007	October 8, 2006	15.42	71,100
1971	June 1, 1971	17.02	88,500				

---

<sup>1</sup>Discharge is a maximum daily average.

<sup>2</sup>Discharge actually greater than indicated value.

**Table 337. 02037800 Falling Creek near Midlothian, Va.**

LOCATION.--Latitude 37°27'15", Longitude 077°35'20", NAD27, Chesterfield County, Hydrologic Unit 02080206, at bridge on State Highway 653, 2.2 mi upstream from Horners Run, and 4 mi southeast of Midlothian.

DRAINAGE AREA.--18.2 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 170 ft NGVD of 1929, from topographic map. Prior to October 25, 2000 nonrecording gage at present site and datum of 170.06 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 700 ft<sup>3</sup>/s and extended above on basis of contracted-opening measurement at 1,450 ft<sup>3</sup>/s.

BANKFULL STAGE.--4 ft.

REGULATION.--High-flow conditions at this site are considered unregulated. Flows are regulated by Lake Salisbury and other small reservoirs. Estimated total usable capacity 730 acre-feet.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1951		2.30 <sup>1,2</sup>	130 <sup>3,4</sup>	1975	July 14, 1975	7.28 <sup>1</sup>	912
1952	March 24, 1952	5.93 <sup>1</sup>	500	1976	January 1, 1976	4.93 <sup>1</sup>	390
1953	November 21, 1952	4.67 <sup>1</sup>	315	1977		2.30 <sup>1,2</sup>	130 <sup>3,4</sup>
1954	May 21, 1954	4.63 <sup>1</sup>	310	1979	September 30, 1979	11.71 <sup>1</sup>	5,170
1955	August 18, 1955	7.50 <sup>1</sup>	943	1980	November 11, 1979	7.54 <sup>1</sup>	1,020
1956	October 1, 1955	3.96 <sup>1</sup>	235	1981	July 4, 1981	3.92 <sup>1</sup>	252
1957	February 26, 1957	5.44 <sup>1</sup>	420	1982	March 7, 1982	3.97 <sup>1</sup>	257
1958	August 4, 1958	5.21 <sup>1</sup>	385	1983	March 21, 1983	6.02 <sup>1</sup>	604
1959	August 8, 1959	6.95 <sup>1</sup>	780	1984	March 29, 1984	6.33 <sup>1</sup>	666
1960	September 12, 1960	8.62 <sup>1</sup>	1,450	1985	April 4, 1985	8.32 <sup>1</sup>	1,400
1961	February 23, 1961	4.75 <sup>1</sup>	325	1986	November 4, 1985	7.76 <sup>1</sup>	1,100
1962	October 21, 1961	7.45 <sup>1</sup>	950	1987	April 16, 1987	6.91 <sup>1</sup>	823
1963	March 6, 1963	3.98 <sup>1</sup>	240	1988	July 22, 1988	4.89 <sup>1</sup>	382
1964	February 16, 1964	3.55 <sup>1</sup>	198	1989	June 7, 1989	4.91 <sup>1</sup>	387
1965	February 7, 1965	3.77 <sup>1</sup>	216	1990	April 3, 1990	5.80 <sup>1</sup>	560
1966		2.30 <sup>1,2</sup>	130 <sup>3,4</sup>	1991	March 30, 1991	5.68 <sup>1</sup>	536
1967		2.30 <sup>1,2</sup>	130 <sup>3,4</sup>	1992	March 7, 1992	6.63 <sup>1</sup>	731
1968	January 14, 1968	3.24 <sup>1</sup>	167	1993	March 4, 1993	7.18 <sup>1</sup>	904
1969	August 20, 1969	4.07 <sup>1</sup>	251	2001	July 29, 2001	25.12	1,040
1970	August 19, 1970	3.56 <sup>1</sup>	199	2002	March 18, 2002	25.37	1,140
1971	August 27, 1971	6.18 <sup>1</sup>	576	2003	September 18, 2003	27.49	2,530
1972	June 21, 1972	5.88 <sup>1</sup>	516	2004	August 30, 2004	29.61	6,410
1973	February 2, 1973	5.54 <sup>1</sup>	448	2005	March 29, 2005	25.61	1,250
1974	December 21, 1973	5.00 <sup>1</sup>	360				

<sup>1</sup>Gage height at different site and (or) datum.

<sup>2</sup>Gage height below minimum recordable elevation.

<sup>3</sup>Discharge is less than indicated value, which is minimum recordable discharge at this site.  
<sup>4</sup>Month or day of occurrence is unknown or not exact.

**Table 338. 02038000 Falling Creek near Chesterfield, Va.**

LOCATION.--Latitude 37°26'37", Longitude 077°31'21", NAD27, Chesterfield County, Hydrologic Unit 02080206, on left bank at upstream side of bridge on State Highway 651, 0.8 mi downstream from Licking Creek, 2.8 mi upstream from Pocoshock Creek, and 4.7 mi northwest of Chesterfield.

DRAINAGE AREA.--33.1 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 126.39 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 1,400 ft<sup>3</sup>/s and extended above on the basis of slope-area measurement at 5,930 ft<sup>3</sup>/s.

BANKFULL STAGE.--8 ft.

REGULATION.--High-flow conditions at this site are considered unregulated. Usable capacity of dams in the basin is approximately 1,100 acre-ft.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1955	August 18, 1955		2,000	1982	March 7, 1982	7.87	464
1956	June 2, 1956	7.04	356	1983	March 21, 1983	10.84	1,380
1957	February 26, 1957	8.42	592	1984	March 29, 1984	11.07	1,490
1958	August 4, 1958	10.07	855	1985	August 19, 1985	10.23	1,110
1959	December 29, 1958	9.92	815	1986	November 4, 1985	11.63	1,820
1960	September 12, 1960	12.67	2,510	1987	April 16, 1987	10.27	1,130
1961	February 23, 1961	7.41	432	1988	July 23, 1988	8.55	598
1962	October 21, 1961	11.10	1,500	1989	August 18, 1989	9.09	726
1963	June 3, 1963	8.33	574	1990	April 3, 1990	8.03	491
1964	February 16, 1964	5.94	268	1991	March 30, 1991	9.48	846
1965	February 8, 1965	6.20	298	1992	March 7, 1992	10.06	1,050
1966	February 28, 1966	5.47	214	1993	March 4, 1993	10.84	1,380
1967	October 19, 1966	5.57	227	1994	March 3, 1994	11.09	1,500
1968	January 14, 1968	6.99	387	1996	September 6, 1996	11.29	1,610
1969	July 23, 1969	10.39	1,200	1997	October 9, 1996	10.78	1,350
1970	August 20, 1970	5.34	196	1998	March 19, 1998	11.30	1,620
1971	May 31, 1971	6.48	339	1999	September 16, 1999	14.20	4,310
1972	October 24, 1971	9.68	904	2000	April 18, 2000	7.69	430
1973	February 2, 1973	8.63	616	2001	March 29, 2001	8.68	626
1974	December 21, 1973	8.63	550	2002	May 10, 2002	5.26	124
1975	July 14, 1975	10.65	1,600	2003	September 18, 2003	13.85	3,860
1976	January 1, 1976	8.46	592	2004	August 30, 2004	18.50	17,800
1977	April 5, 1977	6.25	268	2005	November 12, 2004	12.92	2,840
1978	March 10, 1978	9.62	860	2006	December 16, 2005	7.87	462
1980	October 1, 1979	15.32	5,930	2007	November 23, 2006	12.98	2,900
1981	July 5, 1981	6.07	204				

**Table 339. 02038500 Falling Creek near Drewrys Bluff, Va.**

LOCATION.--Latitude 37°27'40", Longitude 077°28'00", NAD27, Chesterfield County, Hydrologic Unit 02080206, on left bank 300 ft downstream from Chesterfield County Reservoir, 2.4 mi northeast of Drewrys Bluff, 2.7 mi downstream from Pocoshock Creek, and 3.7 mi upstream from mouth.

DRAINAGE AREA.--53.3 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 60 ft NGVD of 1929, from topographic map. Prior to Oct. 1, 1952, water-stage recorder at site 300 ft upstream, at datum of 65.39 NGVD 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 1,450 ft<sup>3</sup>/s; extended to 4,700 ft<sup>3</sup>/s and above on the basis of slope-area and flow-over-dam measurement of the flood peak of August 1955.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated. Usable capacity of dams in the basin is approximately 2,350 acre-ft.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1943	October 26, 1942	4.30 <sup>1</sup>	575	1954	May 21, 1954	5.19	932
1944	August 7, 1944	4.68 <sup>1</sup>	745	1955	August 18, 1955	10.12	4,700
1945	July 18, 1945	10.10 <sup>1</sup>	7,270	1956	October 1, 1955	4.70	700
1946	July 23, 1946	5.09 <sup>1</sup>	940	1957	February 26, 1957		1,070
1947	September 25, 1947	4.80 <sup>1</sup>	790	1958	December 21, 1957	5.62	1,300
1948	February 14, 1948	4.72 <sup>1</sup>	745	1959	December 29, 1958	5.95	1,530
1949	August 16, 1949	4.60 <sup>1</sup>	700	1960	September 12, 1960	10.40	5,010
1950	November 2, 1949	5.91 <sup>1</sup>	1,420	1961	February 23, 1961	4.66	689
1951	March 20, 1951	3.27 <sup>1</sup>	249	1962	January 6, 1962	7.56	2,860
1952	March 24, 1952	5.28 <sup>1</sup>	1,040	1963	June 3, 1963	5.85	1,480
1953	November 21, 1952	5.30	1,020				

<sup>1</sup>Gage height at different site and (or) datum.

**Table 340.** 0203856510 Reedy Creek Industrial Drainage near Chesterfield, Va.

LOCATION.--Latitude 37°24'03.89", Longitude 077°31'43.00", NAD83, Chesterfield County, Hydrologic Unit 02080206, at west end of Whitebark Terrace, 100 ft upstream from confluence with main drainage ditch.

DRAINAGE AREA.--0.016 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage) and concrete-lined trapezoidal channel. Datum of gage is not determined. Prior to Sept. 21, 2004, water-stage recorder at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 1.28 ft<sup>3</sup>/s and extended above by logarithmic plotting.

BANKFULL STAGE.--Not determined.

REGULATION.--High flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
2003	May 26, 2003	0.950	5.45	2006	September 1, 2006	0.900	5.00
2004	August 30, 2004	1.01	5.52	2007	October 7, 2006	1.40	7.40
2005	January 14, 2005	0.470	3.00				

**Table 341. 02038800 Appomattox River near Appomattox, Va.**

LOCATION.--Latitude 37°22'55", Longitude 078°47'24", NAD27, Appomattox County, Hydrologic Unit 02080207, at bridge on State Highway 24, 3.0 mi northeast of Appomattox.

DRAINAGE AREA.--5.67 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 649.60 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 2 ft<sup>3</sup>/s and extended above on basis of slope-area measurement at 535 ft<sup>3</sup>/s and contracted-opening measurement at 3,870 ft<sup>3</sup>/s.

BANKFULL STAGE.--4 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1955	August 17, 1955	5.42	535	1966	March 1, 1966	4.70	340
1956	April 15, 1956	4.21	240	1967		4.10 <sup>1</sup>	220 <sup>2,3</sup>
1957	April 5, 1957	4.55	310	1968		4.10 <sup>1</sup>	220 <sup>2,3</sup>
1958	November 19, 1957	5.47	545	1969		4.10 <sup>1</sup>	220 <sup>2,3</sup>
1959	September 30, 1959	5.84	670	1970		4.10 <sup>1</sup>	220 <sup>2,3</sup>
1960	May 8, 1960	5.51	560	1971	May 30, 1971	6.06	780
1961	February 24, 1961	5.48	550	1972	June 21, 1972	8.68	3,870
1962	October 21, 1961	5.22	480	1973	October 5, 1972	6.71	1,190
1963		4.10 <sup>1</sup>	220 <sup>2,3</sup>	1974	December 21, 1973	7.31	1,770
1964		4.10 <sup>1</sup>	220 <sup>2,3</sup>	1975	March 19, 1975	6.56	1,070
1965	February 7, 1965	5.40	540	1976	March 31, 1976	5.71	678

<sup>1</sup>Gage height below minimum recordable elevation.

<sup>2</sup>Discharge is less than indicated value, which is minimum recordable discharge at this site.

<sup>3</sup>Month or day of occurrence is unknown or not exact.

**Table 342.** 02038830 Fishpond Creek near Hixburg, Va.

LOCATION.--Latitude 37°22'09", Longitude 078°38'45", NAD27, Appomattox County, Hydrologic Unit 02080207, on left bank attached to upstream side of bridge on State Highway 617, 0.5 mi upstream from mouth, and 2.8 mi north of Hixburg.

DRAINAGE AREA.--13.9 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is not determined.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1980	January 18, 1980	4.71	201	1981	July 24, 1981	3.44	97.0

**Table 343.** 02038840 Holiday Creek near Toga, Va.

LOCATION.--Latitude 37°25'58", Longitude 078°41'12", NAD27, Buckingham County, Hydrologic Unit 02080207, on left bank 40 ft downstream from State Forest Road 2307, 1.8 mi upstream from confluence with North Holiday Creek, and 5.9 mi southwest of Toga.

DRAINAGE AREA.--1.67 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 614.40 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Developed by current-meter measurements, step-backwater computations, and slope-area measurement at 2,820 ft<sup>3</sup>/s.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1972	June 21, 1972	6.72	2,820	1989	May 5, 1989	3.57	296
1973	August 18, 1973	5.06	816	1990	March 17, 1990	2.92	202
1974	September 6, 1974	2.96	207	1992	June 5, 1992	1.48	51.0
1975	September 25, 1975	5.33	994	1993	March 4, 1993	3.71	323
1976	December 31, 1975	2.95	206	1994	November 28, 1993	4.45	532
1977	October 20, 1976	3.18	236	1995	January 15, 1995	2.48	149
1978	January 26, 1978	3.06	220	1996	September 6, 1996	4.91	730
1979	February 25, 1979	2.50	151	1997	July 24, 1997	2.25	125
1980	January 18, 1980	1.97	99.0	1998	January 28, 1998	2.42	144
1981	February 19, 1981	1.95	97.0	1999	September 29, 1999	1.46	50
1982	June 3, 1982	5.03	798	2000	December 13, 1999	0.77	8.5
1983	March 18, 1983	2.41	141	2001	August 23, 2001	0.80	9.6
1985	August 18, 1985	3.11	226	2002	May 13, 2002	0.75	7.9
1986	November 4, 1985	4.60	590	2003	March 20, 2003	3.59	299
1987	September 8, 1987	5.61	1,250	2004	September 17, 2004	1.44	48
1988	May 18, 1988	2.13	114	2005	January 14, 2005	0.610	3.9

**Table 344. 02038845 North Holiday Creek near Toga, Va.**

LOCATION.--Latitude 37°26'09", Longitude 078°40'04", NAD27, Buckingham County, Hydrologic Unit 02080207, on left bank 18 ft upstream from State Forest Road 2307, 1.0 mi upstream from mouth, and 4.5 mi southwest of Toga.

DRAINAGE AREA.--1.35 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 588.84 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Developed by current-meter measurements and computation of flow through culvert and flow over road.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1972	June 21, 1972	6.79	1,570	1987	September 8, 1987	5.85	420
1973	August 18, 1973	6.02	500	1988	May 18, 1988	1.28	23.0
1974	September 6, 1974	3.07	68.0	1989	May 5, 1989	2.62	55.0
1975	September 25, 1975	5.78	392	1990	March 17, 1990	2.83	61.0
1976	December 31, 1975	2.02	38.0	1991	June 16, 1991	2.10	39.0
1977	October 9, 1976	2.30	45.0	1992	December 29, 1991	1.06	18.0
1978	January 8, 1978	4.69	161	1993	March 4, 1993	4.32	131
1979	February 24, 1979	5.47	281	1994	November 28, 1993	5.44	272
1980	January 18, 1980	1.45	26.0	1995	January 15, 1995	3.41	82.0
1981	February 20, 1981	1.19	21.0	1996	September 6, 1996	5.67	340
1982	June 3, 1982	5.54	302	1997	December 1, 1996	1.30	23
1983	March 18, 1983	2.20	42.0	1998	January 28, 1998	2.78	59
1984	March 29, 1984	3.28	76.0	1999	March 14, 1999	1.43	26
1985	August 18, 1985	4.42	138	2000	December 13, 1999	0.76	12
1986	November 4, 1985	5.39	258				

**Table 345. 02038850 Holiday Creek near Andersonville, Va.**

LOCATION.--Latitude 37°24'55", Longitude 078°38'10", NAD27, Appomattox County, Hydrologic Unit 02080207, on right bank 350 ft downstream from culvert on State Highway 614, 1.0 mi upstream from Holiday Lake, and 5.2 mi southwest of Andersonville.

DRAINAGE AREA.--8.54 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 472.97 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 4,200 ft<sup>3</sup>/s and extended above on basis of slope-area measurement at 9,640 ft<sup>3</sup>/s.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1967	June 23, 1967	3.80	336	1987	September 8, 1987	9.94	2,950
1968	December 10, 1967	3.14	224	1988	May 18, 1988	2.73	194
1969	July 23, 1969	3.55	294	1989	May 6, 1989	4.55	550
1970	July 9, 1970	2.26	90.0	1990	March 17, 1990	4.58	556
1971	May 13, 1971	5.16	615	1991	January 11, 1991	3.35	305
1972	June 21, 1972	14.64	9,640	1992	September 25, 1992	3.61	355
1973	August 18, 1973	11.90	4,980	1993	March 4, 1993	5.78	877
1974	September 6, 1974	4.78	526	1994	November 28, 1993	8.26	1,860
1975	September 25, 1975	10.66	3,610	1995	January 15, 1995	3.30	296
1976	December 31, 1975	3.89	351	1996	September 6, 1996	9.57	2,670
1977	October 9, 1976	4.05	380	1997	December 1, 1996	2.80	206
1978	January 26, 1978	5.36	665	1998	January 28, 1998	4.27	488
1979	February 24, 1979	6.31	952	1999	January 24, 1999	2.87	218
1980	January 18, 1980	3.06	209	2002	March 18, 2002	1.61	36
1981	February 19, 1981	2.62	138	2003	September 19, 2003	7.40	1,450
1982	June 4, 1982	5.67	753	2004	November 6, 2003	3.17	278
1983	March 18, 1983	3.39	265	2005	January 14, 2005	4.22	478
1984	March 29, 1984	4.45	460	2006	September 5, 2006	4.28	490
1985	August 18, 1985	5.26	731	2007	October 7, 2006	4.97	654
1986	November 4, 1985	6.80	1,220				

**Table 346.** 02038880 Vaughans Creek near Hixburg, Va.

LOCATION.--Latitude 37°21'08", Longitude 078°35'57", NAD27, Appomattox County, Hydrologic Unit 02080207, on left bank attached to upstream side of bridge on State Highway 626, 3.3 mi northeast of Hixburg, and 3.9 mi upstream from mouth.

DRAINAGE AREA.--23.2 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is not determined.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 33 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1980	July 10, 1980	3.88	136	1981	February 11, 1981		50.0 <sup>1</sup>

<sup>1</sup>Discharge is a maximum daily average.

**Table 347.** 02038900 Dry Creek near Farmville, Va.

LOCATION.--Latitude 37°20'45", Longitude 078°24'45", NAD27, Cumberland County, Hydrologic Unit 02080207, at culvert on State Highway 635, 3.5 mi northwest of Farmville.

DRAINAGE AREA.--3.60 mi<sup>2</sup>.

GAGE.--Water-stage recorder (flood-hydrograph recorder). Datum of gage is 315 ft NGVD of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--4 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1966	February 28, 1966	5.00	270	1970		3.00 <sup>1</sup>	100 <sup>2,3</sup>
1967	August 24, 1967	3.40	132	1971	May 30, 1971	4.97	267
1968	June 10, 1968	5.25	295	1972	June 21, 1972	8.60	700 <sup>4</sup>
1969	July 30, 1969	3.65	165				

<sup>1</sup>Gage height below minimum recordable elevation.

<sup>2</sup>Discharge is less than indicated value, which is minimum recordable discharge at this site.

<sup>3</sup>Month or day of occurrence is unknown or not exact.

<sup>4</sup>Discharge is an estimate.

**Table 348. 02039000 Buffalo Creek near Hampden Sydney, Va.**

LOCATION.--Latitude 37°15'25", Longitude 078°29'12", NAD27, Prince Edward County, Hydrologic Unit 02080207, on left bank 100 ft upstream from bridge on State Highway 658, 0.8 mi upstream from Locket Creek, 2.0 mi northwest of Hampden Sydney, and 6.0 mi southwest of Farmville.

DRAINAGE AREA.--69.6 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 339.19 ft NGVD of 1929 (levels by Virginia Department of Transportation). Prior to Aug. 19, 1953, nonrecording gage at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 1,700 ft<sup>3</sup>/s and extended above on basis of slope-area measurement at 8,200 ft<sup>3</sup>/s.

BANKFULL STAGE.--5 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Subsequent to June 30, 1957, records were provided by the Virginia Department of Environmental Quality - Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1940	August 1940	15.00		1976	January 1, 1976	7.28	1,490
1947	April 17, 1947	5.90	730	1977	October 20, 1976	7.32	1,490
1948	February 14, 1948	7.10	2,640	1978	January 26, 1978	9.72	4,560
1949	December 4, 1948	7.00	2,440	1979	February 25, 1979	10.43	5,580
1950	March 23, 1950	6.60	1,660	1980	October 3, 1979	6.91	1,190
1951	December 5, 1950	5.47	452	1981	September 7, 1981	5.32	424
1952	December 21, 1951	7.53	3,540	1982	February 3, 1982	6.93	1,200
1953	November 21, 1952	7.77	4,040	1983	April 15, 1983	8.11	2,420
1954	January 23, 1954	6.57	1,580	1984	March 29, 1984	7.64	1,410
1955	August 18, 1955	9.00	6,440	1985	August 18, 1985	7.54	1,740
1956	February 7, 1956	5.79	643	1986	November 5, 1985	8.24	2,590
1957	April 9, 1957	6.17	1,020	1987	April 17, 1987	7.85	2,110
1958	February 27, 1958	6.36	1,280	1988	May 22, 1988	5.65	546
1959	December 29, 1958	7.00	2,440	1989	July 16, 1989	8.73	3,230
1960	April 5, 1960	6.84	2,120	1990	May 29, 1990	7.15	1,360
1961	August 6, 1961	7.10	2,640	1991	March 30, 1991	7.61	1,820
1962	January 7, 1962	6.55	1,580	1992	April 22, 1992	5.22	406
1963	March 6, 1963	6.75	1,940	1993	March 4, 1993	10.22	5,310
1964	February 7, 1964	5.36	418	1994	November 28, 1993	9.77	4,660
1965	February 8, 1965	6.45	825	1995	November 22, 1994	5.99	687
1966	March 1, 1966	6.37	772	1996	September 6, 1996	9.48	4,250
1967	August 25, 1967	5.33	386	1997	April 29, 1997	6.62	1,010
1968	March 17, 1968	5.72	480	1998	March 19, 1998	7.86	1,650
1969	March 25, 1969	6.33	748	1999	January 24, 1999	6.43	747
1970	April 3, 1970	5.21	360	2002	March 18, 2002	5.40	414
1971	September 12, 1971	7.81	2,050	2003	September 19, 2003	10.82	5,660

1972	June 21, 1972	12.38	9,160	2004	August 2, 2004	7.20	1,260
1973	April 27, 1973	7.82	2,050	2005	January 14, 2005	7.21	1,270
1974	September 7, 1974	9.82	4,220	2006	December 16, 2005	5.59	475
1975	March 30, 1975	8.48	2,930	2007	January 1, 2007	9.59	3,660

---

**Table 349. 02039500 Appomattox River at Farmville, Va.**

LOCATION.--Latitude 37°18'25", Longitude 078°23'20", NAD27, Cumberland County, Hydrologic Unit 02080207, on left bank at downstream side of bridge on State Highway 45 at north town limits of Farmville and 1.1 mi downstream from Buffalo Creek.

DRAINAGE AREA.--302 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 281.93 ft NGVD of 1929. Prior to Nov. 29, 1928, nonrecording gage at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 12,000 ft<sup>3</sup>/s and extended above on basis of contracted-opening measurement at 33,100 ft<sup>3</sup>/s.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Subsequent to Sept. 30, 1989, records were provided by the Virginia Department of Environmental Quality - Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1926	July 6, 1926	8.90	898	1966	March 1, 1966	15.22	3,120
1927	December 29, 1926	13.50	2,560	1967	August 25, 1967	11.74	1,650
1928	August 12, 1928	21.10	13,900	1968	January 15, 1968	12.89	2,010
1929	April 17, 1929	16.46	5,530	1969	March 26, 1969	13.64	2,290
1930	February 5, 1930	13.80	2,800	1970	April 3, 1970	9.35	997
1931	May 22, 1931	14.02	2,960	1971	May 31, 1971	17.41	6,720
1932	March 7, 1932	16.36	5,400	1972	June 22, 1972	29.70	33,100
1933	October 18, 1932	17.33	6,650	1973	October 6, 1972	19.14	7,680
1934	March 5, 1934	15.73	4,570	1974	September 7, 1974	18.59	8,320
1935	September 6, 1935	19.88	11,300	1975	September 26, 1975	20.90	11,900
1936	March 18, 1936	17.72	7,270	1976	January 1, 1976	16.53	5,410
1937	April 26, 1937	20.28	12,100	1977	October 21, 1976	17.04	5,820
1938	June 21, 1938	17.64	7,110	1978	January 26, 1978	21.19	12,300
1939	February 12, 1939	14.59	3,460	1979	February 25, 1979	21.79	13,400
1940	August 15, 1940	23.60	21,000	1980	January 19, 1980	15.72	4,490
1941	November 15, 1940	13.64	2,640	1981	August 8, 1981	10.35	1,400
1942	August 9, 1942	15.72	4,570	1982	February 4, 1982	17.52	6,770
1943	February 7, 1943	15.08	3,940	1983	April 16, 1983	16.40	5,300
1944	September 20, 1944	21.00	13,700	1984	March 30, 1984	17.28	6,440
1945	September 19, 1945	20.90	13,500	1985	August 19, 1985	18.49	8,160
1946	May 5, 1946	14.88	3,740	1986	November 5, 1985	20.03	9,400
1947	March 15, 1947	14.57	3,470	1987	September 9, 1987	19.82	10,200
1948	April 2, 1948	17.02	5,400	1988	May 22, 1988	12.88	2,350
1949	December 5, 1948	18.84	9,000	1989	May 7, 1989	16.82	5,820
1950	November 1, 1949	15.59	3,350	1990	May 30, 1990	14.60	3,500
1951	December 5, 1950	12.68	1,790	1991	March 30, 1991	16.56	5,490
1952	December 23, 1951	17.96	7,400	1992	April 22, 1992	13.42	2,610

1953	November 21, 1952	16.82	5,020	1993	March 5, 1993	20.78	11,700
1954	January 23, 1954	15.28	3,060	1994	November 29, 1993	20.79	11,700
1955	August 19, 1955	19.76	11,000	1995	January 16, 1995	14.09	3,080
1956	February 7, 1956	11.15	1,400	1996	September 7, 1996	24.02	17,900
1957	April 10, 1957	13.67	2,100	1997	December 2, 1996	16.24	5,110
1958	February 28, 1958	15.15	2,960	1998	January 29, 1998	18.87	8,710
1959	December 30, 1958	16.13	3,930	1999	January 25, 1999	15.14	3,970
1960	February 20, 1960	16.15	4,060	2002	March 18, 2002	10.07	1,330
1961	February 24, 1961	15.40	3,280	2003	September 19, 2003	19.58	9,800
1962	October 22, 1961	16.39	4,370	2004	November 7, 2003	14.89	3,740
1963	March 7, 1963	14.86	2,920	2005	January 15, 2005	15.75	4,550
1964	February 7, 1964	12.78	1,980	2006	September 6, 2006	11.81	1,870
1965	February 8, 1965	15.07	3,050	2007	January 2, 2007	17.38	6,570

---

**Table 350. 02040000 Appomattox River at Mattoax, Va.**

LOCATION.--Latitude 37°25'17", Longitude 077°51'33", NAD27, Amelia County, Hydrologic Unit 02080207, on right bank 75 ft upstream from Southern Railway bridge at Mattoax, 0.3 mi upstream from Skinquarter Creek, and 3.7 mi upstream from Flat Creek.

DRAINAGE AREA.--725 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 174.51 ft NGVD of 1929. August 1900 to December 1905, nonrecording gage at present site at different datum. March 1926 to October 1936, nonrecording gage at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 20,000 ft<sup>3</sup>/s and extended above on basis of records for stations at Farmville and near Petersburg.

BANKFULL STAGE.--19 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Subsequent to June 30, 1957, records were provided by the Virginia Department of Environmental Quality - Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1901	May 25, 1901		13,400	1964	February 19, 1964	17.10	3,500
1902	February 28, 1902		12,000	1965	March 8, 1965	16.92	3,420
1903	March 25, 1903		10,600	1966	March 5, 1966	18.13	3,880
1904	September 16, 1904		6,120	1967	February 23, 1967	15.10	2,740
1905	February 25, 1905		5,020	1968	January 17, 1968	17.50	3,650
1926	July 7, 1926	12.74	1,940	1969	July 23, 1969	19.33	4,350
1927	December 29, 1926	17.85	3,850	1970	April 4, 1970	14.91	2,660
1928	August 15, 1928	25.94	11,200	1971	June 2, 1971	24.34	8,970
1929	April 20, 1929	20.10	4,770	1972	June 25, 1972	34.08	31,100
1930	October 22, 1929	18.36	4,090	1973	October 7, 1972	31.10	22,400
1931	May 25, 1931	16.75	3,450	1974	September 10, 1974	23.81	8,330
1932	March 10, 1932	22.50	6,700	1975	September 29, 1975	25.66	10,900
1933	April 20, 1933	20.88	5,090	1976	January 4, 1976	22.28	6,440
1934	March 8, 1934	23.40	7,800	1977	October 25, 1976	19.74	4,530
1935	December 4, 1934	23.66	8,190	1978	January 28, 1978	27.73	14,000
1936	March 20, 1936	25.27	10,300	1979	February 26, 1979	30.84	21,600
1937	April 28, 1937	29.97	20,100	1980	October 2, 1979	23.27	7,630
1938	June 24, 1938	24.21	8,840	1981	August 12, 1981	14.63	2,300
1939	March 4, 1939	18.02	3,930	1982	June 8, 1982	20.15	4,720
1940	August 18, 1940	35.30	35,000	1983	April 19, 1983	23.81	8,330
1941	April 6, 1941	15.83	3,080	1984	March 29, 1984	24.80	9,640
1942	August 12, 1942	17.29	3,650	1985	August 23, 1985	18.90	4,190
1943	February 9, 1943	21.64	5,700	1986	November 7, 1985	26.64	12,300
1944	September 23, 1944	25.30	10,300	1987	April 19, 1987	25.96	11,300
1945	September 22, 1945	25.30	10,300	1988	December 13, 1987	16.60	3,310
1946	December 30, 1945	20.00	4,730	1989	May 6, 1989	20.93	5,170

1947	March 18, 1947	19.34	4,300	1990	May 30, 1990	19.47	4,420
1948	February 18, 1948	23.10	7,420	1991	April 3, 1991	20.69	5,020
1949	December 7, 1948	24.39	9,100	1992	March 8, 1992	15.90	3,010
1950	November 4, 1949	22.09	6,230	1993	March 8, 1993	26.38	11,900
1951	March 22, 1951	14.81	2,590	1994	December 1, 1993	26.54	12,100
1952	December 24, 1951	23.20	7,540	1995	July 14, 1995	20.84	5,380
1953	November 24, 1952	21.70	5,800	1996	September 10, 1996	27.49	13,800
1954	May 21, 1954	19.06	4,200	1997	December 6, 1996	20.38	5,150
1955	August 21, 1955	26.53	12,100	1998	March 22, 1998	25.85	10,900
1956	October 14, 1955	16.23	3,080	1999	September 16, 1999	19.53	4,720
1957	March 1, 1957	16.50	3,190	2002	March 19, 2002	14.53	2,480
1958	May 10, 1958	20.02	4,750	2003	September 23, 2003	27.33	13,500
1959	January 2, 1959	22.26	6,460	2004	December 15, 2003	19.72	4,810
1960	April 9, 1960	22.22	6,340	2005	January 18, 2005	18.49	4,070
1961	February 28, 1961	19.74	4,510	2006	September 2, 2006	18.82	4,370
1962	January 10, 1962	22.84	7,060	2007	January 5, 2007	23.80	7,960
1963	March 10, 1963	19.80	4,550				

---

**Table 351. 02040500 Flat Creek near Amelia, Va.**

LOCATION.--Latitude 37°23'27", Longitude 078°03'45", NAD27, Amelia County, Hydrologic Unit 02080207, at bridge on State Highway 681, 0.5 mi downstream from Horsepen Creek, and 6.0 mi northwest of Amelia.

DRAINAGE AREA.--73.7 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 240 ft NGVD of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 1,300 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--5 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1947	September 26, 1947	6.90	1,090 <sup>1</sup>	1981	June 7, 1981	5.52	389
1954	May 21, 1954	7.96	1,800	1982	June 5, 1982	7.42	1,060
1955	August 18, 1955	9.15	3,200	1983	April 16, 1983	8.47	1,620
1956	October 15, 1955	8.33	2,180	1984	March 29, 1984	8.71	1,710
1957	April 10, 1957	6.15	670	1985	February 1, 1985	6.80	788
1958	August 26, 1958	8.47	2,280	1986	November 4, 1985	9.85	2,610
1959	December 30, 1958	8.63	2,400	1987	April 16, 1987	12.38	5,260
1960	May 8, 1960	7.80	1,700	1988	November 11, 1987	7.27	986
1961	February 24, 1961	7.96	1,850	1990	November 28, 1989	6.58	703
1962	October 21, 1961	9.21	3,300	1991	March 30, 1991	8.19	1,460
1963	March 6, 1963	7.42	1,470	1992	March 7, 1992	7.35	1,020
1964	February 8, 1964	5.33	384	1993	March 4, 1993	11.24	3,930
1965	February 7, 1965	5.76	520	1994	March 29, 1994	10.50	3,180
1966	June 17, 1966	7.42	1,470	1995	March 8, 1995	6.72	756
1967	August 25, 1967	7.52	1,540	1996	September 7, 1996	11.95	4,150
1968	March 13, 1968	7.37	1,440	1997	December 2, 1996	7.25	978
1969	August 20, 1969	7.42	1,450	1998	January 28, 1998	9.70	2,290
1970	December 26, 1969	7.90	1,810	1999	January 28, 1999	8.53	1,570
1972	October 24, 1971	14.12	7,690	2000	April 18, 2000	9.18	1,950
1973	October 24, 1972	14.12		2001	June 6, 2001	10.42	2,810
1974	October 6, 1973	8.67		2002	March 18, 2002	5.74	442
1975	December 21, 1974	12.14		2003	September 18, 2003	12.73	4,940
1976	January 27, 1976	8.64	1,730	2004	August 2, 2004	8.32	1,460
1977	October 20, 1976	7.84	1,260	2005	January 14, 2005	8.06	1,330
1978	March 11, 1978	10.13	2,840	2006	September 2, 2006	7.59	1,130
1979	September 5, 1979	11.99	4,790	2007	October 7, 2006	11.84	4,040
1980	January 18, 1980	7.79	1,240				

<sup>1</sup>Discharge is a historic peak.

**Table 352.** 02040600 Nibbs Creek tributary near Amelia, Va.

LOCATION.--Latitude 37°23'45", Longitude 077°58'20", NAD27, Amelia County, Hydrologic Unit 02080207, 3.8 mi north of Amelia.

DRAINAGE AREA.--0.42 mi<sup>2</sup>.

GAGE.--Water-stage recorder (flood-hydrograph recorder). Datum of gage is 225 ft NGVD of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert and flow over road.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1966	September 21, 1966	5.85	77.0	1971	September 21, 1971	8.00	114
1967	June 23, 1967	5.55	71.0	1972	June 21, 1972	9.48	740
1968	January 14, 1968	5.24	64.0	1973	October 5, 1972	9.79	1,030
1969	July 23, 1969	8.00	115	1974	December 21, 1973	6.53	91.0
1970	March 29, 1970	3.45	21.0	1975	March 30, 1975	5.35	67.0

**Table 353. 02041000 Deep Creek near Mannboro, Va.**

LOCATION.--Latitude 37°16'59", Longitude 077°52'12", NAD27, Amelia County, Hydrologic Unit 02080207, on left bank 300 ft upstream from bridge on State Highway 153, 0.9 mi upstream from Sweathouse Creek. 3.4 mi northwest of Mannboro, and 7.5 mi southeast of Amelia.

DRAINAGE AREA.--158 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 177.20 ft NGVD of 1929. Prior to Sept. 2, 1949, nonrecording gage at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 11,700 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--7 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Subsequent to June 30, 1957, records were provided by the Virginia Department of Environmental Quality - Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1940	August 1940	14.80	10,000 <sup>12</sup>	1977	October 21, 1976	8.30	1,850
1947	September 25, 1947	13.10	7,140	1978	March 11, 1978	14.46	9,250
1948	February 15, 1948	11.30	4,560	1979	September 6, 1979	16.27	12,100
1949	December 31, 1948	8.00	1,300	1980	October 1, 1979	14.56	9,340
1950	November 2, 1949	10.49	3,480	1981	June 8, 1981	7.67	1,500
1951	March 21, 1951	7.04	900	1982	March 8, 1982	7.24	1,170
1952	December 22, 1951	9.78	2,590	1983	April 16, 1983	10.38	3,970
1953	November 21, 1952	11.64	4,980	1984	February 15, 1984	15.79	11,300
1954	May 22, 1954	7.98	1,300	1985	February 2, 1985	8.27	1,840
1955	August 19, 1955	10.35	3,720	1986	November 4, 1985	14.35	9,030
1956	October 15, 1955	12.64	7,020	1987	April 17, 1987	14.92	9,880
1957	September 18, 1957	8.77	2,240	1988	December 12, 1987	6.87	975
1958	April 12, 1958	8.74	2,160	1989	May 7, 1989	8.84	2,320
1959	December 30, 1958	10.46	3,910	1990	May 30, 1990	8.26	1,830
1960	November 25, 1959	10.08	3,480	1991	March 30, 1991	10.59	4,210
1961	February 24, 1961	9.08	2,680	1992	March 8, 1992	9.65	3,160
1962	January 7, 1962	12.45	6,000	1993	March 5, 1993	14.32	8,980
1963	March 7, 1963	8.92	2,520	1994	March 3, 1994	12.57	6,590
1964	February 8, 1964	6.48	950	1995	March 10, 1995	8.50	2,010
1965	February 8, 1965	9.30	2,840	1996	January 20, 1996	10.73	4,370
1966	June 17, 1966	9.20	2,760	1997	October 9, 1996	10.39	3,980
1967	August 28, 1967	6.85	1,120	1998	March 20, 1998	12.82	6,900
1968	January 15, 1968	8.34	2,040	1999	September 17, 1999	12.20	6,140
1969	July 24, 1969	9.72	2,180	2000	April 19, 2000	9.94	3,480
1970	April 3, 1970	6.59	534	2001	March 31, 2001	10.60	4,220
1971	May 30, 1971	11.16	4,290	2002	March 19, 2002	5.46	422
1972	October 24, 1971	19.53	10,200	2003	September 19, 2003	16.87	13,100

1973	October 6, 1972	24.04	15,000	2004	August 31, 2004	15.76	11,200
1974	December 22, 1973	10.40	3,990	2005	January 15, 2005	9.18	2,650
1975	March 31, 1975	11.99	5,900	2006	September 3, 2006	8.28	1,820
1976	January 1, 1976	10.39	3,990	2007	October 8, 2006	11.77	5,110

---

<sup>1</sup>Discharge is a historic peak.

<sup>2</sup>Month or day of occurrence is unknown or not exact.

**Table 354. 02041500 Appomattox River near Petersburg, Va.**

LOCATION.--Latitude 37°13'33", Longitude 077°32'20", NAD27, Dinwiddie County, Hydrologic Unit 02080207, on right bank 2.2 mi upstream from Virginia Power dam, 4.2 mi downstream from Wipponock Creek, and 5.9 mi west of corporate limits of city of Petersburg.

DRAINAGE AREA.--1,333 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 116.04 ft NGVD of 1929. Prior to Sept. 22, 1931, water-stage recorder at site 0.8 mi downstream at different datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements.

BANKFULL STAGE.--10 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1927	December 30, 1926		7,000	1947	September 27, 1947	9.75	7,950
1928	April 30, 1928	9.53 <sup>1</sup>	8,710	1948	February 16, 1948	10.75	9,600
1929	March 1, 1929	8.51 <sup>1</sup>	7,380	1949	December 10, 1948	9.63	7,650
1930	October 24, 1929	8.30 <sup>1</sup>	7,120	1950	November 4, 1949	11.70	11,400
1931	August 13, 1931	7.35 <sup>1</sup>	5,950	1951	March 21, 1951	7.27	4,660
1932	March 8, 1932	10.40	8,890	1952	April 28, 1952	9.82	7,950
1933	October 21, 1932		7,500	1953	November 23, 1952	9.72	7,800
1934	March 6, 1934	10.39	8,890	1954	May 23, 1954	9.57	7,650
1935	September 6, 1935	11.12	10,200	1955	August 22, 1955	11.15	10,300
1936	January 9, 1936	11.75	11,000	1956	October 1, 1955	9.54	7,500
1937	April 30, 1937	14.85	18,800	1957	March 1, 1957	8.28	5,890
1938	July 26, 1938	14.58	18,200	1958	May 8, 1958	9.70	7,800
1939	July 1, 1939	8.22	5,540	1959	January 1, 1959	9.85	7,950
1940	August 20, 1940	18.15	28,000	1960	April 6, 1960	9.27	7,220
1941	November 16, 1940	7.32	4,560	1961	February 26, 1961	9.30	7,580
1942	March 30, 1942	6.76	4,080	1962	January 9, 1962	11.52	11,500
1943	February 8, 1943	9.17	7,080	1963	March 8, 1963	8.63	6,540
1944	September 25, 1944	9.32	7,220	1964	February 20, 1964	7.52	5,100
1945	July 19, 1945	14.50	17,900	1965	February 9, 1965	8.35	6,260
1946	January 1, 1946	9.28	7,220	1966	March 3, 1966	8.70	6,680

<sup>1</sup>Gage height at different site and (or) datum.

**Table 355. 02041650 Appomattox River at Matoaca, Va.**

LOCATION.--Latitude 37°13'30", Longitude 077°28'32", NAD27, Chesterfield County, Hydrologic Unit 02080207, on left bank at upstream side of bridge on State Highway 600, 0.2 mi south of Matoaca, 2.0 mi upstream from Rohoic Creek, 2.8 mi downstream from Lake Chesdin, 3.5 mi west of Petersburg, and at mile 15.9.

DRAINAGE AREA.--1,342 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 68.30 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 40,000 ft<sup>3</sup>/s.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered regulated. Flow regulated by Appomattox Water Authority at Lake Chesdin, capacity 36,000 acre-ft, 2.8 mi upstream.

REMARKS.--Records do not include flow of Upper Appomattox Canal of city of Petersburg which diverts around station. Records were provided by the Virginia Department of Environmental Quality - Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1970	April 4, 1970	7.04	4,710 <sup>1</sup>	1989	May 7, 1989	9.20	8,940 <sup>1</sup>
1971	May 31, 1971	10.70	10,500 <sup>1</sup>	1990	June 1, 1990	8.52	7,780 <sup>1</sup>
1972	June 27, 1972	14.60	22,800 <sup>1</sup>	1991	March 31, 1991	9.05	8,680 <sup>1</sup>
1973	October 7, 1972	18.39	40,800 <sup>1</sup>	1992	March 8, 1992	9.28	9,080 <sup>1</sup>
1974	December 23, 1973	9.19	8,500 <sup>1</sup>	1993	March 6, 1993	11.32	12,500 <sup>1</sup>
1975	March 19, 1975	12.31	15,200 <sup>1</sup>	1994	March 4, 1994	11.10	12,200 <sup>1</sup>
1976	January 29, 1976	9.22	8,550 <sup>1</sup>	1995	July 14, 1995	7.77	6,510 <sup>1</sup>
1977	October 23, 1976	7.88	6,410 <sup>1</sup>	1996	September 12, 1996	11.17	12,300 <sup>1</sup>
1978	March 12, 1978	11.98	14,200 <sup>1</sup>	1997	December 8, 1996	9.13	8,820 <sup>1</sup>
1979	February 26, 1979	14.37	22,000 <sup>1</sup>	1998	March 21, 1998	11.97	14,100 <sup>1</sup>
1980	October 3, 1979	13.09	17,700 <sup>1</sup>	1999	September 16, 1999	11.58	13,100 <sup>1</sup>
1981	June 9, 1981	6.07	3,650 <sup>1</sup>	2000	April 19, 2000	9.13	8,820 <sup>1</sup>
1982	June 8, 1982	7.86	6,380 <sup>1</sup>	2001	April 1, 2001	9.16	8,870 <sup>1</sup>
1983	March 21, 1983	10.61	10,900 <sup>1</sup>	2002	March 20, 2002	5.94	3,510 <sup>1</sup>
1984	February 16, 1984	12.63	16,200 <sup>1</sup>	2003	May 26, 2003	14.61	25,900 <sup>1</sup>
1985	February 3, 1985	8.62	7,950 <sup>1</sup>	2004	August 31, 2004	13.57	21,800 <sup>1</sup>
1986	November 6, 1985	12.07	14,400 <sup>1</sup>	2005	January 17, 2005	8.39	7,830 <sup>1</sup>
1987	April 18, 1987	12.04	14,300 <sup>1</sup>	2006	September 3, 2006	7.76	6,250 <sup>1</sup>
1988	January 21, 1988	7.40	5,880 <sup>1</sup>	2007	October 9, 2006	10.73	12,900 <sup>1</sup>

<sup>1</sup>Discharge affected by regulation or diversion.

**Table 356.** 02042000 Swift Creek near Chester, Va.

LOCATION.--Latitude 37°18'55", Longitude 077°29'40", NAD27, Chesterfield County, Hydrologic Unit 02080207, at Bradley Bridge, 1.25 mi downstream from Second Branch, 3 mi upstream from Frank Branch, and 4 mi southwest of Chester.

DRAINAGE AREA.--140 mi<sup>2</sup>.

GAGE.--Nonrecording gage (chain gage). Datum of gage is 65 ft NGVD of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1940	August 1940	27.00	10,700 <sup>1,2</sup>	1947	September 26, 1947	13.00	2,180
1944	August 3, 1944	7.80	853	1948	February 15, 1948	13.00	2,180
1945	July 18, 1945	29.00	13,200	1949	May 12, 1949	10.50	1,480
1946	May 27, 1946	11.50	1,740				

<sup>1</sup>Discharge is a historic peak.

<sup>2</sup>Month or day of occurrence is unknown or not exact.

**Table 357. 0204206210 Swift Creek tributary Industrial Drainage near Walthall, Va.**

LOCATION.--Latitude 37°18'09.23", Longitude 077°23'05.47", NAD83, Chesterfield County, Hydrologic Unit 02080207, at Continental Boulevard, 1.5 mi southeast of Walthall.

DRAINAGE AREA.--0.087 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage) and concrete-lined trapezoidal channel. Datum of gage is not determined. Prior to Sept. 21, 2004, water-stage recorder at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 4.84 ft<sup>3</sup>/s and extended above by logarithmic plotting.

BANKFULL STAGE.--Not determined.

REGULATION.--High flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
2003	July 9, 2003	1.16	73.0	2006	November 22, 2005	0.880	39.9
2004	September 9, 2004	1.59	144	2007	April 15, 2007	1.45	118
2005	April 2, 2005	0.800	32.4				

**Table 358. 02042200 Glebe Creek tributary near Charles City, Va.**

LOCATION.--Latitude 37°22'05", Longitude 077°04'15", NAD27, Charles City County, Hydrologic Unit 02080206, at culvert on State Highway 155, 2.0 mi north of Charles City.

DRAINAGE AREA.--0.99 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 52.31 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 1 ft<sup>3</sup>/s by contracted-opening measurements at 286 ft<sup>3</sup>/s and 555 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--2 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1948	May 26, 1948	4.64	555 <sup>1</sup>	1964		1.60 <sup>2</sup>	5.00 <sup>3,4</sup>
1951	June 5, 1951	2.80	110	1965		1.60 <sup>2</sup>	5.00 <sup>3,4</sup>
1952	June 30, 1952	2.58	65.0	1966	September 21, 1966	2.10	19.0
1953	November 22, 1952	2.14	16.0	1967	October 19, 1966	2.22	26.0
1954	January 28, 1954	1.76	4.00	1968	March 12, 1968	1.99	15.0
1955	August 13, 1955	4.20	286	1969	August 15, 1969	2.07	18.0
1956	July 29, 1956	2.18	19.0	1970	April 4, 1970	2.14	21.0
1957	December 16, 1956	2.08	13.0	1971	May 30, 1971	2.00	15.0
1958	May 25, 1958	2.68	85.0	1972	October 23, 1971	2.40	40.0
1959	December 29, 1958	2.18	19.0	1973	February 2, 1973	2.36	37.0
1960	September 13, 1960	2.82	110	1974	September 6, 1974	1.95	14.0
1961	February 8, 1961	2.13	15.0	1975	January 10, 1975	2.29	31.0
1962	October 2, 1961	5.62	900	1976	January 27, 1976	2.26	29.0
1963	June 3, 1963	3.84	195				

<sup>1</sup>Discharge is a historic peak.

<sup>2</sup>Gage height below minimum recordable elevation.

<sup>3</sup>Discharge is less than indicated value, which is minimum recordable discharge at this site.

<sup>4</sup>Month or day of occurrence is unknown or not exact.

**Table 359. 02042250 Bailey Branch tributary at Spring Grove, Va.**

LOCATION.--Latitude 37°10'29", Longitude 076°59'13", NAD27, Surry County, Hydrologic Unit 02080206, on right upstream wingwall of culvert on State Highway 10, 1.0 mi northwest of Spring Grove.

DRAINAGE AREA.--0.55 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 61.39 ft NGVD of 1929. Prior to Jan. 8, 1974, flood-hydrograph recorder at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--3 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1967		3.00 <sup>1</sup>	27.0 <sup>2,3</sup>	1988		2.28 <sup>1</sup>	7.00 <sup>2,3</sup>
1968	July 4, 1968	4.10	76.0	1989	May 2, 1989	3.63	52.0
1969	August 5, 1969	4.85	124	1990	October 31, 1989	2.50	12.0
1970		3.00 <sup>1</sup>	27.0 <sup>2,3</sup>	1991	August 9, 1991	3.23	35.0
1971		3.00 <sup>1</sup>	27.0 <sup>2,3</sup>	1992	May 19, 1992	2.78	20.0
1972	October 24, 1971	3.55	48.0	1993	March 4, 1993	3.57	49.0
1973	October 6, 1972	3.65	52.0	1994	March 29, 1994	4.23	84.0
1974	January 30, 1974	3.19	34.0	1995	March 8, 1995	2.75	20.0
1975	July 14, 1975	6.52	282	1996	October 5, 1995	3.28	37.0
1976	January 27, 1976	4.30	88.0	1997	April 28, 1997	3.13	31
1977	October 20, 1976	3.80	60.0	1998	February 5, 1998	3.44	44
1978	October 27, 1977	5.01	141	1999	September 16, 1999	8.12	474
1979	September 22, 1979	6.01	231	2000	April 16, 2000	2.86	23
1980	May 20, 1980	3.23	35.0	2001	August 14, 2001	2.46	11
1981	June 7, 1981	5.37	170	2002	January 20, 2002	2.43	10
1982		2.28 <sup>1</sup>	12.0 <sup>2,3</sup>	2003	September 18, 2003	5.35	168
1983	April 16, 1983	3.40	42.0	2004	December 14, 2003	4.50	100
1984	May 30, 1984	3.55	48.0	2005	December 10, 2004	4.72	115
1985	September 27, 1985	5.73	203	2006	September 1, 2006	4.71	115
1986	August 12, 1986	2.99	27.0	2007	October 7, 2006	7.94	453
1987	April 16, 1987	3.49	46.0				

<sup>1</sup>Gage height below minimum recordable elevation.

<sup>2</sup>Discharge is less than indicated value, which is minimum recordable discharge at this site.

<sup>3</sup>Month or day of occurrence is unknown or not exact.

**Table 360.** 02042287 Chickahominy River near Atlee, Va.

LOCATION.--Latitude 37°38'30", Longitude 077°25'19", NAD27, Hanover County, Hydrologic Unit 02080206, on left bank at upstream side of bridge on U.S. Highway 301, 1.3 mi southwest of Atlee, and 2.5 mi upstream from Upham Brook.

DRAINAGE AREA.--62.2 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 95 ft NGVD of 1929, from topographic map.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1990	May 30, 1990	7.39	2,200	1994	March 3, 1994	8.51	3,970
1991	March 30, 1991	6.59	967	1995	March 10, 1995	6.48	832
1992	March 8, 1992	6.60	977	1996	January 20, 1996	8.13	3,070
1993	March 5, 1993	8.60	4,220	1997	December 8, 1996	6.49	817

**Table 361.** 0204228775 Chickahominy River tributary to tributary at Ellerson, Va.

LOCATION.--Latitude 37°37'16", Longitude 077°23'31", NAD27, Hanover County, Hydrologic Unit 02080206, near Route 627, at Ellerson.

DRAINAGE AREA.--0.041 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage) and broad-crested weir. Datum of gage is not determined. Prior to June 22, 2004, water-stage recorder at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 2.10 ft<sup>3</sup>/s and extended above by logarithmic plotting.

BANKFULL STAGE.--Not determined.

REGULATION.--High flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
2001	August 13, 2001	0.410	4.96	2005	January 14, 2005	0.700	10.3
2002	July 27, 2002	0.310	3.37	2006	September 1, 2006	0.370	4.35
2003	July 18, 2003	0.410	4.99	2007	March 16, 2007	0.440	5.42
2004	September 8, 2004	0.840	13.2				

**Table 362. 02042300 Horsepen Branch at Richmond, Va.**

LOCATION.--Latitude 37°35'45", Longitude 077°30'40", NAD27, Henrico County, Hydrologic Unit 02080206, on left downstream retaining wall at culverts on U.S. Highway 250 (Broad Street), at Richmond, and 0.9 mi upstream from mouth.

DRAINAGE AREA.--1.06 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is not determined. Prior to July 30, 1980, flood-hydrograph recorder at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by step-backwater computation and slope-area measurements at 2,730 ft<sup>3</sup>/s.

BANKFULL STAGE.--7 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1965	July 25, 1965	3.30	490 <sup>1</sup>	1981	May 11, 1981	2.74	322 <sup>1</sup>
1966	July 30, 1966	3.15	445 <sup>1</sup>	1982	December 15, 1981	4.28	876 <sup>1</sup>
1967	August 23, 1967	3.05	415 <sup>1</sup>	1983	December 12, 1982	3.66	616 <sup>1</sup>
1968	August 2, 1968	3.32	497 <sup>1</sup>	1984	March 29, 1984	4.20	840 <sup>1</sup>
1969	July 22, 1969	5.70	1,550 <sup>1</sup>	1985	August 18, 1985	7.50	2,700 <sup>1</sup>
1970	July 4, 1970	3.75	650 <sup>1</sup>	1986	July 23, 1986	3.96	795 <sup>1</sup>
1971	July 31, 1971	3.90	710 <sup>1</sup>	1987	April 16, 1987	3.81	740 <sup>1</sup>
1972	May 31, 1972	4.00	750 <sup>1</sup>	1988	July 23, 1988	3.68	590 <sup>1</sup>
1973	June 22, 1973	5.22	1,310 <sup>1</sup>	1989	May 5, 1989	3.79	730 <sup>1</sup>
1974	September 6, 1974	3.35	508 <sup>1</sup>	1990	May 29, 1990	6.22	1,810 <sup>1</sup>
1975	July 14, 1975	5.55	1,480 <sup>1</sup>	1991	June 22, 1991	4.91	1,220 <sup>1</sup>
1976	June 17, 1976	3.25	475 <sup>1</sup>	1992	March 7, 1992	4.08	840 <sup>1</sup>
1977	April 5, 1977	4.60	1,020 <sup>1</sup>	1993	March 13, 1993	3.54	635 <sup>1</sup>
1978	August 31, 1978	4.15	818 <sup>1</sup>	1994	November 28, 1993	4.98	1,250 <sup>1</sup>
1979	September 30, 1979	6.17	1,790 <sup>1</sup>	1995	November 21, 1994	3.71	700 <sup>1</sup>
1980	July 23, 1980	4.75	1,090 <sup>1</sup>				

<sup>1</sup>All or part of the record is affected by urbanization, mining, agricultural changes, channelization, or other factors.

**Table 363. 02042400 Jordans Branch at Richmond, Va.**

LOCATION.--Latitude 37°35'10", Longitude 077°29'55", NAD27, Henrico County, Hydrologic Unit 02080206, on left downstream wingwall of bridge on U.S. Highway 250 (Broad Street), at Richmond, and 2.0 mi upstream from mouth.

DRAINAGE AREA.--2.47 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is not determined. Prior to Feb. 28, 1972, flood-hydrograph recorder at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 60 ft<sup>3</sup>/s and extended above on basis of slope-area measurement at 2,300 ft<sup>3</sup>/s.

BANKFULL STAGE.--15 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1966	July 30, 1966	8.27	598 <sup>1</sup>	1986	July 23, 1986	8.90	770 <sup>1</sup>
1967	August 23, 1967	6.55	262 <sup>1</sup>	1987	September 11, 1987	8.93	779 <sup>1</sup>
1968	August 2, 1968	9.27	881 <sup>1</sup>	1988	July 23, 1988	8.98	794 <sup>1</sup>
1969	July 22, 1969	11.20	1,650 <sup>1</sup>	1989	May 5, 1989	8.70	710 <sup>1</sup>
1970	July 4, 1970	9.35	905 <sup>1</sup>	1990	May 29, 1990	9.06	820 <sup>1</sup>
1971	July 11, 1971	10.33	1,280 <sup>1</sup>	1991	June 22, 1991	13.10	2,760 <sup>1</sup>
1972	June 21, 1972	9.06	818 <sup>1</sup>	1992	August 14, 1992	9.30	890 <sup>1</sup>
1973	June 22, 1973	9.78	1,060 <sup>1</sup>	1994	November 28, 1993	10.47	1,340 <sup>1</sup>
1974		8.43 <sup>2</sup>	638 <sup>1,3,4</sup>	1995	November 21, 1994	8.61	683 <sup>1</sup>
1975	July 14, 1975	9.62	998 <sup>1</sup>	1996	July 13, 1996	9.94	1,130 <sup>1</sup>
1976	June 17, 1976	8.63	689 <sup>1</sup>	1997	July 24, 1997	11.67	1,900 <sup>1</sup>
1977	April 5, 1977	8.57	672 <sup>1</sup>	1998	March 19, 1998	10.48	1,340 <sup>1</sup>
1978	October 26, 1977	8.56	670 <sup>1</sup>	1999	September 16, 1999	6.50	255 <sup>1</sup>
1979	September 30, 1979	12.60	2,460 <sup>1</sup>	2000	January 30, 2000	9.95	1,130 <sup>1</sup>
1980	July 23, 1980	10.09	1,190 <sup>1</sup>	2001	June 1, 2001	12.51	2,410 <sup>1</sup>
1981		8.43 <sup>2</sup>	638 <sup>1,3,4</sup>	2002	May 10, 2002	9.79	1,070 <sup>1</sup>
1982	July 12, 1982	10.88	1,500 <sup>1</sup>	2003	September 18, 2003	12.12	2,170 <sup>1</sup>
1983		8.46 <sup>2</sup>	645 <sup>1,3,4</sup>	2004	August 30, 2004	13.96	3,370 <sup>1</sup>
1984		8.46 <sup>2</sup>	645 <sup>1,3,4</sup>	2005	January 14, 2005	10.90	1,510 <sup>1</sup>
1985	August 18, 1985	12.44	2,360 <sup>1</sup>	2006	September 1, 2006	11.11	1,600 <sup>1</sup>

<sup>1</sup>All or part of the record is affected by urbanization, mining, agricultural changes, channelization, or other factors.

<sup>2</sup>Gage height below minimum recordable elevation.

<sup>3</sup>Discharge is less than indicated value, which is minimum recordable discharge at this site.

<sup>4</sup>Month or day of occurrence is unknown or not exact.

**Table 364.** 02042426 Upham Brook near Richmond, Va.

LOCATION.--Latitude 37°36'47", Longitude 077°25'28", NAD27, Henrico County, Hydrologic Unit 02080206, on left bank at downstream side of culvert on Wilkinson Road, 1.6 mi northeast of Richmond, and 1.2 mi upstream from mouth.

DRAINAGE AREA.--37.4 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 90 ft NGVD of 1929, from topographic map.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

<b>Water year</b>	<b>Date</b>	<b>Gage height (ft)</b>	<b>Discharge (ft<sup>3</sup>/s)</b>	<b>Water year</b>	<b>Date</b>	<b>Gage height (ft)</b>	<b>Discharge (ft<sup>3</sup>/s)</b>
Annual maximum stages and discharges							
1990	April 3, 1990	7.98	1,730	1993	March 4, 1993	8.60	2,350
1991	June 22, 1991	8.00	1,750	1994	November 28, 1993	8.66	2,410
1992	March 7, 1992	8.12	1,870				

**Table 365.** 0204243150 Beaverdam Creek tributary at Ellerson, Va.

LOCATION.--Latitude 37°37'35", Longitude 077°23'13", NAD27, Hanover County, Hydrologic Unit 02080206, above Route 627.

DRAINAGE AREA.--0.008 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage) and Palmer-Bowlus flume. Datum of gage is not determined. Prior to Nov. 12, 2003, water-stage recorder at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by theoretical flume rating.

BANKFULL STAGE.--Not determined.

REGULATION.--High flow conditions at this site are considered unregulated.

<b>Water year</b>	<b>Date</b>	<b>Gage height (ft)</b>	<b>Discharge (ft<sup>3</sup>/s)</b>	<b>Water year</b>	<b>Date</b>	<b>Gage height (ft)</b>	<b>Discharge (ft<sup>3</sup>/s)</b>
Annual maximum stages and discharges							
2001	August 12, 2001	2.10	9.20	2005	July 8, 2005	1.02	5.09
2002	May 18, 2002	0.740	2.80	2006	September 1, 2006	1.15	6.46
2003	September 23, 2003	2.04	17.0	2007	August 15, 2007	1.61	11.4
2004	September 08, 2004	2.14	18.9				

**Table 366. 02042500 Chickahominy River near Providence Forge, Va.**

LOCATION.--Latitude 37°26'10", Longitude 077°03'40", NAD27, New Kent County, Hydrologic Unit 02080206, on left bank 100 ft downstream from bridge on State Highway 618, 1.1 mi southwest of Providence Forge, 1.7 mi downstream from Schiminoc Creek.

DRAINAGE AREA.--251 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 6.07 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 5,520 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--10 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1942	April 4, 1942	7.77	760	1975	July 17, 1975	9.78	2,880
1943	February 8, 1943	8.54	1,080	1976	January 31, 1976	9.00	1,620
1944	March 7, 1944	8.53	1,080	1977	October 27, 1976	7.22	575
1945	July 21, 1945	10.60	5,750	1978	January 21, 1978	9.37	2,370
1946	December 31, 1945	9.02	1,620	1979	February 27, 1979	10.99	5,490
1947	April 21, 1947	8.24	940	1980	October 5, 1979	9.37	2,320
1948	May 26, 1948	8.64	1,320	1981	June 4, 1981	6.55	450
1949	December 4, 1948	8.65	1,320	1982	March 11, 1982	8.44	1,140
1950	November 5, 1949	9.13	1,820	1983	April 17, 1983	9.34	2,080
1951	March 26, 1951	7.03	575	1984	March 30, 1984	10.26	3,700
1952	May 1, 1952	8.93	1,590	1985	August 22, 1985	9.76	2,740
1953	November 25, 1952	9.10	1,820	1986	November 8, 1985	9.19	1,870
1954	January 29, 1954	7.63	767	1987	April 20, 1987	9.64	2,530
1955	August 15, 1955	11.67	7,710	1988	May 27, 1988	8.27	1,030
1956	October 20, 1955	8.38	1,180	1989	May 8, 1989	8.56	1,230
1957	November 4, 1956	9.04	1,700	1990	May 30, 1990	9.15	1,820
1958	December 25, 1957	9.12	1,820	1991	March 31, 1991	8.73	1,380
1959	August 12, 1959	8.86	1,590	1992	March 11, 1992	9.09	1,750
1960	September 13, 1960	9.58	2,500	1993	March 7, 1993	9.76	2,740
1961	February 27, 1961	9.22	1,910	1994	March 6, 1994	9.88	2,960
1962	January 8, 1962	9.73	2,660	1995	March 11, 1995	8.25	1,040
1963	June 5, 1963	9.01	1,650	1996	January 22, 1996	9.45	2,230
1964	February 22, 1964	8.26	980	1997	October 11, 1996	8.84	1,450
1965	March 11, 1965	7.94	780	1998	March 22, 1998	9.84	2,880
1966	February 18, 1966	7.77	740	1999	September 17, 1999	10.95	5,370
1967	February 25, 1967	7.67	631	2000	April 19, 2000	9.00	1,550
1968	January 20, 1968	8.63	1,040	2001	April 3, 2001	9.03	1,590
1969	July 25, 1969	10.79	5,080	2002	May 15, 2002	6.78	418

1970	April 4, 1970	7.92	788	2003	September 22, 2003	10.62	4,510
1971	February 14, 1971	8.27	962	2004	September 1, 2004	12.58	18,900
1972	June 25, 1972	10.07	3,440	2006	September 5, 2006	9.79	2,910
1973	February 4, 1973	9.09	1,840	2007	November 19, 2006	10.04	3,550
1974	September 11, 1974	8.86	1,540				

---

**Table 367. 02042700 Collins Run near Providence Forge, Va.**

LOCATION.--Latitude 37°23'59", Longitude 077°02'54", NAD27, Charles City County, Hydrologic Unit 02080206, at bridge on State Highway 155, 2.8 mi south of Providence Forge.

DRAINAGE AREA.--2.83 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 32.73 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 10 ft<sup>3</sup>/s and extended above on basis of contracted-opening measurements at 1,350 ft<sup>3</sup>/s and 1,630 ft<sup>3</sup>/s.

BANKFULL STAGE.--4 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1948	May 26, 1948	7.40	1,630 <sup>1</sup>	1964	February 16, 1964	3.52	87.0
1951	December 5, 1950	3.54	82.0	1965	June 15, 1965	2.57	38.0
1952	January 28, 1952	4.37	160	1966	June 17, 1966	3.43	84.0
1953	November 22, 1952	4.18	135	1967	October 19, 1966	3.32	75.0
1954	January 28, 1954	3.48	78.0	1968		2.50 <sup>2</sup>	35.0 <sup>3,4</sup>
1955	August 13, 1955	7.03	1,350	1969	August 15, 1969	4.60	180
1956	July 29, 1956	3.74	96.0	1970		2.50 <sup>2</sup>	35.0 <sup>3,4</sup>
1957	August 19, 1957	4.47	170	1971	September 30, 1971	4.87	224
1958	May 25, 1958	4.90	255	1972	October 23, 1971	4.64	186
1959	October 22, 1958	4.55	185	1973	February 2, 1973	4.70	195
1960	September 13, 1960	4.86	240	1974	September 6, 1974	4.23	145
1961	February 8, 1961	3.53	90.0	1975	January 10, 1975	4.49	169
1962	October 21, 1961	4.96	255	1976	January 27, 1976	4.57	177
1963	March 6, 1963	3.02	58.0	1977	October 2, 1976	4.56	176

<sup>1</sup>Discharge is a historic peak.

<sup>2</sup>Gage height below minimum recordable elevation.

<sup>3</sup>Discharge is less than indicated value, which is minimum recordable discharge at this site.

<sup>4</sup>Month or day of occurrence is unknown or not exact.

**Table 368.** 02042710 Collins Run tributary near Providence Forge, Va.

LOCATION.--Latitude 37°24'15", Longitude 077°02'50", NAD27, Charles City County, Hydrologic Unit 02080206, at culvert on State Highway 155, 2.5 mi south of Providence Forge.

DRAINAGE AREA.--0.32 mi<sup>2</sup>.

GAGE.--Water-stage recorder (flood-hydrograph recorder). Datum of gage is 49.96 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--5 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1966	July 30, 1966	3.80	30.0	1971	September 30, 1971	4.34	46.0
1967	October 19, 1966	3.13	13.0	1972	October 23, 1971	3.57	23.0
1968	November 2, 1967	3.60	25.0	1973	February 2, 1973	3.56	22.0
1969	August 15, 1969	4.30	45.0	1974	September 6, 1974	3.47	20.0
1970		3.00 <sup>1</sup>	10.0 <sup>2,3</sup>	1975	January 10, 1975	3.82	31.0

<sup>1</sup>Gage height below minimum recordable elevation.

<sup>2</sup>Discharge is less than indicated value, which is minimum recordable discharge at this site.

<sup>3</sup>Month or day of occurrence is unknown or not exact.

**Table 369.** 02042780 West Branch Long Hill Swamp near Lightfoot, Va.

LOCATION.--Latitude 37°18'50", Longitude 076°46'02", NAD27, James City County, Hydrologic Unit 02080206, on left upstream wingwall of culvert on State Highway 612, 1.1 mi upstream from mouth, and 2.0 mi south of Lightfoot.

DRAINAGE AREA.--2.47 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is not determined. Prior to Sept. 8, 1975, flood-hydrograph recorder at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--3 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1970	July 23, 1970	3.55	84.0	1984	May 30, 1984	3.64	91.0
1971	June 23, 1971	3.50	80.0	1985	September 26, 1985	4.54	163
1972	June 22, 1972	3.60	88.0	1986	October 21, 1985	2.98	49.0
1973	October 6, 1972	3.70	96.0	1987	January 19, 1987	3.81	105
1974	September 6, 1974	3.48	78.0	1988	May 5, 1988	3.34	68.0
1975	September 1, 1975	5.20	320	1989	August 8, 1989	4.63	170
1976	January 27, 1976	3.60	88.0	1990	May 29, 1990	6.18 <sup>1</sup>	115
1978	August 1, 1978	3.78	102	1991	January 9, 1991	3.71	108
1979	September 22, 1979	4.04	123	1992	March 7, 1992	5.63	114
1980	November 11, 1979	3.47	78.0	1993	March 4, 1993	3.04	52.0
1981	October 25, 1980	3.35	68.0	1994	March 2, 1994	3.63	90.0
1982	August 8, 1982	4.00	120	1995	March 8, 1995	3.61	89.0
1983	April 15, 1983	3.57	95.0	1996	July 13, 1996	3.40	72.0

<sup>1</sup>Affected by backwater from beaver dams in the culvert.

## South Atlantic Slope Basin: Dismal Swamp Basin

**Table 370.** 02043500 Cypress Swamp at Cypress Chapel, Va.

LOCATION.--Latitude 36°37'24", Longitude 076°36'07", NAD27, Suffolk City, Hydrologic Unit 03010205, near center of span on downstream side of bridge on State Highway 32, 0.5 mi downstream from Dragon Swamp, 0.8 mi northwest of Cypress Chapel, and 6.5 mi south of downtown Suffolk.

DRAINAGE AREA.--23.5 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 28.65 ft NGVD of 1929. October 1953 to September 1971, recording gage on right bank 30 ft upstream at present datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 1,100 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--3 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Records were provided by the Virginia Department of Environmental Quality - Water Division from July 1, 1957, to Mar. 1, 1978.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1940	August 1940	10.20 <sup>1</sup>		1978	June 9, 1978	5.32	543
1954	January 23, 1954	5.67 <sup>1</sup>	552	1979	March 7, 1979	5.68	714
1955	September 20, 1955	6.65 <sup>1</sup>	1,170	1980	November 12, 1979	4.77	371
1956	March 17, 1956	5.17 <sup>1</sup>	392	1981	June 3, 1981	4.45	252
1957	February 1, 1957	5.87 <sup>1</sup>	690	1982	February 18, 1982	4.82	357
1958	May 7, 1958	6.37 <sup>1</sup>	1,190	1983	February 15, 1983	5.26	462
1959	August 1, 1959	5.59 <sup>1</sup>	735	1984	April 23, 1984	5.44	584
1960	September 12, 1960	6.62 <sup>1</sup>	1,130	1985	September 27, 1985	5.36	551
1961	May 12, 1961	5.36 <sup>1</sup>	452	1986	October 22, 1985	4.91	385
1962	January 7, 1962	5.48 <sup>1</sup>	500	1987	January 20, 1987	5.44	584
1963	June 3, 1963	6.47 <sup>1</sup>	1,020	1988	May 6, 1988	4.26	215
1964	September 14, 1964	4.93 <sup>1</sup>	417	1989	March 24, 1989	5.35	547
1965	October 5, 1964	6.22 <sup>1</sup>	840	1990	November 24, 1989	4.68	309
1966	August 9, 1966	5.90 <sup>1</sup>	660	1991	April 21, 1991	5.46	593
1967	August 11, 1967	6.85 <sup>1</sup>	1,330	1992	August 18, 1992	6.04	886
1968	March 18, 1968	5.37 <sup>1</sup>	452	1993	December 11, 1992	5.03	425
1969	March 2, 1969	4.80 <sup>1</sup>	298	1994	March 11, 1994	6.41	1,150
1970	February 3, 1970	5.56 <sup>1</sup>	517	1995	February 17, 1995	4.69	318
1971	January 6, 1971	5.35 <sup>1</sup>	452	1996	September 6, 1996	5.49	606

<sup>1</sup>Gage height at different site and (or) datum.

**Table 371.** 02043550 Washington Ditch near Cypress Chapel, Va.

LOCATION.--Latitude 36°38'21", Longitude 076°31'36", NAD27, Suffolk City, Hydrologic Unit 03010205, on left bank 400 ft downstream from junction with Lynn Ditch and 3.0 mi above Lake Drummond.

DRAINAGE AREA.--41.3 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 15.00 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 100 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1979	February 27, 1979	8.67	150	1981	June 3, 1981	8.44	111
1980	March 8, 1980		220 <sup>1</sup>				

<sup>1</sup>Discharge is a maximum daily average.

**Table 372.** 02043600 Lake Drummond in Great Dismal Swamp, Va.

LOCATION.--Latitude 36°35'42", Longitude 076°26'23", NAD27, Chesapeake City, Hydrologic Unit 03010205, on right bank in outlet canal, 200 ft upstream from dam and gates, 0.5 mi downstream from Lake Drummond, 3.1 mi north of North Carolina State line, and 20 mi southwest of Norfolk.

DRAINAGE AREA.--119 mi<sup>2</sup>.

GAGE.--Nonrecording gage. Datum of gage is 12.16 ft NGVD of 1929. Aug. 22, 1978, to Oct. 1, 1981, water-stage recorder at present site and datum.

STAGE-DISCHARGE RELATION.--Not developed.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Gage readings were provided by U.S. Army Corps of Engineers.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1988	May 14, 1988	5.16		1996	December 29, 1995	4.78	
1990	March 18, 1990	5.30		1997	October 12, 1996	5.40	
1991	March 15, 1991	5.60		1998	February 7, 1998	5.76	
1992	August 20, 1992	5.98		1999	September 17, 1999	7.00	
1993	February 17, 1993	5.96		2000	October 21, 1999	6.48	
1994	March 13, 1994	5.70		2001	June 7, 2001	5.46	
1995	May 2, 1995	5.40		2002	May 3, 2002	5.40	

## South Atlantic Slope Basin: Chowan River Basin

**Table 373.** 02044000 Nottoway River near Burkeville, Va.

LOCATION.--Latitude 37°04'40", Longitude 078°11'50", NAD27, Lunenburg County, Hydrologic Unit 03010201, on right bank at downstream side of bridge on State Highway 723, 4.0 mi upstream from Modest Creek, 5.6 mi north of Victoria, and 7.5 mi south of Burkeville.

DRAINAGE AREA.--38.7 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 354.58 ft NGVD of 1929. Prior to July 4, 1951, nonrecording gage at present site and datum. July 4, 1951, to Oct. 28, 1981, water-stage recorder on left bank at downstream side of bridge at present datum. Oct. 29, 1981, to Oct. 1, 1986, water-stage recorder on right bank at downstream side of bridge at present datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 3,200 ft<sup>3</sup>/s and extended above on basis of slope-area measurement at 13,400 ft<sup>3</sup>/s.

BANKFULL STAGE.--8 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Records were provided by the Virginia Department of Environmental Quality - Water Division from July 1, 1957, to Jan. 1, 1987. Flood peak of August 1940 was the highest since at least 1930.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1940	August 1940	27.40		1971	May 16, 1971	13.92	1,640
1947	September 25, 1947	18.15	3,020	1972	October 23, 1971	22.33	13,400
1948	February 14, 1948	15.56	2,130	1973	October 5, 1972	18.14	3,830
1949	November 29, 1948	13.40	1,510	1974	September 7, 1974	17.43	3,310
1950	November 2, 1949	15.85	2,190	1975	March 30, 1975	18.06	3,770
1951	March 20, 1951	10.55	858	1976	January 27, 1976	14.55	2,040
1952	April 28, 1952	15.17	2,010	1977	September 9, 1977	16.29	2,730
1953	January 24, 1953	13.92	1,640	1978	April 27, 1978	18.36	4,010
1954	March 1, 1954	14.50	1,810	1979	September 22, 1979	20.88	7,940
1955	August 18, 1955	19.06	3,320	1980	October 3, 1979		3,200 <sup>1</sup>
1956	October 1, 1955	18.70	3,200	1981	June 7, 1981	16.90	3,000
1957	September 18, 1957	18.06	2,980	1982	January 4, 1982	9.99	678
1958	January 25, 1958	14.15	1,730	1983	April 16, 1983	15.90	2,600
1959	December 29, 1958	14.81	1,890	1984	March 29, 1984	13.78	1,650
1960	February 19, 1960	15.25	2,010	1985	February 1, 1985	10.38	756
1961	February 23, 1961	15.65	2,130	1986	November 21, 1985	14.44	1,950
1962	January 7, 1962	17.82	2,880	1987	April 17, 1987	16.84	2,980
1963	March 6, 1963	14.22	1,730	1988	December 11, 1987	8.05	391
1964	February 6, 1964	11.90	1,140	1989	May 6, 1989	12.15	1,145
1965	February 8, 1965	13.36	1,510	1990	August 24, 1990	16.81	2,960
1966	March 1, 1966	13.07	1,440	1991	January 13, 1991	11.90	1,080
1967	February 21, 1967	10.20	777	1992	March 7, 1992	10.12	704
1968	January 14, 1968	13.85	1,620	1993	April 10, 1993	13.61	1,620

1969	March 25, 1969	14.37	1,780	1994	March 2, 1994	15.01	2,180
1970	July 10, 1970	9.51	652	1995	November 21, 1994	10.41	762

---

<sup>1</sup>Discharge is an estimate.

**Table 374. 02044200 Falls Creek tributary near Victoria, Va.**

LOCATION.--Latitude 37°02'04", Longitude 078°10'26", NAD27, Lunenburg County, Hydrologic Unit 03010201, at upstream end of culvert on State Highway 49, 3.6 mi northeast of Victoria.

DRAINAGE AREA.--0.37 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 409.21 ft NGVD of 1929. Prior to Feb. 24, 1978, flood-hydrograph recorder at present site and datum. Prior to Feb. 1, 1968, crest-stage gage at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--4 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1968	January 14, 1968	3.90	52.0	1988	July 22, 1988	3.54	34.0
1969	March 25, 1969	4.10	60.0	1989	May 6, 1989	4.42	73.0
1970	June 22, 1970	4.70	85.0	1990	August 24, 1990	8.73	318
1971	August 4, 1971	5.20	110	1991	August 7, 1991	4.23	65.0
1972	June 21, 1972	9.15	343	1992	March 7, 1992	4.02	57.0
1973	October 5, 1972	8.30	292	1993	March 4, 1993	4.57	79.0
1974	July 26, 1974	4.85	92.0	1994	March 2, 1994	3.62	41.0
1975	September 26, 1975	5.75	138	1995	November 21, 1994	4.37	71.0
1976	January 27, 1976	3.70	44.0	1996	October 20, 1995	6.56	186
1977	October 20, 1976	4.40	72.0	1997	April 28, 1997	6.15	161
1978	April 27, 1978	4.45	74.0	1998	March 19, 1998	4.36	70
1979	September 30, 1979	6.30	170	1999	September 15, 1999	8.02	275
1980	November 11, 1979	4.54	78.0	2000	April 16, 2000	3.44	35
1981	June 7, 1981	6.35	173	2001	March 29, 2001	4.17	63
1982	May 24, 1982	4.42	73.0	2002	May 10, 2002	5.50	125
1983	October 25, 1982	3.55	38.0	2003	September 18, 2003	6.54	184
1984	October 14, 1983	5.73	136	2004	August 30, 2004	8.03	276
1985	February 1, 1985	3.20	27.0	2005	July 8, 2005	5.34	117
1986	November 4, 1985	4.21	64.0	2006	September 1, 2006	6.36	174
1987	April 16, 1987	4.23	65.0	2007	January 1, 2007	4.74	87.0

**Table 375.** 02044400 Hurricane Branch at Blackstone, Va.

LOCATION.--Latitude 37°04'47", Longitude 077°58'55", NAD27, Nottoway County, Hydrologic Unit 03010201, at culvert on State Highway 40, 0.3 mi east of Blackstone.

DRAINAGE AREA.--1.61 mi<sup>2</sup>.

GAGE.--Water-stage recorder (flood-hydrograph recorder). Datum of gage is 333.24 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--7 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1967	February 18, 1967	4.95	50.0	1972	June 21, 1972	13.31	1,340
1968	January 14, 1968	6.15	130	1973	October 5, 1972	13.34	1,350
1969	August 20, 1969	6.85	173	1974	July 26, 1974	6.35	134
1970	June 21, 1970	5.60	72.0	1975	July 14, 1975	9.70	465
1971	May 30, 1971	6.20	134	1976	September 15, 1976	5.08	

**Table 376. 02044500 Nottoway River near Rawlings, Va.**

LOCATION.--Latitude 36°59'00", Longitude 077°48'00", NAD27, Brunswick County, Hydrologic Unit 03010201, on right bank at downstream side of bridge on State Highway 612 at Harpers Bridge, 0.1 mi upstream from Beaver Pond Creek, and 2.6 mi northwest of Rawlings.

DRAINAGE AREA.--317 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 184.88 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 16,000 ft<sup>3</sup>/s and extended above on basis of slope-area measurement at 23,000 ft<sup>3</sup>/s and 31,000 ft<sup>3</sup>/s.

BANKFULL STAGE.--10 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Subsequent to June 30, 1957, records were provided by the Virginia Department of Environmental Quality - Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1940	August 1940	20.80	19,000 <sup>1,2</sup>	1979	September 23, 1979	15.76	11,100
1951	March 21, 1951	5.97	1,690	1980	October 1, 1979	13.48	7,430
1952	December 22, 1951	9.80	4,240	1981	June 8, 1981	11.16	5,270
1953	November 21, 1952	12.14	6,020	1982	March 8, 1982	6.09	1,740
1954	May 22, 1954	6.67	2,110	1983	April 17, 1983	12.16	6,070
1955	August 19, 1955	12.61	6,420	1984	February 15, 1984	15.06	9,960
1956	October 2, 1955	12.82	6,580	1985	February 3, 1985	8.51	3,300
1957	September 19, 1957	9.57	4,090	1986	November 4, 1985	16.43	12,200
1958	May 7, 1958	11.21	5,300	1987	April 17, 1987	16.78	12,900
1959	December 31, 1958	9.42	3,940	1988	December 12, 1987	5.28	1,310
1960	November 25, 1959	10.98	5,140	1989	May 7, 1989	8.09	3,000
1961	February 25, 1961	8.00	2,940	1990	May 31, 1990	8.38	3,210
1962	January 7, 1962	12.70	6,500	1991	March 31, 1991	11.72	5,720
1963	March 8, 1963	8.63	3,360	1992	March 8, 1992	11.35	5,420
1964	August 31, 1964	9.20	3,790	1993	March 5, 1993	15.63	10,900
1965	February 9, 1965	9.68	4,160	1994	March 3, 1994	12.87	6,660
1966	March 2, 1966	7.70	2,750	1995	March 10, 1995	6.78	1,990
1967	February 22, 1967	6.68	2,110	1996	September 7, 1996	11.04	5,050
1968	January 16, 1968	7.36	2,550	1997	April 30, 1997	12.67	6,480
1969	March 27, 1969	7.60	2,680	1998	March 20, 1998	15.26	10,100
1970	July 11, 1970	6.34	1,870	1999	September 17, 1999	13.82	7,850
1971	May 31, 1971	11.65	5,620	2000	April 18, 2000	10.56	5,030
1972	October 24, 1971	21.36	23,900	2001	March 31, 2001	11.61	6,220
1973	October 6, 1972	23.25	29,900	2002	May 4, 2002	4.63	978
1974	September 8, 1974	12.64	6,420	2003	May 26, 2003	22.65	28,100
1975	July 16, 1975	14.39	8,900	2004	August 31, 2004	18.92	18,700
1976	January 28, 1976	10.04	4,390	2005	January 16, 2005	8.46	3,310

1977	October 22, 1976	6.92	2,230	2006	July 6, 2006	7.97	3,010
1978	April 27, 1978	17.58	14,500	2007	October 8, 2006	11.84	6,500

---

<sup>1</sup>Discharge is a historic peak.

<sup>2</sup>Month or day of occurrence is unknown or not exact.

**Table 377. 02045500 Nottoway River near Stony Creek, Va.**

LOCATION.--Latitude 36°54'00", Longitude 077°24'00", NAD27, Sussex County, Hydrologic Unit 03010201, on left bank 15 ft downstream from bridge on U.S. Highway 301, 1.8 mi upstream from Island Swamp, 3.3 mi south of town of Stony Creek, and 4.4 mi upstream from Stony Creek.

DRAINAGE AREA.--577 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 58.42 ft NGVD of 1929. Prior to Oct. 11, 1934, nonrecording gage at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 21,000 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--15 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Subsequent to Sept. 30, 1989, records were provided by the Virginia Department of Environmental Quality - Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1930	October 4, 1929		5,700	1969	August 6, 1969	14.44	4,340
1931	August 21, 1931	14.80	4,540	1970	July 12, 1970	14.09	4,100
1932	March 7, 1932	15.66	5,540	1971	June 2, 1971	16.17	6,100
1933	October 20, 1932	12.92	3,140	1972	October 26, 1971	20.32	13,100
1934	March 7, 1934	15.38	5,180	1973	October 7, 1972	21.69	20,800
1935	September 7, 1935	17.76	8,300	1974	September 10, 1974	16.00	5,730
1936	January 22, 1936	17.42	7,690	1975	July 16, 1975	20.09	13,800
1937	April 28, 1937	20.00	11,500	1976	January 28, 1976	15.92	5,420
1938	July 28, 1938	19.93	11,400	1977	October 21, 1976	12.54	3,160
1939	August 30, 1939	16.42	6,370	1978	April 29, 1978	19.39	12,800
1940	August 17, 1940	23.66	25,200	1979	February 27, 1979	20.03	14,700
1941	April 5, 1941	13.48	3,440	1980	October 3, 1979	17.96	8,870
1942	July 3, 1942	10.50	2,230	1981	June 10, 1981	15.09	4,960
1943	February 8, 1943	14.43	4,150	1982	July 15, 1982	13.90	3,980
1944	March 8, 1944		3,500 <sup>1</sup>	1983	March 23, 1983	16.68	6,860
1945	July 20, 1945	20.30	12,600	1984	February 16, 1984	19.19	11,400
1946	December 30, 1945	15.10	4,920	1985	January 5, 1985	14.96	4,860
1947	September 28, 1947	14.23	4,140	1986	November 6, 1985	20.22	14,800
1948	February 17, 1948	15.90	5,780	1987	April 19, 1987	19.69	13,200
1949	June 30, 1949	15.18	5,020	1988	February 12, 1988	9.68	1,950
1950	November 4, 1949	13.92	3,930	1989	May 3, 1989	14.70	4,650
1951	March 20, 1951	10.87	2,510	1990	January 2, 1990	14.56	4,560
1952	April 28, 1952	17.30	7,600	1991	April 1, 1991	15.65	5,550
1953	November 23, 1952	16.16	6,140	1992	March 10, 1992	15.21	5,080
1954	May 22, 1954	16.32	6,270	1993	March 7, 1993	18.49	10,100
1955	August 21, 1955	16.73	6,830	1994	March 5, 1994	17.31	7,770
1956	October 4, 1955	16.38	6,400	1995	March 9, 1995	12.69	3,230

1957	February 2, 1957	15.12	4,920	1996	January 22, 1996	15.41	5,050
1958	May 7, 1958	17.73	8,090	1997	May 2, 1997	17.11	7,440
1959	December 30, 1958	14.83	4,460	1998	March 22, 1998	19.28	12,100
1960	November 27, 1959	15.68	5,430	1999	September 17, 1999	21.28	12,500
1961	February 9, 1961	13.78	3,680	2000	April 20, 2000	17.20	6,810
1962	January 9, 1962	17.57	8,020	2001	April 2, 2001	16.60	6,150
1963	March 7, 1963	15.75	5,550	2002	May 3, 2002	8.21	1,480
1964	September 2, 1964	17.48	7,770	2003	May 28, 2003	20.35	13,400
1965	February 10, 1965	13.32	3,540	2004	September 2, 2004	18.90	9,780
1966	June 18, 1966	12.96	3,300	2005	December 11, 2004	16.45	5,420
1967	February 22, 1967	11.89	2,810	2006	July 7, 2006	13.68	3,630
1968	January 17, 1968	11.26	2,630	2007	November 17, 2006	17.07	6,350

---

<sup>1</sup>Discharge is an estimate.

**Table 378. 02046000 Stony Creek near Dinwiddie, Va.**

LOCATION.--Latitude 37°04'01", Longitude 077°36'10", NAD27, Dinwiddie County, Hydrologic Unit 03010201, on right bank at upstream side of upstream bridge on U.S. Highway 1, 1.2 mi southwest of Dinwiddie, 1.7 mi downstream from Chamberlains Bed Creek, and 5.7 mi downstream from confluence of White Oak and Butterwood Creeks.

DRAINAGE AREA.--113 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 129.94 ft NGVD of 1929. Prior to June 12, 1957, nonrecording gage and crest-stage gage at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 6,300 ft<sup>3</sup>/s and extended above on basis of contracted-opening measurement at 11,400 ft<sup>3</sup>/s.

BANKFULL STAGE.--6 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Subsequent to June 30, 1957, records were provided by the Virginia Department of Environmental Quality - Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1940	August 1940		8,000 <sup>12</sup>	1977	October 21, 1976	7.24	930
1947	March 15, 1947	7.20	890	1978	April 27, 1978	11.26	2,770
1948	February 15, 1948	10.05	1,950	1979	September 6, 1979	18.50	9,050
1949	August 29, 1949	8.53	1,270	1980	October 1, 1979	18.70	9,250
1950	September 10, 1950	8.00	1,100	1981	June 7, 1981	11.63	2,970
1951	March 20, 1951	6.70	771	1982	August 17, 1982	8.51	1,300
1952	January 29, 1952	10.93	2,530	1983	March 22, 1983	12.13	3,280
1953	January 25, 1953	10.38	2,190	1984	February 15, 1984	13.09	3,900
1954	May 21, 1954	9.08	1,510	1985	February 2, 1985	9.16	1,580
1955	August 18, 1955	11.52	3,000	1986	November 5, 1985	15.23	5,780
1956	October 1, 1955	9.82	1,830	1987	April 16, 1987	12.28	3,370
1957	October 28, 1956	10.96	2,600	1988	February 12, 1988	5.65	595
1958	May 7, 1958	11.30	2,840	1989	May 2, 1989	9.26	1,640
1959	December 29, 1958	9.59	1,730	1990	January 1, 1990	8.06	1,150
1960	November 7, 1959	12.62	3,980	1991	March 30, 1991	9.14	1,570
1961	February 9, 1961	8.78	1,390	1992	March 8, 1992	9.10	1,550
1962	January 7, 1962	13.05	4,340	1993	March 5, 1993	11.59	2,940
1963	March 7, 1963	8.52	1,270	1994	March 3, 1994	11.85	3,090
1964	September 1, 1964	13.42	4,530	1995	March 9, 1995	7.29	1,010
1965	March 5, 1965	7.77	1,040	1996	January 20, 1996	10.72	2,400
1966	June 17, 1966	10.22	1,500	1997	October 19, 1996	13.05	3,950
1967	February 21, 1967	8.39	860	1998	March 20, 1998	13.13	4,010
1968	March 13, 1968	7.79	724	1999	September 17, 1999	17.24	7,150
1969	August 5, 1969	7.57	688	2000	April 18, 2000	14.59	4,670
1970	July 11, 1970	7.18	616	2001	March 30, 2001	9.62	1,580
1971	May 31, 1971	10.30	1,800	2002	March 18, 2002	4.20	330

1972	October 24, 1971	15.07	5,030	2003	September 19, 2003	19.41	9,640
1973	October 6, 1972	20.84	11,400	2004	August 31, 2004	15.15	5,920
1974	September 7, 1974	7.58	777	2005	March 29, 2005	8.21	1,030
1975	September 26, 1975	15.10	5,370	2006	September 1, 2006	9.24	1,420
1976	January 28, 1976	8.71	1,370	2007	November 17, 2006	12.47	3,120

---

<sup>1</sup>Discharge is a historic peak.

<sup>2</sup>Month or day of occurrence is unknown or not exact.

**Table 379.** 02046200 Millrun Branch near McKenney, Va.

LOCATION.--Latitude 36°56'47", Longitude 077°34'41", NAD27, Dinwiddie County, Hydrologic Unit 03010201, at bridge on State Highway 40, 9.3 mi east of McKenney.

DRAINAGE AREA.--2.23 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 172.37 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Not fully developed.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1962	July 4, 1962	4.92	320	1970	July 10, 1970	4.92	320
1963	November 10, 1962	4.30	220	1971	May 30, 1971	3.88	
1964	August 31, 1964	4.83	300	1972	October 24, 1971	4.22	
1965	February 7, 1965	5.40		1973	December 15, 1972	3.41	
1966	September 21, 1966	4.02		1974		2.00 <sup>1</sup>	
1967	August 24, 1967	3.46		1975	July 14, 1975	5.11	
1968	March 13, 1968	3.64		1976	January 27, 1976	4.12	
1969	March 7, 1969	4.29					

<sup>1</sup>Gage height below minimum recordable elevation.

**Table 380. 02046400 Jones Hole Swamp tributary near Carson, Va.**

LOCATION.--Latitude 37°04'13", Longitude 077°20'30", NAD27, Prince George County, Hydrologic Unit 03010201, at culvert on State Highway 35, 3.8 mi east of McKenney.

DRAINAGE AREA.--3.08 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 89.35 ft NGVD of 1929. Prior to Oct. 3, 1973, flood-hydrograph recorder at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1967	August 24, 1967	3.56	25.0	1972	June 22, 1972	4.00	67.0
1968	January 14, 1968	4.00	45.0	1973	February 2, 1973	4.50	101
1969	April 19, 1969	4.05	70.0	1974	September 6, 1974	3.54	40.0
1970	March 30, 1970	3.85	58.0	1975	September 26, 1975	4.66	112
1971	May 30, 1971	3.65	54.0	1976	November 13, 1975	3.50	48.0

**Table 381. 02046500 Anderson Branch at Sussex, Va.**

LOCATION.--Latitude 36°55'10", Longitude 077°15'45", NAD27, Sussex County, Hydrologic Unit 03010201, at bridge on State Highway 40, 1.0 mi east of Sussex.

DRAINAGE AREA.--4.99 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 96.00 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 120 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--4 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1949	August 15, 1949	4.95	96.0	1971	June 24, 1971	4.58	50.0
1950	September 12, 1950	6.12	228	1972	October 24, 1971	5.05	102
1951	March 20, 1951	4.29	35.0	1973	October 6, 1972	4.94	89.0
1952	January 29, 1952	5.37	138	1974	December 21, 1973	4.42	22.0
1953	February 15, 1953	4.45	40.0	1975	September 24, 1975	5.61	167
1954	May 21, 1954	5.63	170	1976	January 27, 1976	5.50	154
1955	August 23, 1955	5.78	188	1977	October 20, 1976	4.72	65.0
1956	June 2, 1956	5.28	128	1978	March 10, 1978	5.50	154
1966	March 4, 1966	4.02	13.0	1979	February 25, 1979	5.41	143
1967	February 18, 1967	4.06	14.0	1980	November 11, 1979	4.97	93.0
1968	January 14, 1968	4.87	82.0	1981	June 7, 1981	5.86	197
1969	August 5, 1969	5.34	135	1982	July 17, 1982	6.64	298
1970	June 26, 1970	5.13	110	1983	February 11, 1983	4.81	75.0

**Table 382.** 02046800 Three Creek tributary near Drewryville, Va.

LOCATION.--Latitude 36°41'36", Longitude 077°20'58", NAD27, Southhampton County, Hydrologic Unit 03010201, at bridge on U.S. Highway 58, 2.8 mi southwest of Drewryville.

DRAINAGE AREA.--1.06 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 76.10 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--2 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1962	June 14, 1962	4.69	130	1970	December 26, 1969	4.61	
1963	November 10, 1962	3.46	80.0	1971	February 4, 1971	3.30	
1964	August 31, 1964	3.16	70.0	1972	October 24, 1971	3.90	
1965	October 4, 1964	4.10	110	1973	December 15, 1972	3.55	
1966	June 17, 1966	4.14		1974	January 29, 1974	2.72	
1967	August 24, 1967	4.00		1975	July 14, 1975	3.43	
1968	March 16, 1968	4.58		1976	January 27, 1976	3.92	
1969	August 5, 1969	4.62		1977	October 20, 1976	3.55	

**Table 383.** 02046900 Musgrave Branch near Drewryville, Va.

LOCATION.--Latitude 36°42'13", Longitude 077°16'29", NAD27, Southhampton County, Hydrologic Unit 03010201, at culvert on U.S. Highway 58, 2.0 mi east of Drewryville.

DRAINAGE AREA.--1.96 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 60 ft NGVD of 1929, from topographic map. Prior to Nov. 1, 1974, water-stage recorder at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--4 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1966	March 4, 1966	4.45	30.0	1971	February 4, 1971	4.70	60.0
1967	August 24, 1967	5.45	88.0	1972	October 23, 1971	5.20	72.0
1968	January 14, 1968	5.93	130	1973	December 15, 1972	4.92	57.0
1969	February 23, 1969	4.70	62.0	1974	January 29, 1974	4.57	43.0
1970	February 17, 1970	5.10	50.0	1975	July 14, 1975	5.40	84.0

**Table 384. 02047000 Nottoway River near Sebrell, Va.**

LOCATION.--Latitude 36°46'13", Longitude 077°09'59", NAD27, Southhampton County, Hydrologic Unit 03010201, on right bank 1,000 ft upstream from bridge on State Highway 653, 1 mi downstream from Three Creek, 2.5 mi southwest of Sebrell, and 5.5 mi upstream from Assamoosick Swamp.

DRAINAGE AREA.--1,441 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 5.94 ft NGVD of 1929. Prior to Aug. 23, 1950, nonrecording gage at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 25,000 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--12 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1940	August 1940	29.70	48,000 <sup>1,2</sup>	1975	July 19, 1975	24.43	26,000
1942	April 2, 1942	12.78	3,050	1976	October 1, 1975	19.69	12,300
1943	February 11, 1943	17.00	6,800	1977	March 11, 1977	15.10	5,090
1944	March 11, 1944	16.70	6,410	1978	May 1, 1978	21.32	16,400
1945	July 22, 1945	24.50	25,000	1979	March 1, 1979	23.28	22,000
1946	January 2, 1946	18.29	9,230	1980	October 6, 1979	18.74	10,300
1947	January 25, 1947	14.50	4,170	1981	June 12, 1981	16.34	6,620
1948	February 19, 1948	18.24	9,020	1982	February 21, 1982	15.63	5,950
1949	January 3, 1949	17.60	7,800	1983	April 20, 1983	18.81	10,400
1950	September 14, 1950	16.13	5,690	1984	February 19, 1984	19.42	11,600
1951	March 24, 1951	14.40	4,090	1985	February 7, 1985	16.38	6,670
1952	May 1, 1952	19.61	12,000	1986	November 9, 1985	20.39	13,800
1953	November 26, 1952	15.72	5,260	1987	April 21, 1987	20.66	14,500
1954	May 25, 1954	18.70	10,100	1988	February 16, 1988	14.84	4,840
1955	August 24, 1955	19.00	10,700	1989	May 6, 1989	17.71	8,580
1956	February 11, 1956	16.27	5,920	1990	January 6, 1990	16.30	6,570
1957	February 5, 1957	18.35	9,440	1991	April 4, 1991	16.99	7,490
1958	May 10, 1958	21.80	16,900	1992	March 13, 1992	16.55	6,900
1959	January 3, 1959	17.55	8,240	1993	March 9, 1993	19.42	11,700
1960	February 23, 1960	17.93	8,400	1994	March 7, 1994	19.66	12,200
1961	February 13, 1961	16.95	6,800	1995	March 13, 1995	16.08	6,300
1962	January 11, 1962	20.26	12,800	1996	January 25, 1996	17.57	8,360
1963	March 11, 1963	17.83	8,520	1997	May 4, 1997	18.27	9,500
1964	September 5, 1964	16.98	7,400	1998	March 24, 1998	21.31	16,000
1965	October 9, 1964	15.62	5,720	1999	September 19, 1999	26.98	36,000
1966	March 6, 1966	15.03	5,100	2000	September 8, 2000	19.71	12,200
1967	February 26, 1967	15.63	5,760	2001	April 5, 2001	16.73	6,570
1968	January 19, 1968	15.43	4,990	2002	May 6, 2002	11.72	2,300

1969	August 9, 1969	17.65	7,690	2003	September 23, 2003	24.71	26,900
1970	April 6, 1970	16.24	5,850	2004	September 6, 2004	18.67	10,000
1971	June 5, 1971	17.34	7,330	2005	December 15, 2004	17.58	7,980
1972	October 29, 1971	21.44	16,100	2006	July 8, 2006		5,500 <sup>3,4</sup>
1973	October 11, 1972	24.13	22,400	2007	November 21, 2006	19.63	12,500
1974	September 13, 1974	15.70	5,810				

---

<sup>1</sup>Discharge is a historic peak.

<sup>2</sup>Month or day of occurrence is unknown or not exact.

<sup>3</sup>Discharge is a maximum daily average.

<sup>4</sup>Discharge is an estimate.

**Table 385. 02047100 Assamoosick Swamp near Sebrell, Va.**

LOCATION.--Latitude 36°46'22", Longitude 077°05'57", NAD27, Southhampton County, Hydrologic Unit 03010201, near center of span on upstream side of bridge on State Highway 35, 0.7 mi upstream from Indian Branch, 1.7 mi southeast of Sebrell, and 2.8 mi upstream from mouth.

DRAINAGE AREA.--86.1 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 20 ft NGVD of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 1,130 ft<sup>3</sup>/s and extended above by logarithmic plotting.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Records were provided by the Virginia Department of Environmental Quality - Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1983	April 18, 1983	6.57	1,180	1986	November 24, 1985	5.68	706
1984	March 8, 1984	6.75	1,290	1987	April 18, 1987	9.34	3,480
1985	September 28, 1985	7.42	1,730				

**Table 386. 02047500 Blackwater River near Dendron, Va.**

LOCATION.--Latitude 37°01'30", Longitude 076°52'30", NAD27, Surry County, Hydrologic Unit 03010202, on left bank 10 ft upstream from Walls Bridge on State Highway 617, 1.2 mi downstream from Cypress Swamp, and 3.5 mi southeast of Dendron.

DRAINAGE AREA.--290 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 30.99 ft NGVD of 1929 (U.S. Army Corps of Engineers bench mark). Prior to Aug. 13, 1980, water-stage recorder at site 25 ft upstream at present datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 4,700 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--5 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Records were provided by the Virginia Department of Environmental Quality - Water Division from Oct. 1, 1958, to Dec. 31, 1986 and subsequent to July 28, 1988.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1940	August 1940	13.10 <sup>1</sup>	10,000 <sup>23</sup>	1975	March 21, 1975	8.40 <sup>1</sup>	4,900
1942	March 11, 1942	4.34 <sup>1</sup>	560	1976	January 31, 1976	6.26 <sup>1</sup>	2,540
1943	February 8, 1943	5.70 <sup>1</sup>	1,580	1977	March 10, 1977	5.03 <sup>1</sup>	1,360
1944	March 9, 1944	5.84 <sup>1</sup>	1,790	1978	January 21, 1978	7.07 <sup>1</sup>	3,470
1945	July 21, 1945	8.90 <sup>1</sup>	4,710	1979	February 28, 1979	8.26 <sup>1</sup>	4,790
1946	December 31, 1945	6.74 <sup>1</sup>	2,580	1980	November 15, 1979	6.89 <sup>1</sup>	2,810
1947	January 23, 1947	4.62 <sup>1</sup>	845	1981	June 9, 1981	5.42	1,370
1948	February 18, 1948	6.20 <sup>1</sup>	2,130	1982	August 13, 1982	6.71	2,650
1949	August 16, 1949	6.45 <sup>1</sup>	2,220	1983	April 19, 1983	6.90	2,880
1950	September 12, 1950	6.12 <sup>1</sup>	2,040	1984	March 8, 1984	6.99	2,990
1951	March 22, 1951	4.56 <sup>1</sup>	842	1985	September 28, 1985	9.11	5,850
1952	January 30, 1952	6.56 <sup>1</sup>	2,490	1986	December 2, 1985	5.82	1,730
1953	March 18, 1953	5.08 <sup>1</sup>	1,220	1987	April 20, 1987	7.63	3,820
1954	May 23, 1954	5.66 <sup>1</sup>	1,660	1988	February 14, 1988	5.43	1,380
1955	August 19, 1955	6.41 <sup>1</sup>	2,310	1989	May 4, 1989	6.51	2,440
1956	February 13, 1956	4.99 <sup>1</sup>	1,150	1990	August 8, 1990	8.76	5,360
1957	February 5, 1957	6.20 <sup>1</sup>	2,130	1991	January 14, 1991	5.89	1,880
1958	August 5, 1958	7.49 <sup>1</sup>	3,300	1992	March 12, 1992	5.31	1,400
1959	January 2, 1959	6.24 <sup>1</sup>	2,190	1993	March 8, 1993	6.63	2,560
1960	September 14, 1960	8.39 <sup>1</sup>	3,800	1994	March 4, 1994	8.12	4,440
1961	February 10, 1961	6.10 <sup>1</sup>	2,310	1995	March 10, 1995	5.98	1,950
1962	October 22, 1961	7.93 <sup>1</sup>	3,700	1996	September 12, 1996	5.81	1,810
1963	June 5, 1963	9.10 <sup>1</sup>	5,070	1997	October 10, 1996	6.61	2,580
1964	February 22, 1964	4.76 <sup>1</sup>	1,020	1998	February 6, 1998	7.81	4,030
1965	March 29, 1965	4.75 <sup>1</sup>	1,020	1999	September 17, 1999	17.11	12,300
1966	May 7, 1966	4.22 <sup>1</sup>	682	2000	September 5, 2000	10.12	5,150
1967	February 24, 1967	5.23 <sup>1</sup>	1,540	2001	May 28, 2001	4.65	812

1968	March 20, 1968	5.78 <sup>1</sup>	2,090	2002	April 3, 2002	4.03	578
1969	August 7, 1969	6.93 <sup>1</sup>	3,370	2003	September 20, 2003	10.57	5,460
1970	April 5, 1970	5.64 <sup>1</sup>	2,000	2004	September 20, 2004	7.02	2,490
1971	April 9, 1971	5.10 <sup>1</sup>	1,460	2005	December 12, 2004	6.27	1,660
1972	October 26, 1971	6.25 <sup>1</sup>	2,250	2006	September 2, 2006	9.27	4,380
1973	October 8, 1972	7.62 <sup>1</sup>	4,230	2007	October 8, 2006	15.73	10,700
1974	March 21, 1974	4.58 <sup>1</sup>	839				

---

<sup>1</sup>Gage height at different site and (or) datum.

<sup>2</sup>Discharge is a historic peak.

<sup>3</sup>Month or day of occurrence is unknown or not exact.

**Table 387. 02048000 Blackwater River at Zuni, Va.**

LOCATION.--Latitude 36°52'05", Longitude 076°50'07", NAD27, Isle of Wight County, Hydrologic Unit 03010202, on left bank at downstream side of bridge on U.S. Highway 460 at Zuni, 1.6 mi downstream from Pope Swamp, and 4.2 mi upstream from Antioch Swamp.

DRAINAGE AREA.--451 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 8.56 ft NGVD of 1929. Prior to July 18, 1957, nonrecording gage at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 6,900 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--9 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Subsequent to July 1, 1958, records were provided by the Virginia Department of Environmental Quality - Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1940	August 1940	23.20	16,000 <sup>1,2</sup>	1966	March 6, 1966	8.00	900
1943	February 9, 1943	10.35	2,120	1967	August 25, 1967	10.47	2,070
1944	March 9, 1944	11.08	2,580	1968	March 21, 1968	10.88	2,270
1945	July 25, 1945	15.05	5,200	1969	August 9, 1969	12.35	3,020
1946	January 2, 1946	11.62	2,740	1970	April 5, 1970	10.38	2,210
1947	January 22, 1947	8.23	985	1971	April 10, 1971	9.67	1,670
1948	February 17, 1948	11.09	2,440	1972	October 28, 1971	11.70	2,584
1949	August 18, 1949	13.34	3,880	1973	October 9, 1972	15.05	4,330
1950	September 14, 1950	9.80	1,720	1974	January 31, 1974	9.36	1,520
1951	March 24, 1951	8.28	1,070	1975	March 21, 1975	15.70	7,000
1952	March 7, 1952	11.88	2,920	1976	February 4, 1976	12.34	3,770
1953	March 22, 1953	8.76	1,260	1977	March 9, 1977		1,640 <sup>3</sup>
1954	May 23, 1954	10.90	2,320	1978	January 22, 1978	13.93	5,210
1955	August 24, 1955	11.40	2,620	1979	March 1, 1979	14.88	6,200
1956	February 10, 1956	9.62	1,620	1980	November 16, 1979	12.48	4,020
1957	February 5, 1957	11.80	2,860	1981	June 10, 1981	11.26	3,150
1958	May 9, 1958	13.77	4,240	1982	August 15, 1982	11.05	3,000
1959	January 4, 1959	11.32	2,560	1983	April 20, 1983	12.48	4,020
1960	September 14, 1960	17.47	5,680	1984	March 10, 1984	12.10	3,740
1961	February 12, 1961	11.32	2,560	1985	September 29, 1985	15.38	6,640
1962	January 10, 1962	13.67	4,160	1986	December 3, 1985	11.01	2,970
1963	June 5, 1963	17.51	5,800	1987	January 24, 1987	14.90	6,200
1964	February 20, 1964	9.59	1,620	1988	February 15, 1988	10.22	2,420
1965	October 19, 1964	9.88	1,680				

<sup>1</sup>Discharge is a historic peak.

<sup>2</sup>Month or day of occurrence is unknown or not exact.

<sup>3</sup>Discharge is a maximum daily average.

**Table 388.** 02048400 Seacock Creek near Ivor, Va.

LOCATION.--Latitude 36°55'28", Longitude 076°55'48", NAD27, Southhampton County, Hydrologic Unit 03010202, at bridge on State Highway 618, 2 mi northwest of Ivor.

DRAINAGE AREA.--28.0 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is not determined. Prior to Sept. 7, 1960, nonrecording gage (crest-stage gage) at present site and datum. July 8, 1965, to Nov. 15, 1970, flood-hydrograph recorder at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 50 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--3 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1950	September 12, 1950	4.50	170	1964	September 1, 1964	3.35	140
1951	June 1951	3.98	95.0 <sup>1</sup>	1965	December 27, 1964	3.69	210
1952	January 29, 1952	4.86	240	1966	July 31, 1966	3.70	210
1953	November 21, 1952	4.59	180	1967	August 24, 1967	4.45	410
1954	May 23, 1954	4.81	220	1968	January 14, 1968	4.08	320
1955	August 24, 1955	4.64	195	1969	August 5, 1969	5.30	800
1956	February 9, 1956	4.38	145	1970	December 26, 1969	3.70	210
1957	February 4, 1957	4.90	240	1971	September 30, 1971	3.79	228
1958	May 6, 1958	6.33	700	1972	October 24, 1971	4.89	606
1959	December 30, 1958	5.57	430	1973	October 6, 1972	4.77	558
1960	September 12, 1960	7.26	4,000	1974	January 30, 1974	3.85	245
1961	February 8, 1961	4.36	380	1975	March 19, 1975	4.59	486
1962	January 6, 1962	5.38	840	1976	January 27, 1976	4.95	630
1963	June 3, 1963	6.33	1,500				

<sup>1</sup>Month or day of occurrence is unknown or not exact.

**Table 389.** 02048500 Seacock Creek at Unity, Va.

LOCATION.--Latitude 36°49'15", Longitude 076°53'00", NAD27, Southhampton County, Hydrologic Unit 03010202, at downstream side of highway bridge on State Highway 635, 0.7 mi northeast of Unity, 1 mi upstream from mouth, and 4.2 mi downstream from Round Hill Swamp.

DRAINAGE AREA.--102 mi<sup>2</sup>.

GAGE.--Nonrecording gage (chain gage). Datum of gage is 9.22 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 500 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1943	July 11, 1943	7.50	500	1947	April 18, 1947	6.40	332
1944	March 9, 1944	7.94	614	1948	February 16, 1948	8.18	778
1945	September 19, 1945	9.02	1,180	1949	August 16, 1949	8.62	946
1946	December 31, 1945	7.70	633				

**Table 390. 02049000 Blackwater River near Burdette, Va.**

LOCATION.--Latitude 36°48'15", Longitude 076°51'45", NAD27, Southhampton-Isle of Wight County line, Hydrologic Unit 03010202, near center of downstream side of highway bridge on State Highway 603, 1.5 mi downstream from Seacock Creek, 1.8 mi upstream from Corrowaugh Swamp, and 3 mi northeast of Burdette.

DRAINAGE AREA.--578 mi<sup>2</sup>.

GAGE.--Nonrecording gage (wire-weight gage). Datum of gage is 1.91 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 2,600 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1940	August 1940	28.7		1943	February 9, 1943	15.65	2,500
1942	March 14, 1942	10.46	756	1944	March 10, 1944	17.27	3,380

**Table 391. 02049500 Blackwater River near Franklin, Va.**

LOCATION.--Latitude 36°45'45", Longitude 076°53'55", NAD27, Southhampton County, Hydrologic Unit 03010202, on right bank 0.4 mi south of Burdette, 0.5 mi upstream from Black Creek, 3.3 mi downstream from Corrowaugh Swamp, and 6.0 mi north of Franklin.

DRAINAGE AREA.--613 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 1.56 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 9,400 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--8 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Peak flows for 1942-1944 transferred from Blackwater River near Burdette, Va. (Water-Supply Paper 1673).

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1940	August 1940	22.00 <sup>1</sup>	21,000 <sup>2,3</sup>	1975	March 22, 1975	14.21	6,580
1942	March 14, 1942	10.46 <sup>1</sup>	756	1976	February 4, 1976	11.72	3,840
1943	February 9, 1943	15.65 <sup>1</sup>	2,500	1977	March 9, 1977	9.43	2,140
1944	March 10, 1944	17.27 <sup>1</sup>	3,380	1978	January 22, 1978	12.95	4,940
1945	July 25, 1945	13.40	5,360	1979	March 2, 1979	13.31	5,260
1946	January 3, 1946	11.10	3,340	1980	November 16, 1979	11.29	3,490
1947	January 24, 1947	8.16	1,280	1981	June 9, 1981	10.61	2,910
1948	February 18, 1948	10.90	3,180	1982	February 20, 1982	9.87	2,360
1949	August 19, 1949	11.50	3,660	1983	April 21, 1983	11.46	3,620
1950	July 17, 1950	9.94	2,480	1984	April 25, 1984	11.26	3,440
1951	March 24, 1951	8.08	1,350	1985	September 30, 1985	13.42	5,360
1952	March 7, 1952	12.10	4,190	1986	December 2, 1985	11.04	3,260
1953	March 22, 1953	8.44	1,430	1987	January 24, 1987	13.67	5,600
1954	May 23, 1954	10.64	2,940	1988	February 15, 1988	10.00	2,460
1955	August 24, 1955	11.50	3,660	1989	April 9, 1989	13.68	5,610
1956	February 10, 1956	9.49	2,090	1990	August 11, 1990	10.77	2,980
1957	February 5, 1957	11.55	3,930	1991	January 16, 1991	10.06	2,340
1958	May 9, 1958	13.47	5,450	1992	August 19, 1992	12.83	4,820
1959	January 5, 1959	10.40	2,970	1993	March 8, 1993	11.29	3,470
1960	September 14, 1960	17.14	9,420	1994	March 5, 1994	13.83	5,750
1961	February 12, 1961	10.75	3,290	1995	March 12, 1995	10.65	2,940
1962	January 10, 1962	12.47	4,650	1996	September 13, 1996	12.31	4,340
1963	June 6, 1963	14.97	6,900	1997	October 11, 1996	12.29	4,320
1964	February 20, 1964		2,090	1998	February 7, 1998	15.27	7,250
1965	October 7, 1964	9.70	2,230	1999	September 18, 1999	26.27	23,000
1966	March 6, 1966	8.18	1,220	2000	September 8, 2000	13.80	4,380
1967	August 26, 1967	10.26	2,670	2001	June 18, 2001	10.50	2,100
1968	March 21, 1968	10.50	2,860	2002	April 3, 2002	9.82	1,780

1969	August 9, 1969	11.06	3,310	2003	September 21, 2003	16.79	7,840
1970	April 5, 1970	10.00	2,460	2004	August 17, 2004	13.63	5,470
1971	April 10, 1971	9.57	2,130	2005	December 14, 2004	10.70	3,010
1972	October 28, 1971	11.12	3,360	2006	September 4, 2006	15.61	7,580
1973	October 10, 1972	13.11	4,930	2007	October 10, 2006	22.77	21,200
1974	February 1, 1974	9.33	2,270				

---

<sup>1</sup>Gage height at different site and (or) datum.

<sup>2</sup>Discharge is a historic peak.

<sup>3</sup>Month or day of occurrence is unknown or not exact.

**Table 392.** 02049700 Cypress Swamp near Burdette, Va.

LOCATION.--Latitude 36°44'29", Longitude 076°56'18", NAD27, Southhampton County, Hydrologic Unit 03010202, at bridge on State Highway 635, 3 mi southeast of Burdette, and 5 mi north of Franklin.

DRAINAGE AREA.--8.43 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 18.36 ft NGVD of 1929. July 8, 1965, to Nov. 20, 1973, flood-hydrograph recorder at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 74 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--5 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1950	September 12, 1950	5.30	150	1964	September 1, 1964	3.98	87.0
1951	March 1951	5.25	148 <sup>1</sup>	1965	December 28, 1964	5.24	145
1952	January 29, 1952	5.20	145	1966	June 18, 1966	4.16	94.0
1953	February 1953	3.61	73.0 <sup>1</sup>	1967	February 18, 1967	2.90	47.0
1954	January 1954	5.52	162 <sup>1</sup>	1968	January 14, 1968	5.00	135
1955	April 26, 1955	5.36	152	1969	March 2, 1969	3.59	72.0
1956	February 9, 1956	5.05	137	1970	February 17, 1970	4.46	108
1957	February 4, 1957	4.74	122	1971	January 5, 1971	4.73	122
1958	May 6, 1958	6.17	197	1972	October 24, 1971	5.14	142
1959	December 30, 1958	4.65	118	1973	October 6, 1972	5.41	156
1960	September 12, 1960	9.85	526	1974	January 29, 1974	3.10	53.0
1961	May 11, 1961	5.91	185	1975	March 19, 1975	5.09	140
1962	June 14, 1962	5.51	160	1976	January 27, 1976	4.87	134
1963	June 3, 1963	6.88	270				

<sup>1</sup>Month or day of occurrence is unknown or not exact.

**Table 393.** 02050050 Blackwater River tributary 1 near Holland, Va.

LOCATION.--Latitude 36°38'44", Longitude 076°51'29", NAD27, Suffolk City, Hydrologic Unit 03010202, on left upstream wingwall of culvert on State Highway 189, 3.0 mi upstream from mouth, and 4.9 mi southwest of Holland.

DRAINAGE AREA.--2.72 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 29.25 ft NGVD of 1929. Prior to Dec. 14, 1977, flood-hydrograph recorder at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--4 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1967	August 24, 1967	5.62	140	1987	January 18, 1987	5.90	181
1968	March 17, 1968	5.50	130	1988	July 20, 1988	4.57	88.0
1969	July 30, 1969	5.70	150	1989	July 13, 1989	7.08	331
1970	February 2, 1970	5.35	145	1990	August 24, 1990	5.20	124
1971	January 5, 1971	5.40	138	1991	August 9, 1991	5.26	128
1972	October 23, 1971	6.53	254	1992	August 14, 1992	6.42	240
1973	August 3, 1973	7.65	408	1993	March 4, 1993	4.78	99.0
1974	March 30, 1974	4.90	105	1994	March 2, 1994	7.24	354
1975	March 19, 1975	5.40	138	1995	February 16, 1995	3.80	52.0
1976	January 27, 1976	5.25	128	1996	September 6, 1996	4.90	105
1977	October 20, 1976	4.87	104	1997	October 8, 1996	5.48	144
1978	January 20, 1978	5.61	155	1998	February 5, 1998	6.34	231
1979	September 5, 1979	7.62	403	1999	September 16, 1999	10.78	784
1980	November 11, 1979	4.71	96.0	2000	October 18, 1999	7.50	390
1981	June 7, 1981	4.86	103	2001	March 21, 2001	5.95	186
1982	October 25, 1981	5.33	133	2002	May 2, 2002	4.02	61
1983	April 16, 1983	7.43	380	2003	September 19, 2003	8.39	497
1984	April 23, 1984	7.37	372	2004	August 14, 2004	10.03	694
1985	September 26, 1985	6.78	289	2005	December 10, 2004	4.63	105
1986	October 22, 1985	4.37	78.0	2006	September 1, 2006	7.27	363

**Table 394.** 02050400 North Meherrin River near Briery, Va.

LOCATION.--Latitude 37°04'20", Longitude 078°27'45", NAD27, Charlotte County, Hydrologic Unit 03010204, at culvert on U.S. Highway 360, 1.3 mi south of Briery, and 2.5 mi northeast of Keysville.

DRAINAGE AREA.--1.22 mi<sup>2</sup>.

GAGE.--Water-stage recorder (flood-hydrograph recorder). Datum of gage is 437 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--4 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1966	September 21, 1966	5.15	200	1971	August 27, 1971	6.28	255
1967	June 23, 1967	6.30	270	1972	October 23, 1971	7.85	472
1968	May 27, 1968	5.58	200	1973	October 5, 1972	7.20	397
1969	June 2, 1969	3.82	61.0	1974	September 6, 1974	5.10	195
1970	August 19, 1970	7.47	355	1975	March 30, 1975	7.25	407

**Table 395. 02050500 North Meherrin River near Keysville, Va.**

LOCATION.--Latitude 37°03'05", Longitude 078°25'20", NAD27, Charlotte County, Hydrologic Unit 03010204, on right bank at upstream side of highway bridge, 3.5 mi northeast of Keysville, and 3.6 mi upstream from Owl Creek.

DRAINAGE AREA.--9.06 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 475 ft NGVD of 1929, by barometer. Prior to Sept. 30, 1961, water-stage recorder at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 560 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--5 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Prior to Sept. 30, 1961, records were provided by the Virginia Department of Environmental Quality - Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1940	August 1940	10.30		1959	December 29, 1958	5.76	800
1949	December 4, 1948	5.63	755	1960	February 18, 1960	6.09	890
1950	July 24, 1950	6.04	860	1961	February 23, 1961	6.38	1,000
1951	July 16, 1951	4.55	440	1966	March 1, 1966	5.66	755
1952	September 1, 1952	6.80	1,160	1967	June 23, 1967	4.25	410
1953	November 20, 1952	5.74	770	1968	May 27, 1968	4.92	540
1954	March 1, 1954	6.06	890	1969	March 25, 1969	6.34	960
1955	April 14, 1955	7.28	1,320	1970	August 19, 1970	4.87	534
1956	October 14, 1955	5.54	725	1971	May 30, 1971	6.23	932
1957	September 17, 1957	6.45	1,000	1972	June 21, 1972	8.03	1,720
1958	January 25, 1958	5.49	710	1973	October 5, 1972	6.24	936

**Table 396. 02051000 North Meherrin River near Lunenburg, Va.**

LOCATION.--Latitude 36°59'50", Longitude 078°21'00", NAD27, Lunenburg County, Hydrologic Unit 03010204, on right bank at upstream side of bridge on State Highway 40, 0.5 mi downstream from Tusekiah Creek, 4.6 mi upstream from Juniper Creek, and 5.2 mi northwest of Lunenburg.

DRAINAGE AREA.--56.0 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 333.7 ft NGVD of 1929 (levels by U.S. Army Corps of Engineers). Prior to July 5, 1951, nonrecording gage at site 20 ft downstream at present datum. July 5, 1951, to July 11, 1980, water-stage recorder at site 20 ft downstream at present datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 1,700 ft<sup>3</sup>/s and extended above on basis of slope-area measurement at 14,000 ft<sup>3</sup>/s.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Subsequent to June 30, 1957, records were provided by the Virginia Department of Environmental Quality - Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1940	August 1940	48.00 <sup>1</sup>		1977	September 9, 1977	16.80 <sup>1</sup>	3,120
1947	September 25, 1947	15.00 <sup>1</sup>	2,480	1978	April 26, 1978	21.64 <sup>1</sup>	5,500
1948	February 14, 1948	17.00 <sup>1</sup>	2,890	1979	September 22, 1979	26.94 <sup>1</sup>	11,800
1949	November 28, 1948	14.00 <sup>1</sup>	2,240	1980	October 3, 1979	19.72 <sup>1</sup>	4,300
1950	October 31, 1949	18.25 <sup>1</sup>	3,340	1982	July 13, 1982	15.37	2,680
1951	July 16, 1951	7.20 <sup>1</sup>	808	1983	April 16, 1983	18.40	3,700
1952	April 27, 1952	17.00 <sup>1</sup>	3,000	1984	March 29, 1984	15.63	2,750
1953	November 20, 1952	16.15 <sup>1</sup>	2,790	1985	February 1, 1985		780 <sup>2</sup>
1954	April 16, 1954	15.13 <sup>1</sup>	2,500	1986	November 4, 1985	15.42	2,690
1955	April 14, 1955	19.70 <sup>1</sup>	3,800	1987	April 17, 1987	9.64	1,410
1956	October 14, 1955	15.50 <sup>1</sup>	2,610	1988	August 29, 1988	6.87	847
1957	September 17, 1957	20.80 <sup>1</sup>	4,160	1989	June 6, 1989	16.15	2,900
1958	January 25, 1958	14.86 <sup>1</sup>	2,560	1990	May 29, 1990	11.59	1,840
1959	December 29, 1958	16.76 <sup>1</sup>	3,090	1991	March 18, 1991	7.97	1,070
1960	February 18, 1960	16.55 <sup>1</sup>	3,030	1992	March 7, 1992	6.85	843
1961	February 23, 1961	17.05 <sup>1</sup>	3,150	1993	April 16, 1993	16.41	2,990
1962	January 6, 1962	19.75 <sup>1</sup>	3,990	1994	April 16, 1994	8.86	1,210
1963	March 6, 1963	14.68 <sup>1</sup>	2,520	1995	June 29, 1995	6.87	819
1964	February 6, 1964	13.13 <sup>1</sup>	2,170	1996	September 6, 1996	22.94	6,390
1965	February 7, 1965	15.46 <sup>1</sup>	2,710	1997	April 28, 1997	13.71	2,280 <sup>3</sup>
1966	March 1, 1966	11.18 <sup>1</sup>	1,750	1998	March 19, 1998	19.34	4,240
1967	February 20, 1967	9.90 <sup>1</sup>	1,460	1999	September 16, 1999	15.89	3,120
1968	June 10, 1968	16.72 <sup>1</sup>	3,060	2000	April 18, 2000	17.15	3,490
1969	March 25, 1969	16.10 <sup>1</sup>	2,880	2001	March 30, 2001	16.49	3,300
1970	July 9, 1970	11.70 <sup>1</sup>	1,860	2002	May 3, 2002	6.95	873

1971	May 16, 1971	15.85 <sup>1</sup>	2,800	2003	September 19, 2003	23.86	7,180
1972	October 23, 1971	28.30 <sup>1</sup>	14,400	2004	August 30, 2004	26.28	10,200
1973	February 2, 1973	18.90 <sup>1</sup>	3,920	2005	July 8, 2005	15.97	3,150
1974	September 7, 1974	18.95 <sup>1</sup>	3,950	2006	December 16, 2005	10.53	1,690
1975	March 30, 1975	21.95 <sup>1</sup>	5,660	2007	January 1, 2007	17.26	3,520

---

<sup>1</sup>Gage height at different site and (or) datum.

<sup>2</sup>Discharge is a maximum daily average.

<sup>3</sup>Discharge is an estimate.

**Table 397. 02051400 Saddletree Creek near Lawrenceville, Va.**

LOCATION.--Latitude 36°43'51", Longitude 077°54'39", NAD27, Brunswick County, Hydrologic Unit 03010204, at culvert on U.S. Highway 58, 1.3 mi upstream from mouth, and 4.3 mi west of Lawrenceville.

DRAINAGE AREA.--0.87 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 220 ft NGVD of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Records were provided by the U.S. Department of Agriculture, Soil Conservation Service.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1958	May 6, 1958	2.67	104	1968	June 17, 1968	1.44	46.0
1959	July 10, 1959	2.04	73.0	1969	August 5, 1969	1.09	25.0
1960	February 18, 1960	1.23	36.0	1970	July 23, 1970	4.95	370
1961	June 7, 1961	2.98	120	1971	February 6, 1971	1.36	42.0
1962	June 20, 1962	1.39	43.0	1972	March 20, 1972	5.82	332
1963	March 6, 1963	2.49	95.0	1973	October 5, 1972	7.96	610
1964	August 31, 1964	2.66	104	1974	September 6, 1974	1.64	55.0
1965	August 25, 1965	0.95	16.0	1975	September 26, 1975	2.28	86.0
1966	August 4, 1966	1.10	26.0	1976	February 2, 1976	1.15	30.0
1967	May 7, 1967	0.89	13.0				

**Table 398. 02051500 Meherrin River near Lawrenceville, Va.**

LOCATION.--Latitude 36°43'00", Longitude 077°49'55", NAD27, Brunswick County, Hydrologic Unit 03010204, on right bank 50 ft upstream from Gholson Bridge on State Highway 715, 0.6 mi upstream from Allen Creek, and 3.0 mi southeast of Lawrenceville.

DRAINAGE AREA.--552 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 136.56 ft NGVD of 1929. Prior to Nov. 17, 1931, nonrecording gage at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 19,000 ft<sup>3</sup>/s and extended above on basis of velocity-area studies and record for Nottoway River near Stony Creek.

BANKFULL STAGE.--15 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Information for floods prior to 1929 derived from data reported in Congressional documents: 71st Cong., 2nd Sess., H. Doc. 446, Meherrin River (1930). Discharges shown are based on the assumption that no shift in the rating curve occurred other than defined in subsequent years. The flood of Aug. 17, 1940 is the highest known since at least 1873.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1889	June 2, 1889	31.20	18,000 <sup>1</sup>	1967	February 22, 1967	15.83	4,670
1908	August 28, 1908	31.90	19,000 <sup>1</sup>	1968	May 29, 1968	17.21	5,360
1928	April 27, 1928	25.00	10,000	1969	March 8, 1969	16.27	4,880
1929	March 6, 1929	22.10	6,990	1970	July 11, 1970	14.12	3,870
1930	October 3, 1929	22.66	7,270	1971	June 1, 1971	19.58	6,570
1931	April 7, 1931	15.88	4,320	1972	October 26, 1971	31.24	17,700
1932	March 7, 1932	23.42	8,600	1973	October 7, 1972	32.99	20,000
1933	April 18, 1933	17.98	5,200	1974	September 8, 1974	24.71	10,400
1934	March 6, 1934	19.63	5,880	1975	July 16, 1975	26.09	11,800
1935	December 1, 1934	24.17	9,420	1976	January 29, 1976	20.74	7,290
1936	January 21, 1936	25.84	11,200	1977	October 22, 1976	16.65	5,080
1937	April 27, 1937	30.92	17,300	1978	April 28, 1978	31.91	18,600
1938	July 27, 1938	28.70	14,500	1979	February 27, 1979	28.89	14,800
1939	August 30, 1939	20.95	6,480	1980	October 2, 1979	25.32	11,000
1940	August 17, 1940	42.00	38,000	1981	June 8, 1981	15.54	4,550
1941	November 16, 1940	17.02	4,450	1982	May 26, 1982	15.76	4,650
1942	August 10, 1942	15.65	3,970	1983	April 17, 1983	23.42	9,370
1943	February 7, 1943	18.36	4,970	1984	February 15, 1984	24.74	10,400
1944	September 21, 1944	18.15	4,890	1985	January 5, 1985	21.71	8,070
1945	July 19, 1945	26.40	11,800	1986	November 5, 1985	28.98	15,000
1946	February 12, 1946	18.70	6,190	1987	April 18, 1987	28.26	14,100
1947	September 27, 1947	19.10	5,280	1988	January 21, 1988	11.96	2,980
1948	February 16, 1948	22.37	7,660	1989	February 23, 1989	19.51	6,610
1949	November 30, 1948	19.44	5,430	1990	January 2, 1990	18.80	6,210

1950	November 2, 1949	15.95	4,110	1991	March 31, 1991	21.83	8,160
1951	March 21, 1951	15.12	3,800	1992	March 9, 1992	19.06	6,360
1952	December 23, 1951	21.38	6,800	1993	March 5, 1993	27.39	13,200
1953	November 22, 1952	22.70	7,930	1994	March 4, 1994	24.60	10,300
1954	March 2, 1954	15.70	4,350	1995	March 10, 1995	15.47	4,510
1955	August 20, 1955	25.30	10,600	1996	September 8, 1996	27.71	13,500
1956	October 2, 1955	18.88	5,560	1997	April 30, 1997	23.91	9,760
1957	February 2, 1957	18.53	6,060	1998	March 21, 1998	28.39	14,300
1958	May 8, 1958	24.09	9,890	1999	September 17, 1999	29.97	16,200
1959	December 31, 1958	22.67	8,660	2000	April 19, 2000	18.15	5,860
1960	November 26, 1959	21.90	8,030	2001	March 31, 2001	22.89	8,960
1961	February 9, 1961	16.75	5,150	2002	March 19, 2002	10.93	2,570
1962	January 8, 1962	25.3	11,000	2003	May 28, 2003	30.25	16,500
1963	March 8, 1963	20.77	7,280	2004	September 1, 2004	28.04	13,900
1964	February 7, 1964	14.98	4,300	2005	March 29, 2005	17.13	5,320
1965	February 9, 1965	18.95	6,250	2006	July 6, 2006	19.58	6,650
1966	June 18, 1966	19.17	6,360	2007	October 9, 2006	22.31	8,520

---

<sup>1</sup>Discharge is a historic peak.

**Table 399. 02051600 Great Creek near Cochran, Va.**

LOCATION.--Latitude 36°48'46", Longitude 077°55'19", NAD27, Brunswick County, Hydrologic Unit 03010204, on left bank at upstream side of bridge on State Highway 763, 1.4 mi southwest of Cochran, and 9.5 mi upstream from Roses Creek.

DRAINAGE AREA.--30.8 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 215.72 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 3,600 ft<sup>3</sup>/s and extended above on basis of contracted-opening measurement at 4,800 ft<sup>3</sup>/s and 7,130 ft<sup>3</sup>/s.

BANKFULL STAGE.--6 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Records were provided by the Virginia Department of Environmental Quality - Water Division from May 20, 1958, to Dec. 31, 1986.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1958	May 6, 1958	7.62	580	1977	October 21, 1976	6.43	322
1959	July 10, 1959	14.57	4,810	1978	April 27, 1978	13.58	3,500
1960	November 25, 1959	10.51	1,660	1979	September 30, 1979	13.18	3,170
1961	February 8, 1961	7.85	620	1980	November 12, 1979	11.08	1,720
1962	January 7, 1962	12.08	2,680	1981	August 4, 1981	8.16	636
1963	March 6, 1963	8.11	690	1982	July 14, 1982	7.04	414
1964	September 1, 1964	6.44	380	1983	March 21, 1983	10.08	1,200
1965	February 8, 1965	5.34	270	1984	February 14, 1984	14.72	4,640
1966	June 17, 1966	14.58	4,700	1985	January 4, 1985	7.77	545
1967	February 21, 1967	6.64	264	1986	November 4, 1985	14.15	4,030
1968	March 13, 1968	5.98	202	1987	April 16, 1987	11.71	2,110
1969	July 24, 1969	7.71	438	1988	February 12, 1988	4.53	137
1970	July 10, 1970	9.87	1,240	1989	August 8, 1989	8.45	711
1971	May 30, 1971	7.79	551	1990	January 1, 1990	8.42	702
1972	June 22, 1972	15.34	5,470	1991	March 30, 1991	7.59	509
1973	October 6, 1972	16.65	7,100	1992	March 7, 1992	6.74	370
1974	September 7, 1974	9.40	1,020	1993	March 4, 1993	10.84	1,590
1975	July 14, 1975	11.75	2,140	1994	March 2, 1994	9.59	1,050
1976	January 28, 1976	6.86	392	1995	July 11, 1995	5.93	263

**Table 400.** 02051650 Rocky Run near Dolphin, Va.

LOCATION.--Latitude 36°47'35", Longitude 077°49'35", NAD27, Brunswick County, Hydrologic Unit 03010204, at culvert on State Highway 641, 3.2 mi southwest of Dolphin.

DRAINAGE AREA.--1.42 mi<sup>2</sup>.

GAGE.--Water-stage recorder (flood-hydrograph recorder). Datum of gage is 255 ft NGVD of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert and flow over road.

BANKFULL STAGE.--5 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1966	June 17, 1966	9.25	275	1971	May 30, 1971	6.18	117
1967	February 18, 1967	4.45	50.0	1972	October 22, 1971	6.30	122
1968	January 14, 1968	5.90	108	1973	October 5, 1972	9.65	315
1969	July 24, 1969	7.10	155	1974	July 26, 1974	6.52	131
1970	July 10, 1970	5.10	74.0	1975	July 14, 1975	7.84	192

**Table 401. 02051700 Rocky Run at Lawrenceville, Va.**

LOCATION.--Latitude 36°46'14", Longitude 077°50'28", NAD27, Brunswick County, Hydrologic Unit 03010204, at culvert on State Highway 642, 0.4 mi northeast of Lawrenceville.

DRAINAGE AREA.--6.13 mi<sup>2</sup>.

GAGE.--Water-stage recorder (flood-hydrograph recorder). Datum of gage is 181.06 ft NGVD of 1929. Prior to May 1964, nonrecording gage (crest-stage gage) at site 25 ft upstream at different datum.

STAGE-DISCHARGE RELATION.--Not developed.

BANKFULL STAGE.--6 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Insufficient field data available to develop stage-discharge rating at either location.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1954	April 16, 1954	5.63 <sup>1</sup>		1967	February 18, 1967	5.95	
1955	August 18, 1955	4.87 <sup>1</sup>		1968	January 14, 1968	6.42	
1956	October 14, 1955	3.28 <sup>1</sup>		1969	February 23, 1969	6.45	
1957	October 28, 1956	6.25 <sup>1</sup>		1970	July 3, 1970	7.30	
1958	May 7, 1958	6.20 <sup>1</sup>		1971	May 30, 1971	6.85	
1959	December 29, 1958	6.17 <sup>1</sup>		1972	October 22, 1971	7.07	
1960	December 12, 1959	5.70 <sup>1</sup>		1973	October 5, 1972	18.00	
1961	February 9, 1961	6.21 <sup>1</sup>		1974	September 7, 1974	6.75	
1962	June 27, 1962	5.85 <sup>1</sup>		1975	July 14, 1975	7.67	
1963	March 6, 1963	6.31 <sup>1</sup>					

<sup>1</sup>Gage height at different site and (or) datum.

**Table 402. 02052000 Meherrin River at Emporia, Va.**

LOCATION.--Latitude 36°41'24", Longitude 077°32'27", NAD27, Emporia City, Hydrologic Unit 03010204, on left bank at downstream side of bridge on U.S. Highway 301 and 1.2 mi upstream from Falling Run.

DRAINAGE AREA.--744 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 67.17 ft NGVD of 1929 (levels by U.S. Army Corps of Engineers).

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 18,000 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--13 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Subsequent to June 30, 1957, records were provided by the Virginia Department of Environmental Quality - Water Division. Flood of August 1940 is the highest known since at least 1873.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1908	August 28, 1908	28.00		1978	April 29, 1978	26.62	19,400
1912	March 1912	25.00		1979	February 27, 1979	25.34	16,600
1928	April 27, 1928	26.00		1980	October 3, 1979	22.60	11,100
1940	August 17, 1940	31.50	40,000 <sup>1</sup>	1981	June 9, 1981	16.70	4,790
1951	March 21, 1951	16.90	5,100	1982	May 26, 1982	16.38	4,940
1952	December 23, 1951	20.60	9,410	1983	April 18, 1983	21.70	9,360
1953	November 23, 1952	21.90	11,200	1984	February 16, 1984	23.96	13,800
1954	May 21, 1954	17.63	5,860	1985	January 6, 1985	20.84	8,570
1955	August 21, 1955	22.80	12,600	1986	November 6, 1985	25.74	17,500
1956	October 3, 1955	19.07	7,520	1987	April 18, 1987	25.29	16,600
1957	February 3, 1957	19.78	7,580	1988	January 21, 1988	13.85	3,800
1958	May 8, 1958	22.76	12,100	1989	February 24, 1989	19.69	7,390
1959	December 31, 1958	21.18	9,400	1990	January 3, 1990	19.36	7,060
1960	November 27, 1959	20.70	8,710	1991	April 1, 1991	20.49	8,190
1961	February 10, 1961	19.02	6,700	1992	March 9, 1992	19.40	7,100
1962	January 9, 1962	23.17	12,900	1993	March 7, 1993	24.11	14,100
1963	March 8, 1963	20.47	8,450	1994	March 5, 1994	22.41	10,700
1964	February 8, 1964	16.30	4,210	1995	March 10, 1995	17.47	5,250
1965	February 10, 1965	19.34	7,030	1996	September 9, 1996	24.06	13,400
1966	June 19, 1966	19.72	7,470	1997	May 1, 1997	22.08	9,870
1967	February 22, 1967	17.50	5,200	1998	March 22, 1998	24.96	16,000
1968	January 16, 1968	18.52	6,200	1999	September 16, 1999	26.33	18,800
1969	March 9, 1969	18.13	5,800	2000	April 20, 2000	19.81	7,960
1970	July 11, 1970	16.52	5,400	2001	April 1, 2001	22.04	8,310
1971	June 1, 1971	19.96	7,800	2002	March 19, 2002	12.92	3,260
1972	October 26, 1971	26.59	19,400	2003	May 29, 2003	25.56	17,200
1973	October 8, 1972	27.38	21,100	2004	September 2, 2004	24.43	14,600
1974	September 9, 1974	21.95	10,000	2005	December 12, 2004	20.85	8,170

1975	July 17, 1975	25.09	16,200	2006	July 6, 2006	21.69	10,500
1976	January 29, 1976	20.40	8,100	2007	October 9, 2006	21.41	9,230
1977	October 22, 1976	17.83	5,640				

---

<sup>1</sup>Discharge is a historic peak.

**Table 403. 02052500 Fountains Creek near Brink, Va.**

(Formerly published as Fontaine Creek near Brink.)

LOCATION.--Latitude 36°36'55", Longitude 077°42'00", NAD27, Greenville County, Hydrologic Unit 03010204, on left bank 30 ft upstream from bridge on State Highway 603, 0.3 mi downstream from Quarrel Creek, 3.6 mi west of Brink, and 10 mi southwest of Emporia.

DRAINAGE AREA.--68.7 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 152.59 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 3,000 ft<sup>3</sup>/s and extended above on basis of slope-area measurement at 16,000 ft<sup>3</sup>/s.

BANKFULL STAGE.--12 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Subsequent to June 30, 1957, records were provided by the Virginia Department of Environmental Quality - Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1940	August 1940	18.50	2,720 <sup>1,2</sup>	1975	July 14, 1975	18.90	4,920
1954	April 27, 1954	12.49	1,320	1976	January 28, 1976	12.88	1,420
1955	August 18, 1955	13.71	1,620	1977	October 21, 1976	11.42	1,060
1956	October 2, 1955	11.36	1,040	1978	April 27, 1978	18.75	4,760
1957	February 1, 1957	14.37	1,940	1979	February 25, 1979	15.36	2,300
1958	May 7, 1958	18.18	2,660	1980	October 1, 1979	12.82	1,400
1959	December 29, 1958	13.42	1,590	1981	February 11, 1981	5.90	200
1960	July 30, 1960	11.30	980	1982	February 18, 1982	8.87	575
1961	February 9, 1961	10.22	771	1983	April 16, 1983	14.37	1,840
1962	January 7, 1962	15.56	2,340	1984	February 14, 1984	18.71	4,630
1963	March 7, 1963	12.78	1,380	1985	January 4, 1985	10.78	888
1964	January 10, 1964	7.70	357	1986	November 5, 1985	18.02	4,020
1965	October 5, 1964	9.39	612	1987	January 20, 1987	16.34	2,870
1966	March 5, 1966	9.29	632	1988	February 12, 1988	8.11	394
1967	August 24, 1967	16.36	2,430	1989	March 25, 1989	12.17	1,230
1968	January 14, 1968	11.02	970	1990	February 17, 1990	12.60	1,340
1969	August 5, 1969	16.50	2,460	1991	March 30, 1991	11.94	1,170
1970	February 18, 1970	9.71	634	1992	March 7, 1992	13.52	1,580
1971	May 31, 1971	10.80	881	1993	March 4, 1993	17.97	3,980
1972	October 24, 1971	16.68	2,530	1994	March 3, 1994	17.33	3,510
1973	October 6, 1972	24.14	16,000	1995	March 9, 1995	15.28	2,260
1974	August 7, 1974	11.08	992	1996	September 6, 1996	16.78	3,140

<sup>1</sup>Discharge is a historic peak.

<sup>2</sup>Month or day of occurrence is unknown or not exact.

**Table 404.** 02053000 Fontaine Creek near Emporia, Va.

LOCATION.--Latitude 36°38'10", Longitude 077°35'10", NAD27, Greenville County, Hydrologic Unit 03010204, near center of span on upstream side of highway bridge, 4.4 mi southwest of Emporia, and 7.1 mi upstream from Cattail Creek.

DRAINAGE AREA.--95.9 mi<sup>2</sup>.

GAGE.--Nonrecording gage (chain gage). Datum of gage is 98 ft NGVD of 1929, by barometer. Additional crest-stage gage installed May 29, 1951, at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 2,000 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1945	July 19, 1945	10.58	3,500	1950	September 13, 1950	6.26	1,220
1946	May 27, 1946	9.50	2,840	1951	August 5, 1951	4.60	520
1947	January 21, 1947	4.17	354	1952	April 27, 1952	7.90	2,010
1948	February 15, 1948	7.32	1,660	1953	March 26, 1953	6.00	1,080
1949	December 1, 1948	6.12	1,120				

## South Atlantic Slope Basin: Roanoke River Basin

**Table 405.** 02053800 South Fork Roanoke River near Shawsville, Va.

LOCATION.--Latitude 37°08'24", Longitude 080°16'00", NAD27, Montgomery County, Hydrologic Unit 03010101, on right bank 95 ft downstream from bridge on State Highway 637, 0.3 mi downstream from Georges Run, 1.3 mi downstream from Elliot Creek, and 2.0 mi southwest of Shawsville.

DRAINAGE AREA.--109 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 1,361.87 ft NGVD of 1929. Prior to Aug. 26, 1974, water-stage recorder at site 95 ft upstream at present datum. Aug. 26, 1974, to July 24, 1975, nonrecording gage at site 95 ft upstream at present datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 3,700 ft<sup>3</sup>/s and extended above on basis of slope-area measurement at 14,200 ft<sup>3</sup>/s.

BANKFULL STAGE.--5 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Records were provided by the Virginia Department of Environmental Quality - Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1959	September 30, 1959	9.89 <sup>1</sup>		1984	February 14, 1984	4.70	1,980
1961	May 11, 1961	4.33 <sup>1</sup>	1,380	1985	August 18, 1985	7.07	3,980
1962	March 12, 1962	3.87 <sup>1</sup>	1,160	1986	November 4, 1985	8.81	7,070
1963	November 10, 1962	4.93 <sup>1</sup>	2,140	1987	April 25, 1987	6.02	4,690
1964	August 31, 1964	3.21 <sup>1</sup>	970	1988	January 20, 1988	1.87	411
1965	March 26, 1965	4.24 <sup>1</sup>	1,700	1989	September 22, 1989	8.05	8,110
1966	February 13, 1966	4.02 <sup>1</sup>	1,530	1990	November 16, 1989	4.66	2,960
1967	March 7, 1967	6.35 <sup>1</sup>	3,840	1991	October 23, 1990	3.47	1,600
1968	March 12, 1968	2.60 <sup>1</sup>	736	1992	April 21, 1992	8.15	8,300
1969	October 19, 1968	5.95 <sup>1</sup>	3,020	1993	March 24, 1993	5.93	4,570
1970	December 31, 1969	3.33 <sup>1</sup>	1,120	1994	August 17, 1994	5.44	3,910
1971	June 6, 1971	3.01 <sup>1</sup>	921	1995	January 15, 1995	6.75	5,790
1972	June 21, 1972	11.12 <sup>1</sup>	14,200	1996	September 6, 1996	8.88	9,690
1973	May 28, 1973	7.44 <sup>1</sup>	4,500	1997	November 8, 1996	5.05	2,640
1974	April 4, 1974	4.51 <sup>1</sup>	1,840	1998	March 20, 1998	6.39	4,030
1975	March 14, 1975	7.10 <sup>1</sup>	4,020	1999	September 5, 1999	5.61	3,210
1976	June 17, 1976	5.08	2,300	2000	April 18, 2000	3.23	1,190
1977	April 5, 1977	6.62	3,520	2001	March 30, 2001	3.28	1,230
1978	April 26, 1978	7.72	4,860	2002	May 2, 2002	5.56	3,160
1979	September 21, 1979	9.27	8,380	2003	February 22, 2003	8.66	7,090
1980	April 14, 1980	4.82	2,080	2004	September 28, 2004	8.86	7,390
1981	May 28, 1981	2.77	682	2005	January 14, 2005	4.19	1,730
1982	February 3, 1982	4.55	1,870	2006	June 27, 2006	7.32	5,180

1983	April 10, 1983	7.79	4,990	2007	November 16, 2006	4.06	1,810
------	----------------	------	-------	------	-------------------	------	-------

---

<sup>1</sup>Gage height at different site and (or) datum.

**Table 406. 02054500 Roanoke River at Lafayette, Va.**

LOCATION.--Latitude 37°14'11", Longitude 080°12'34", NAD27, Montgomery County, Hydrologic Unit 03010101, on right bank 120 ft upstream from bridge on State Highway 603 at Lafayette, 0.4 mi downstream from confluence of North and South Forks, and 1.1 mi upstream from Cove Hollow.

DRAINAGE AREA.--254 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 1,174.47 ft NGVD of 1929. Prior to July 30, 1949, nonrecording gage at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 11,400 ft<sup>3</sup>/s and extended above on basis of slope-area measurement at 24,500 ft<sup>3</sup>/s.

BANKFULL STAGE.--6 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Subsequent to June 30, 1957, records were provided by the Virginia Department of Environmental Quality - Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1940	August 1940	12.20	19,000 <sup>12</sup>	1976	June 17, 1976	6.06	4,120
1944	February 18, 1944	7.50	6,500	1977	April 5, 1977	9.18	8,850
1945	September 18, 1945	10.00	10,400	1978	April 26, 1978	12.12	14,500
1946	February 10, 1946	8.00	7,200	1979	September 22, 1979	10.75	11,800
1947	January 20, 1947	8.00	7,200	1980	April 14, 1980	7.20	5,690
1948	August 4, 1948	11.00	13,200	1981	June 7, 1981	3.74	1,520
1949	December 4, 1948	10.50	11,500	1982	February 3, 1982	7.27	4,510
1950	July 12, 1950	8.23	6,600	1983	April 10, 1983	10.21	9,400
1951	December 7, 1950	9.38	8,800	1984	February 14, 1984	6.99	4,160
1952	September 1, 1952	8.10	6,430	1985	August 18, 1985	8.65	6,510
1953	March 24, 1953	8.00	6,260	1986	November 4, 1985	13.34	17,100
1954	March 1, 1954	6.05	3,250	1987	April 25, 1987	9.78	8,540
1955	October 15, 1954	7.91	6,090	1988	January 20, 1988	3.07	1,050
1956	April 16, 1956	6.66	4,200	1989	September 22, 1989	10.73	10,500
1957	January 29, 1957	9.02	8,000	1990	November 16, 1989	7.84	5,290
1958	July 13, 1958	6.77	4,200	1991	January 11, 1991	7.00	4,170
1959	September 30, 1959	11.56	15,600	1992	April 21, 1992	13.09	16,400
1960	February 11, 1960	6.11	4,110	1993	March 24, 1993	9.61	8,200
1961	May 11, 1961	4.66	2,560	1994	December 5, 1993	8.83	6,810
1962	December 18, 1961	6.76	4,940	1995	January 15, 1995	8.90	6,930
1963	November 10, 1962	7.70	6,040	1996	September 6, 1996	11.61	12,600
1964	April 14, 1964	5.13	3,010	1997	December 1, 1996	8.29	6,220
1965	March 26, 1965	6.54	4,580	1998	March 20, 1998	9.14	7,730
1966	February 13, 1966	6.57	4,120	1999	September 5, 1999	7.01	4,250

1967	March 7, 1967	8.52	6,830	2000	April 18, 2000	7.46	4,900
1968	March 12, 1968	5.04	2,320	2001	March 30, 2001	5.54	2,710
1969	October 19, 1968	7.53	5,380	2002	May 3, 2002	6.98	4,230
1970	December 31, 1969	5.62	2,900	2003	February 22, 2003	12.69	15,800
1971	May 30, 1971	5.97	3,350	2004	September 28, 2004	12.45	15,200
1972	June 21, 1972	15.60	24,500	2005	March 28, 2005	7.29	4,650
1973	May 28, 1973	9.78	9,020	2006	June 27, 2006	9.63	8,670
1974	April 4, 1974	6.37	3,860	2007	November 16, 2006	5.93	3,080
1975	March 14, 1975	9.46	9,360				

---

<sup>1</sup>Discharge is a historic peak.

<sup>2</sup>Month or day of occurrence is unknown or not exact.

**Table 407. 02054510 Roanoke River near Wabun, Va.**

LOCATION.--Latitude 37°14'48", Longitude 080°09'55", NAD27, Roanoke County, Hydrologic Unit 03010101, on right bank 150 ft downstream from mouth of Dry Hollow, 0.7 mi downstream from bridge on State Highway 5800, 3 mi upstream from Dry Branch, and 5.9 mi southwest of Salem.

DRAINAGE AREA.--270 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 1,140 ft NGVD of 1929, from topographic map.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Records were provided by the Virginia Department of Environmental Quality - Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1995	January 15, 1995	9.91	9,860	1998	March 20, 1998	10.19	10,600
1996	September 6, 1996	12.45	15,900	1999	September 5, 1999	7.72	4,950
1997	December 1, 1996	9.12	7,890				

**Table 408. 02054530 Roanoke River at Glenvar, Va.**

LOCATION.--Latitude 37°16'04", Longitude 080°08'23", NAD27, Roanoke County, Hydrologic Unit 03010101, on left bank 150 ft downstream from bridge on State Highway 1154, 0.2 mi downstream from mouth of Callahan Branch, 0.3 mi south of Glenvar, and 2.5 mi upstream from mouth of Mill Creek.

DRAINAGE AREA.--281 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 1,100 ft NGVD of 1929, from topographic map.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Records were provided by the Virginia Department of Environmental Quality - Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1992	April 21, 1992	17.73	19,800	2000	April 18, 2000	9.96	6,540
1993	March 24, 1993	13.46	12,300	2001	March 30, 2001	7.81	3,820
1994	December 5, 1993	11.76	9,500	2002	May 3, 2002	9.90	6,450
1995	January 15, 1995	12.22	10,200	2003	February 22, 2003	17.61	19,600
1996	September 6, 1996	15.59	15,900	2004	September 28, 2004	17.43	19,200
1997	December 1, 1996	10.93	8,020	2005	March 28, 2005	9.62	6,050
1998	March 20, 1998	12.93	11,400	2006	June 27, 2006	13.30	12,000
1999	September 5, 1999	8.88	5,050	2007	November 16, 2006	7.78	3,790

**Table 409. 02055000 Roanoke River at Roanoke, Va.**

LOCATION.--Latitude 37°15'30", Longitude 079°56'20", NAD27, Roanoke City, Hydrologic Unit 03010101, on left bank 50 ft downstream from Walnut Street Bridge, 3.2 mi upstream from Tinker Creek, and at mile 360.6.

DRAINAGE AREA.--384 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 906.84 ft NGVD of 1929 (levels by U.S. Army Corps of Engineers). Prior to June 7, 1937, nonrecording gage on downstream side of highway bridge 50 ft upstream at present datum.

STAGE-DISCHARGE RELATION.-- Defined by current-meter measurements below 25,000 ft<sup>3</sup>/s and extended above on basis of slope-area measurement at 26,000 ft<sup>3</sup>/s.

BANKFULL STAGE.-- 10 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1878	November 1877	16.00 <sup>1</sup>	20,300 <sup>2,3,4</sup>	1953	March 24, 1953	8.79	7,220
1899	March 4, 1899	10.00 <sup>1</sup>	11,000	1954	March 1, 1954	6.69	4,770
1900	March 20, 1900	5.60 <sup>1</sup>	5,060	1955	October 15, 1954	7.80	5,960
1901	May 22, 1901	15.00 <sup>1</sup>	19,000	1956	April 16, 1956	6.16	4,270
1902	February 25, 1902	13.20 <sup>1</sup>	15,300	1957	January 29, 1957	9.20	8,900
1903	February 17, 1903	9.40 <sup>1</sup>	10,200	1958	May 6, 1958	7.21	5,760
1904	August 10, 1904	4.00 <sup>1</sup>	2,900	1959	September 30, 1959	13.28	14,900
1905	July 12, 1905	12.80 <sup>1</sup>	14,800	1960	February 11, 1960	6.92	5,180
1906	December 20, 1905	5.20 <sup>1</sup>	4,520	1961	May 11, 1961	5.91	3,980
1907	September 23, 1907	9.20 <sup>1</sup>	9,920	1962	December 18, 1961	7.80	6,340
1908	January 12, 1908	10.60 <sup>1</sup>	11,800	1963	November 10, 1962	9.26	8,450
1909	October 24, 1908	9.00 <sup>1</sup>	9,660	1964	April 14, 1964	5.76	3,870
1910	June 13, 1910	8.80 <sup>1</sup>	9,380	1965	March 26, 1965	7.32	5,690
1911	April 5, 1911	4.10 <sup>1</sup>	3,040	1966	February 13, 1966	7.25	5,560
1912	May 12, 1912	8.50 <sup>1</sup>	8,980	1967	March 7, 1967	10.93	11,000
1913	March 14, 1913	8.60 <sup>1</sup>	9,120	1968	March 13, 1968	5.82	3,890
1914	January 9, 1914	3.90 <sup>1</sup>	2,780	1969	October 19, 1968	9.83	9,240
1915	December 5, 1914	10.00 <sup>1</sup>	11,000	1970	December 31, 1969	6.98	5,280
1916	December 18, 1915	7.80 <sup>1</sup>	8,040	1971	May 30, 1971	6.84	5,110
1917	March 5, 1917	6.60 <sup>1</sup>	6,420	1972	June 21, 1972	19.61	25,300
1918	June 26, 1918	8.20 <sup>1</sup>	6,440	1973	May 28, 1973	12.31	13,000
1919	January 3, 1919	8.40 <sup>1</sup>	6,700	1974	April 4, 1974	6.53	4,740
1920	February 4, 1920	6.20 <sup>1</sup>	4,270	1975	March 14, 1975	11.96	12,400
1921	November 30, 1920	3.50 <sup>1</sup>	1,700	1976	June 17, 1976	5.80	3,870
1922	November 1, 1921	13.20 <sup>1</sup>	14,100	1977	April 5, 1977	11.01	11,000
1923	March 7, 1923	7.40 <sup>1</sup>	5,510	1978	April 27, 1978	18.95	24,100
1924	September 29, 1924	10.50 <sup>1</sup>	9,600	1979	September 22, 1979	11.62	11,900
1925	January 18, 1925	3.00 <sup>1</sup>	1,300	1980	April 14, 1980	9.79	9,180

1926	January 17, 1926	4.10 <sup>1</sup>	2,240	1981	September 4, 1981	4.87	2,930
1927	December 26, 1926	10.00 <sup>1</sup>	8,900	1982	February 3, 1982	7.97	6,560
1928	August 16, 1928	18.10 <sup>1</sup>	22,600	1983	April 10, 1983	12.53	13,300
1929	March 5, 1929	7.10 <sup>1</sup>	5,180	1984	February 14, 1984	8.16	6,820
1930	October 2, 1929	11.50 <sup>1</sup>	11,100	1985	August 18, 1985	11.32	11,400
1931	August 22, 1931	5.40 <sup>1</sup>	3,470	1986	November 4, 1985	23.35	32,300
1932	February 3, 1932	4.10 <sup>1</sup>	2,240	1987	April 25, 1987	13.56	14,900
1933	October 17, 1932	13.10 <sup>1</sup>	13,900	1988	January 20, 1988	3.31	1,460
1934	March 28, 1934	8.30 <sup>1</sup>	6,570	1989	September 23, 1989	11.63	11,900
1935	January 23, 1935	11.70 <sup>1</sup>	11,400	1990	November 16, 1989	7.74	6,250
1936	March 18, 1936	11.00 <sup>1</sup>	10,400	1991	January 11, 1991	7.77	6,290
1937	August 30, 1937	10.15	9,180	1992	April 22, 1992	18.09	22,000
1938	October 19, 1937	10.84	10,000	1993	March 24, 1993	11.80	11,000
1939	August 19, 1939	9.67	8,480	1994	December 5, 1993	9.94	8,410
1940	August 14, 1940	18.25	22,800	1995	January 15, 1995	11.66	10,800
1941	July 8, 1941	5.84	3,910	1996	September 6, 1996	13.86	14,400
1942	May 22, 1942	7.38	5,740	1997	December 1, 1996	9.07	7,210
1943	April 19, 1943	7.50	5,870	1998	March 21, 1998	13.01	12,900
1944	February 18, 1944	6.65	4,750	1999	September 6, 1999	5.97	3,600
1945	September 18, 1945	13.70	15,100	2000	April 18, 2000	7.82	5,620
1946	February 10, 1946	7.33	5,400	2001	March 30, 2001	5.57	3,210
1947	January 20, 1947	7.77	5,960	2002	May 3, 2002	5.61	3,250
1948	August 5, 1948	11.96	11,900	2003	February 23, 2003	15.57	17,400
1949	December 4, 1948	13.68	15,100	2004	September 28, 2004	17.82	21,500
1950	May 30, 1950	8.64	6,960	2005	March 28, 2005	7.11	4,800
1951	December 8, 1950	11.15	10,600	2006	June 27, 2006	12.80	12,600
1952	September 1, 1952	8.29	6,570	2007	November 16, 2006	5.79	3,420

<sup>1</sup>Gage height at different site and (or) datum.

<sup>2</sup>Discharge is an estimate.

<sup>3</sup>Discharge is a historic peak.

<sup>4</sup>Month or day of occurrence is unknown or not exact.

**Table 410. 02055100 Tinker Creek near Daleville, Va.**

LOCATION.--Latitude 37°25'03", Longitude 079°56'08", NAD27, Botetourt County, Hydrologic Unit 03010101, on left bank 1,100 ft downstream from Norfolk and Western Railway bridge, 0.2 mi downstream from unnamed tributary, 0.5 mi south of Glebe Mills, and 1.3 mi northwest of Daleville.

DRAINAGE AREA.--11.7 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 1,217.47 ft NGVD of 1929 (Norfolk and Western Railway bench mark).

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 120 ft<sup>3</sup>/s and extended above on basis of slope-area measurement at 2,200 ft<sup>3</sup>/s and 10,000 ft<sup>3</sup>/s.

BANKFULL STAGE.--6 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1940	August 1940	9.0		1982	February 3, 1982	3.89	272
1957	April 5, 1957	3.91	245	1983	April 10, 1983	6.78	1,170
1958	May 5, 1958	5.20	580	1984	June 30, 1984	7.13	1,350
1959	September 30, 1959	4.98	520	1985	August 18, 1985	4.95	508
1960	September 1, 1960	5.52	670	1986	November 4, 1985	13.36	10,400
1961	August 25, 1961	8.52	2,180	1987	April 16, 1987	8.37	2,200
1962	August 5, 1962	5.61	700	1988	July 21, 1988	2.82	117
1963	November 9, 1962	4.53	403	1989	September 16, 1989	7.11	1,350
1964	August 31, 1964	5.65	720	1990	November 16, 1989	8.48	2,290
1965	July 7, 1965	5.62	700	1991	July 26, 1991	6.52	1,060
1966	February 13, 1966	5.60	700	1992	April 21, 1992	6.71	1,150
1967	March 7, 1967	7.90	1,820	1993	March 4, 1993	7.05	1,320
1968	March 12, 1968	4.03	286	1994	August 17, 1994	3.85	291
1969	October 19, 1968	6.23	952	1995	January 15, 1995	5.60	727
1970	July 24, 1970	4.64	426	1996	January 19, 1996	7.18	1,390
1971	February 13, 1971	5.28	604	1997	December 1, 1996	4.61	452
1972	June 21, 1972	9.82	4,000	1998	March 20, 1998	8.18	2,050
1973	May 28, 1973	9.25	3,150	1999	September 28, 1999	4.13	346
1974	July 26, 1974	9.55	3,580	2000	April 17, 2000	5.06	566
1975	March 19, 1975	5.82	788	2001	March 29, 2001	3.40	212
1976	October 18, 1975	3.84	251	2002	March 18, 2002	1.69	23
1977	October 25, 1976	4.76	458	2003	May 18, 2003	7.89	1,840
1978	November 7, 1977	5.94	836	2004	September 28, 2004	8.23	2,090
1979	September 21, 1979	9.17	3,040	2005	March 28, 2005	5.52	702
1980	April 14, 1980	7.05	1,340	2006	June 26, 2006	5.94	839
1981	July 5, 1981	2.60	87.0	2007	November 16, 2006	4.50	427

**Table 411. 02056000 Roanoke River at Niagara, Va.**

LOCATION.--Latitude 37°15'18", Longitude 079°52'18", NAD27, Roanoke City, Hydrologic Unit 03010101, on right bank 200 ft downstream from powerplant of Appalachian Power Company at Niagara, 2 mi downstream from Tinker Creek, 2.1 mi southeast of Vinton, and at mile 355.

DRAINAGE AREA.--509 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 820.15 ft NGVD of 1929 (levels by U.S. Army Corps of Engineers).

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 12,000 ft<sup>3</sup>/s and extended above on basis of slope-area measurement at 29,000 ft<sup>3</sup>/s and 52,000 ft<sup>3</sup>/s.

BANKFULL STAGE.--13 ft.

REGULATION.--High-flow conditions at this site are considered unregulated. Flow regulated by dam and powerplant, 200 ft upstream from station has minimal effect on peak flows.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1927	December 26, 1926	12.23	10,800	1968	March 13, 1968	8.53	4,440
1928	August 16, 1928	17.36	24,000	1969	October 19, 1968	13.72	13,800
1929	February 28, 1929	10.51	7,300	1970	December 31, 1969	9.89	6,250
1930	October 2, 1929	14.29	15,200	1971	May 30, 1971	10.06	6,500
1931	August 23, 1931		5,000	1972	June 21, 1972	18.98	28,800
1932	March 6, 1932	7.99	4,150	1973	May 28, 1973	15.27	17,700
1933	October 17, 1932	15.36	18,000	1974	April 4, 1974	9.63	5,880
1934	March 28, 1934	11.48	8,950	1975	March 14, 1975	15.59	18,700
1935	January 23, 1935	14.20	15,000	1976	May 29, 1976	9.37	5,520
1936	March 17, 1936	14.78	16,400	1977	April 5, 1977	14.12	14,800
1937	January 20, 1937	11.54	8,950	1978	April 27, 1978	19.12	29,300
1938	October 19, 1937	13.58	13,400	1979	September 22, 1979	14.51	15,800
1939	August 19, 1939		13,000	1980	April 14, 1980	14.55	15,900
1940	August 14, 1940	17.50	24,400	1981	September 4, 1981	8.28	4,150
1941	July 8, 1941	9.71	6,290	1982	February 3, 1982	11.17	8,340
1942	May 22, 1942	11.25	8,380	1983	April 10, 1983	15.60	18,700
1943	April 19, 1943	11.57	9,170	1984	February 14, 1984	11.75	9,410
1944	September 18, 1944	13.24	12,600	1985	August 18, 1985	14.82	16,500
1945	September 18, 1945	15.10	17,200	1986	November 4, 1985	25.30	52,300
1946	February 10, 1946	10.10	6,570	1987	April 16, 1987	16.29	20,600
1947	January 20, 1947	10.73	7,380	1988	November 29, 1987	6.09	2,010
1948	August 4, 1948	14.00	14,500	1989	September 23, 1989	14.20	14,800
1949	December 4, 1948	16.30	20,800	1990	October 2, 1989	11.37	8,710
1950	May 31, 1950	12.20	10,500	1991	January 11, 1991	12.31	10,500
1951	December 7, 1950	13.50	13,200	1992	April 21, 1992	17.95	25,500
1952	September 1, 1952	13.10	13,200	1993	March 4, 1993	15.32	17,800
1953	March 24, 1953	12.42	11,100	1994	December 5, 1993	12.69	11,300

1954	March 1, 1954	10.27	6,830	1995	January 15, 1995	14.70	16,100
1955	October 15, 1954	13.60	13,500	1996	January 19, 1996	15.73	19,000
1956	April 16, 1956	9.30	5,580	1997	December 1, 1996	12.53	11,000
1957	January 29, 1957	12.33	10,800	1998	February 4, 1998	16.06	20,000
1958	May 6, 1958	10.68	7,490	1999	September 6, 1999	9.04	5,090
1959	December 29, 1958	11.08	8,180	2000	April 18, 2000	12.92	11,800
1960	October 1, 1959	15.10	17,200	2001	March 30, 2001	9.14	5,220
1961	August 26, 1961	9.11	5,140	2002	May 3, 2002	9.61	5,860
1962	December 18, 1961	11.30	8,540	2003	February 22, 2003	16.71	21,800
1963	November 10, 1962	12.22	10,500	2004	September 28, 2004	18.62	27,600
1964	April 14, 1964	8.54	4,400	2005	March 28, 2005	11.53	9,010
1965	March 26, 1965	10.44	7,040	2006	June 27, 2006	15.69	18,900
1966	February 13, 1966	10.82	7,680	2007	November 16, 2006	10.62	7,400
1967	March 7, 1967	13.64	13,600				

---

**Table 412. 02056650 Back Creek near Dundee, Va.**

LOCATION.--Latitude 37°13'39", Longitude 079°52'06", NAD27, Roanoke City, Hydrologic Unit 03010101, on right bank 130 ft upstream from bridge on State Highway 660, 0.9 mi upstream from Horseshoe Branch, 1.1 mi southeast of Dundee, 2.8 mi west of Hardy post office, and at mile 2.4 mi.

DRAINAGE AREA.--55.8 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 822.67 ft NGVD of 1929. Prior to Apr. 4, 1975, nonrecording gage at site 80 ft downstream at present datum. Apr. 4, 1975, to Nov. 4, 1985, water-stage recorder at site 80 ft downstream at present datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 6,000 ft<sup>3</sup>/s and extended above on basis of slope-area measurement at 20,000 ft<sup>3</sup>/s.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1971	May 30, 1971	17.50 <sup>1</sup>		1991	March 4, 1991	8.14	1,440
1972	June 21, 1972	20.00 <sup>1</sup>		1992	April 21, 1992	17.20	8,720
1975	March 19, 1975	8.69 <sup>1</sup>	2,510	1993	March 4, 1993	10.14	2,540
1976	May 29, 1976	15.00 <sup>1</sup>	7,500	1994	August 17, 1994	7.48	1,160
1977	October 9, 1976	9.31 <sup>1</sup>	2,890	1995	June 18, 1995	14.97	6,390
1978	April 26, 1978	13.27 <sup>1</sup>	5,840	1996	September 6, 1996	12.10	3,890
1979	September 22, 1979	12.42 <sup>1</sup>	5,140	1997	June 2, 1997	7.88	1,330
1980	April 14, 1980	9.60 <sup>1</sup>	3,060	1998	February 4, 1998	12.16	3,940
1981	June 7, 1981	5.18 <sup>1</sup>	840	1999	September 5, 1999	6.56	812
1982	June 10, 1982	5.97 <sup>1</sup>	1,130	2000	August 1, 2000	14.20	5,640
1983	April 10, 1983	10.25 <sup>1</sup>	3,410	2001	March 30, 2001	6.65	868
1984	February 14, 1984	7.11 <sup>1</sup>	1,600	2002	May 3, 2002	5.66	562
1985	August 18, 1985	12.46 <sup>1</sup>	5,110	2003	February 22, 2003	11.03	3,770
1986	November 4, 1985	25.10 <sup>1</sup>	20,000	2004	September 28, 2004	16.31	8,550
1987	September 7, 1987	15.05	6,440	2005	March 28, 2005	8.18	1,930
1988	November 29, 1987	5.63	521	2006	June 27, 2006	11.51	4,140
1989	July 7, 1989	11.41	3,370	2007	November 16, 2006	9.13	2,480
1990	October 2, 1989	7.34	1,100				

<sup>1</sup>Gage height at different site and (or) datum.

**Table 413. 02056900 Blackwater River near Rocky Mount, Va.**

LOCATION.--Latitude 37°02'42", Longitude 079°50'40", NAD27, Franklin County, Hydrologic Unit 03010101, on right bank 45 ft downstream from bridge on State Highway 122, 3.0 mi northeast of Rocky Mount, and 4.1 mi upstream from Maggodee Creek.

DRAINAGE AREA.--115 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 876.45 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 7,000 ft<sup>3</sup>/s and extended above on basis of slope-area measurement at 20,800 ft<sup>3</sup>/s.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Records were provided by the Virginia Department of Environmental Quality - Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1977	October 9, 1976		5,000 <sup>1</sup>	1993	March 4, 1993	12.31	5,350
1978	April 27, 1978	15.81	7,710	1994	March 28, 1994	10.73	4,310
1979	September 22, 1979	16.38	8,130	1995	January 15, 1995	11.06	4,520
1980	April 14, 1980	12.15	5,280	1996	September 6, 1996	15.55	7,560
1981	February 11, 1981	2.95	242	1997	November 8, 1996	7.76	2,490
1982	June 13, 1982	8.68	3,060	1998	February 4, 1998	11.63	4,850
1983	April 10, 1983	13.53	6,140	1999	September 30, 1999	5.74	1,420
1984	February 14, 1984	6.25	1,690	2000	August 2, 2000	8.66	3,010
1985	August 18, 1985	10.95	4,470	2001	March 30, 2001	5.29	1,210
1986	November 5, 1985	21.92	20,800	2002	March 18, 2002	4.60	902
1987	September 8, 1987	17.53	9,140	2003	February 22, 2003	11.85	5,000
1988	November 29, 1987	4.41	779	2004	September 28, 2004	14.67	6,930
1989	July 5, 1989	12.61	5,550	2005	January 14, 2005	8.94	3,170
1990	July 15, 1990	10.85	4,400	2006	June 26, 2006	12.35	5,330
1991	October 22, 1990	7.83	2,560	2007	November 16, 2006	7.71	2,460
1992	April 21, 1992	19.93	13,200				

<sup>1</sup>Discharge is a maximum daily average.

**Table 414. 02057000 Blackwater River near Union Hall, Va.**

LOCATION.--Latitude 37°02'35", Longitude 079°41'07", NAD27, Franklin County, Hydrologic Unit 03010101, on left bank 100 ft upstream from highway bridge at Kemps Fork, 3 mi upstream from Gills Creek, and 3 mi north of Union Hall.

DRAINAGE AREA.--208 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 693.13 ft NGVD of 1929. Prior to Nov. 22, 1929, nonrecording gage at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 6,500 ft<sup>3</sup>/s and extended above by logarithmic plotting on basis of unit hydrograph and flood-routing studies by U.S. Army Corps of Engineers, and records for other stations in Roanoke River basin.

BANKFULL STAGE.--10 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1890	June 1890	18.3		1945	September 18, 1945	12.80	8,350
1925	April 29, 1925	3.85	1,070	1946	January 7, 1946	6.66	2,860
1926	January 18, 1926	5.00	1,840	1947	June 14, 1947	6.98	3,130
1927	December 25, 1926	11.00	6,400	1948	June 18, 1948	7.92	3,770
1928	August 11, 1928	19.50	18,000	1949	March 23, 1949	12.90	8,610
1929	June 9, 1929	6.50	2,800	1950	May 31, 1950	10.32	5,850
1930	October 2, 1929	12.70	8,730	1951	December 7, 1950	10.13	5,610
1931	August 22, 1931	6.12	2,490	1952	September 1, 1952	10.36	5,850
1932	March 6, 1932	6.22	2,560	1953	March 24, 1953	8.88	4,730
1933	October 17, 1932	15.27	12,500	1954	March 1, 1954	6.57	2,890
1934	March 28, 1934	7.09	3,190	1955	August 18, 1955	11.30	6,660
1935	September 6, 1935	9.36	4,800	1956	September 27, 1956	4.70	1,520
1936	January 19, 1936	9.87	5,200	1957	September 17, 1957	8.44	4,250
1937	October 17, 1936	10.15	5,440	1958	May 7, 1958	5.02	1,760
1938	October 19, 1937	15.88	13,400	1959	December 29, 1958	9.10	4,810
1939	August 19, 1939	18.50	17,900	1960	October 1, 1959	10.78	6,210
1940	August 14, 1940	19.52	19,700	1961	April 10, 1961	5.30	1,940
1941	April 5, 1941	5.77	2,190	1962	June 14, 1962	7.51	3,530
1942	May 22, 1942	9.28	5,220	1963	November 10, 1962	10.74	6,120
1943	July 10, 1943	13.25	9,480	1964	November 29, 1963	3.84	1,100
1944	September 18, 1944	10.00	5,530				

**Table 415. 02057500 Roanoke (Staunton) River near Toshes, Va.**

LOCATION.--Latitude 37°02'03", Longitude 079°31'18", NAD27, Pittsylvania County, Hydrologic Unit 03010101, on right bank 1.8 mi downstream from Witchers Creek, 3 mi upstream from Pigg River, 5 mi northwest of Toshes, and at mile 313.

DRAINAGE AREA.--1,017 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 588.99 ft NGVD of 1929 (levels by U.S. Army Corps of Engineers). Prior to Oct. 14, 1929, nonrecording gage at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 31,000 ft<sup>3</sup>/s and extended to 70,000 ft<sup>3</sup>/s by logarithmic plotting, on basis of unit hydrographs and flood-routing studies by U.S. Army Corps of Engineers, and records for other stations in Roanoke River basin.

BANKFULL STAGE.--13 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1926	January 19, 1926	8.60	7,840	1945	September 18, 1945	21.04	30,800
1927	February 19, 1927	13.70	15,900	1946	January 8, 1946	9.37	9,000
1928	August 16, 1928	20.00	28,600	1947	January 20, 1947	9.98	9,900
1929	June 15, 1929	10.00	9,900	1948	August 5, 1948	16.81	21,800
1930	October 2, 1929	19.75	28,200	1949	December 4, 1948	22.40	35,800
1931	August 22, 1931	8.67	7,990	1950	May 31, 1950	18.88	26,200
1932	March 6, 1932	8.60	7,850	1951	December 8, 1950	15.62	19,400
1933	October 18, 1932	19.60	27,700	1952	September 1, 1952	15.56	19,400
1934	March 28, 1934	8.38	7,560	1953	March 24, 1953	13.97	16,400
1935	December 1, 1934	15.70	19,400	1954	March 1, 1954	10.88	11,300
1936	March 18, 1936	17.13	21,900	1955	October 15, 1954	19.76	28,200
1937	August 31, 1937	13.38	15,400	1956	April 16, 1956	8.11	7,120
1938	October 19, 1937	20.45	29,500	1957	April 5, 1957	13.68	15,900
1939	August 19, 1939	19.95	28,600	1958	May 6, 1958	11.12	11,600
1940	August 15, 1940	27.36	70,000	1959	December 29, 1958	14.13	16,600
1941	April 5, 1941	8.11	7,120	1960	October 1, 1959	18.58	25,500
1942	May 22, 1942	14.28	16,900	1961	April 13, 1961	7.75	6,810
1943	April 20, 1943	12.12	13,200	1962	December 12, 1961	10.40	10,500
1944	September 19, 1944	18.88	26,200	1963	November 10, 1962	13.28	15,200

**Table 416. 02057700 Powder Mill Creek at Rocky Mount, Va.**

LOCATION.--Latitude 37°00'26", Longitude 079°52'25", NAD27, Franklin County, Hydrologic Unit 03010101, on right upstream wingwall of western-most culvert in the interchange between U.S Highway 220 bypass and State Highway 40 and 122 at Rocky Mount, 3.5 mi upstream from mouth.

DRAINAGE AREA.--0.78 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 1,075 ft NGVD of 1929, from topographic map. Prior to Aug. 10, 1978, flood-hydrograph recorder at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--15 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1967	August 24, 1967	14.35	104	1982	June 13, 1982	14.50	115
1968	December 12, 1967	13.35	41.0	1983	April 10, 1983	15.12	160
1969	July 3, 1969	15.10	158	1984	August 12, 1984	14.53	117
1970	April 3, 1970	14.20	94.0	1985	August 18, 1985	14.38	107
1971	October 31, 1970	14.50	115	1986	August 12, 1986	15.14	161
1972	July 5, 1972	15.65	202	1987	September 8, 1987	16.26	238
1973	June 21, 1973	15.80	214	1988	May 16, 1988	14.65	126
1974	December 21, 1973	14.20	94.0	1989	May 5, 1989	16.78	305
1975	March 14, 1975	14.55	118	1990	July 14, 1990	17.84	
1976	March 31, 1976	15.10	158	1991	October 11, 1990	14.80	136
1977	October 9, 1976	15.02	152	1992	April 21, 1992	16.06	235
1978	April 17, 1978	15.10	158	1993	March 4, 1993	14.57	120
1979	September 22, 1979	15.32	176	1994	March 28, 1994	15.49	189
1980	April 14, 1980	14.34	104	1995	September 2, 1995	16.02	232
1981	July 6, 1981	13.86	72.0				

**Table 417. 02058000 Snow Creek at Sago, Va.**

LOCATION.--Latitude 36°53'50", Longitude 079°39'05", NAD27, Franklin County, Hydrologic Unit 03010101, at highway bridge 200 ft downstream from First Fork and 0.8 mi northwest of Sago.

DRAINAGE AREA.--59.6 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 706.20 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 2,200 ft<sup>3</sup>/s and extended above by logarithmic plotting on basis of velocity-area studies and records for other stations in Roanoke River basin.

BANKFULL STAGE.--14 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1935	January 23, 1935	9.63	888	1940	August 14, 1940	22.98	12,000
1936	January 19, 1936		3,000	1941	July 8, 1941	10.70	972
1937	August 11, 1937	12.65	1,290	1942	May 22, 1942	14.20	1,910
1938	October 20, 1937	15.16	2,290	1943	April 19, 1943	12.69	1,440
1939	July 29, 1939	13.63	1,700	1944	September 19, 1944	13.58	1,700

**Table 418. 02058400 Pigg River near Sandy Level, Va.**

LOCATION.--Latitude 36°56'45", Longitude 079°31'30", NAD27, Pittsylvania County, Hydrologic Unit 03010101, on left bank 300 ft downstream from Harpen Creek, 0.5 mi upstream from bridge on State Highway 40, and 1.1 mi south of Sandy Level.

DRAINAGE AREA.--351 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 617.00 ft NGVD of 1929 (U.S. Army Corps of Engineers bench mark). Prior to Nov. 18, 1963, nonrecording gage at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 12,000 ft<sup>3</sup>/s and extended above on basis of slope-area measurement at 20,600 ft<sup>3</sup>/s and 66,000 ft<sup>3</sup>/s.

BANKFULL STAGE.--12 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1964	August 31, 1964	21.11	14,900	1986	November 4, 1985	19.50	13,800
1965	February 8, 1965	12.07	6,670	1987	September 8, 1987	31.12	65,600
1966	February 13, 1966	10.87	5,830	1988	July 28, 1988	5.97	2,670
1967	August 24, 1967	15.93	9,640	1989	May 6, 1989	14.35	8,380
1968	March 13, 1968	7.66	3,800	1990	March 18, 1990	12.94	7,260
1969	March 25, 1969	9.65	4,990	1991	October 23, 1990	22.64	19,300
1970	August 10, 1970	10.79	5,720	1992	January 4, 1992	16.82	10,600
1971	October 31, 1970	9.59	4,950	1993	March 4, 1993	20.28	14,900
1972	June 22, 1972	24.07	22,700	1994	March 28, 1994	14.34	8,370
1973	February 2, 1973	14.65	8,620	1995	June 29, 1995	26.00	28,300
1974	December 21, 1973	13.09	7,370	1996	September 6, 1996	27.32	33,700
1975	March 19, 1975	18.67	12,700	1997	March 3, 1997	10.02	5,210
1976	May 30, 1976	12.27	6,790	1998	January 28, 1998	18.52	12,500
1977	October 10, 1976	12.74	7,120	1999	September 30, 1999	10.32	5,420
1978	April 27, 1978	25.56	25,400	2000	April 18, 2000	9.67	5,000
1979	September 22, 1979	19.92	14,400	2001	May 22, 2001	11.33	6,130
1980	April 9, 1980	12.58	7,000	2002	March 18, 2002	6.46	3,020
1981	February 11, 1981	3.59	648	2003	March 20, 2003	18.61	12,600
1982	June 13, 1982	9.54	4,920	2004	September 9, 2004	16.54	13,200
1983	April 10, 1983	17.16	11,000	2005	March 28, 2005	8.82	4,880
1984	February 14, 1984	12.25	6,770	2006	June 27, 2006	14.75	10,900
1985	August 18, 1985	21.54	17,100	2007	November 17, 2006	11.86	7,720

**Table 419. 02058500 Pigg River near Toshes, Va.**

LOCATION.--Latitude 36°59'01", Longitude 079°30'52", NAD27, Pittsylvania County, Hydrologic Unit 03010101, on right bank 0.5 mi downstream from Fryingpan Creek, and 1.7 mi northwest of Toshes.

DRAINAGE AREA.--382 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 602.55 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 11,000 ft<sup>3</sup>/s and extended above on basis of slope-area measurement at 21,000 ft<sup>3</sup>/s, and records for other stations in Roanoke River basin.

BANKFULL STAGE.--15 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1931	August 22, 1931	12.58	4,880	1948	April 1, 1948	16.72	8,670
1932	March 6, 1932	13.57	5,680	1949	December 4, 1948	17.27	9,330
1933	October 17, 1932	21.98	15,100	1950	September 11, 1950	17.73	9,770
1934	September 16, 1934	13.11	5,280	1951	February 7, 1951	13.28	5,440
1935	December 1, 1934	15.28	7,200	1952	December 21, 1951	15.93	7,700
1936	January 19, 1936	20.71	13,400	1953	February 21, 1953	13.23	5,360
1937	January 3, 1937	16.98	9,000	1954	January 22, 1954	15.24	7,100
1938	October 20, 1937	22.23	15,400	1955	October 15, 1954	23.66	17,500
1939	August 19, 1939	18.40	10,600	1956	April 16, 1956	11.32	3,970
1940	August 15, 1940	32.50	34,300	1957	September 17, 1957	19.17	11,500
1941	July 5, 1941	12.87	4,820	1958	November 19, 1957	13.98	6,000
1942	May 22, 1942	15.34	7,070	1959	December 29, 1958	21.33	14,200
1943	April 19, 1943	15.80	7,700	1960	October 1, 1959	15.26	7,200
1944	September 18, 1944	25.80	20,800	1961	February 23, 1961	12.58	4,980
1945	September 18, 1945	20.30	12,800	1962	December 12, 1961	16.06	8,010
1946	January 7, 1946	17.00	9,000	1963	November 10, 1962	15.70	7,600
1947	January 20, 1947	10.70	3,550				

**Table 420.** 02059000 Roanoke River near Gretna, Va.

LOCATION.--Latitude 37°00'46", Longitude 079°28'24", NAD27, Pittsylvania County, Hydrologic Unit 03010101, 0.7 mi downstream from Pigg River and 7.5 mi northwest of Gretna.

DRAINAGE AREA.--1,418 mi<sup>2</sup>.

GAGE.--Nonrecording gage (chain gage). Datum of gage is 575 ft NGVD of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 14,000 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1924	September 1924	17.80	17,400 <sup>1,2</sup>	1928	August 17, 1928	29.20	35,700
1926	January 19, 1926	12.80	9,980	1929	February 28, 1929	18.48	18,400
1927	February 19, 1927	20.00	20,700	1930	October 2, 1929	27.60	31,200

<sup>1</sup>Discharge is a historic peak.

<sup>2</sup>Month or day of occurrence is unknown or not exact.

**Table 421. 02059450 South Fork Goose Creek at Montvale, Va.**

LOCATION.--Latitude 37°22'47", Longitude 079°43'50", NAD27, Bedford County, Hydrologic Unit 03010101, at culvert on State Highway 607, 0.5 mi south of Montvale.

DRAINAGE AREA.--11.0 mi<sup>2</sup>.

GAGE.--Water-stage recorder (flood-hydrograph recorder). Datum of gage is 938.02 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--2 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1967	March 7, 1967	4.18	464	1972	June 21, 1972	8.10	2,060
1968		3.00 <sup>1</sup>	180 <sup>2,3</sup>	1973	May 28, 1973	5.53	912
1969	October 19, 1968	5.00	750	1974	December 21, 1973	3.38	256
1970		3.00 <sup>1</sup>	180 <sup>2,3</sup>	1975	March 19, 1975	4.45	545
1971	February 13, 1971	4.42	536	1976	March 31, 1976	3.60	305

<sup>1</sup>Gage height below minimum recordable elevation.

<sup>2</sup>Discharge is less than indicated value, which is minimum recordable discharge at this site.

<sup>3</sup>Month or day of occurrence is unknown or not exact.

**Table 422. 02059500 Goose Creek near Huddleston, Va.**

LOCATION.--Latitude 37°10'23", Longitude 079°31'14", NAD27, Bedford County, Hydrologic Unit 03010101, on left bank 0.3 mi upstream from Haden Bridge on State Highway 732, 0.4 mi upstream from Rockcastle Creek, and 3.5 mi northwest of Huddleston.

DRAINAGE AREA.--188 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 592.91 ft NGVD of 1929. Mar. 15, 1925, to Aug. 4, 1928, nonrecording gage at site 1,300 ft downstream at different datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 11,000 ft<sup>3</sup>/s and extended above on basis of slope-area measurement at 13,000 ft<sup>3</sup>/s and 18,000 ft<sup>3</sup>/s.

BANKFULL STAGE.--13 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Subsequent to June 30, 1957, records were provided by the Virginia Department of Environmental Quality - Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1924	September 1924	21.40 <sup>1</sup>	14,000 <sup>23</sup>	1968	January 14, 1968	6.67	2,160
1926	January 18, 1926	7.50 <sup>1</sup>	4,300	1969	August 20, 1969	9.76	4,580
1927	February 19, 1927	9.70 <sup>1</sup>	5,500	1970	December 31, 1969	7.44	2,890
1930	October 2, 1929		7,000	1971	September 19, 1971	19.25	13,400
1931	August 22, 1931	10.05	3,610	1972	June 21, 1972	19.43	13,600
1932	March 6, 1932	10.22	3,730	1973	May 28, 1973	16.14	7,740
1933	October 17, 1932	18.15	8,980	1974	January 21, 1974	10.32	3,790
1934	March 27, 1934	9.98	3,610	1975	March 19, 1975	17.64	9,240
1935	September 5, 1935	17.53	8,350	1976	December 31, 1975	7.89	2,750
1936	January 3, 1936	13.26	5,730	1977	October 9, 1976	18.28	9,930
1937	October 17, 1936	12.30	5,040	1978	January 26, 1978	19.42	11,200
1938	October 19, 1937	25.75	20,300	1979	September 22, 1979	24.89	18,800
1939	August 18, 1939	21.70	14,100	1980	April 9, 1980	13.00	5,300
1940	August 14, 1940	21.90	14,400	1981	June 7, 1981	5.80	1,560
1941	June 2, 1941	8.20	2,620	1982	June 13, 1982	11.22	4,250
1942	August 8, 1942	19.70	11,000	1983	April 10, 1983	20.68	12,800
1943	May 26, 1943	12.80	5,380	1984	August 14, 1984	16.39	7,990
1944	September 18, 1944	16.80	7,990	1985	August 18, 1985	10.17	3,720
1945	October 20, 1944	15.00	6,630	1986	November 4, 1985	22.05	14,600
1946	February 10, 1946	10.18	3,690	1987	September 8, 1987	37.49	53,200
1947	August 23, 1947	9.98	3,580	1988	November 29, 1987	5.05	1,400
1948	August 4, 1948	18.05	9,000	1989	May 6, 1989	25.34	19,500
1949	March 23, 1949	24.10	17,600	1990	January 1, 1990	8.48	2,800
1950	May 31, 1950	25.10	19,200	1991	October 22, 1990	20.13	12,100
1951	February 7, 1951	10.31	3,740	1992	April 22, 1992	23.58	16,770
1952	August 31, 1952	19.95	11,900	1993	March 4, 1993	11.63	4,480

1953	February 21, 1953	9.22	3,150	1994	March 28, 1994	13.15	5,410
1954	January 22, 1954	7.62	2,350	1995	June 29, 1995	25.80	20,400
1955	October 15, 1954	23.14	16,000	1996	September 6, 1996	17.54	18,200
1956	September 27, 1956	7.33	2,200	1997	December 1, 1996	6.68	3,890
1957	May 19, 1957	14.67	6,420	1998	January 28, 1998	13.06	11,400
1958	March 27, 1958	10.90	4,080	1999	September 30, 1999	7.87	5,170
1959	September 30, 1959	7.72	2,600	2000	April 18, 2000	6.96	4,540
1960	February 19, 1960	8.01	2,730	2001	March 30, 2001	7.08	4,890
1961	February 23, 1961	5.83	1,810	2002	July 26, 2002	2.66	692
1962	June 14, 1962	8.90	3,140	2003	June 14, 2003	21.11	24,400
1963	November 10, 1962	13.30	5,500	2004	August 2, 2004	15.01	14,200
1964	August 30, 1964	11.04	4,130	2005	January 14, 2005	7.98	4,980
1965	February 7, 1965	12.68	5,120	2006	October 8, 2005	8.30	5,340
1966	February 13, 1966	7.78	2,640	2007	November 16, 2006	8.98	6,120
1967	August 24, 1967	13.39	5,560				

<sup>1</sup>Gage height at different site and (or) datum.

<sup>2</sup>Discharge is a historic peak.

<sup>3</sup>Month or day of occurrence is unknown or not exact.

**Table 423.** 02060000 Goose Creek at Huddleston, Va.

LOCATION.--Latitude 37°09'25", Longitude 079°28'33", NAD27, Pittsylvania County, Hydrologic Unit 03010101, at highway bridge at Huddleston, 0.5 mi downstream from Crab Orchard Creek.

DRAINAGE AREA.--213 mi<sup>2</sup>.

GAGE.--Nonrecording gage (chain gage). Datum not determined.

STAGE-DISCHARGE RELATION.--Not developed.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1928	August 1928	35.30		1931	August 22, 1931	12.70	
1930	October 2, 1929	20.70					

**Table 424. 02060500 Roanoke River at Altavista, Va.**

LOCATION.--Latitude 37°06'16", Longitude 079°17'44", NAD27, Pittsylvania County, Hydrologic Unit 03010101, on right bank 12 ft upstream from bridge on alternative U.S. Highway 29, 0.3 mi south of Altavista, 0.3 mi downstream from Sycamore Creek, 3.5 mi upstream from Big Otter River, and at mile 286.

DRAINAGE AREA.--1,782 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 503.10 ft NGVD of 1929. Prior to Feb. 23, 1951, on left bank 50 ft downstream at present datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 52,000 ft<sup>3</sup>/s and extended above on basis of unit hydrograph and flood-routing studies by U.S. Army Corps of Engineers, and records for other stations in Roanoke River basin.

BANKFULL STAGE.--20 ft.

REGULATION.--High-flow conditions at this site are considered regulated after 1961 Flow regulated since 1962 by Leesville Lake 9.5 mi upstream and since 1963 by Smith Mountain Lake 27.5 mi upstream. Total usable capacity 1,615,000 acre-ft.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1931	August 22, 1931	18.76 <sup>1</sup>	19,500	1970	January 10, 1970	20.97	23,400 <sup>2</sup>
1932	March 7, 1932	19.36 <sup>1</sup>	20,800	1971	May 30, 1971	17.22	15,900 <sup>2</sup>
1933	October 18, 1932	29.30 <sup>1</sup>	49,000	1972	June 22, 1972	26.78	37,300 <sup>2</sup>
1934	March 28, 1934	18.54 <sup>1</sup>	17,800	1973	February 2, 1973	19.40	20,400 <sup>2</sup>
1935	December 1, 1934	26.01 <sup>1</sup>	37,600	1974	December 21, 1973	18.29	18,300 <sup>2</sup>
1936	January 20, 1936	27.66 <sup>1</sup>	42,200	1975	March 19, 1975	24.02	30,100 <sup>2</sup>
1937	January 3, 1937	24.03 <sup>1</sup>	32,400	1976	April 1, 1976	14.37	11,700 <sup>2</sup>
1938	October 20, 1937	31.27 <sup>1</sup>	57,000	1977	April 5, 1977	16.97	15,800 <sup>2</sup>
1939	August 19, 1939	29.60 <sup>1</sup>	47,300	1978	April 27, 1978	27.68	40,100 <sup>2</sup>
1940	August 15, 1940	40.08 <sup>1</sup>	105,000	1979	February 26, 1979	23.76	29,600 <sup>2</sup>
1941	April 5, 1941	15.47 <sup>1</sup>	13,000	1980	April 14, 1980	17.10	16,100 <sup>2</sup>
1942	May 22, 1942	24.31 <sup>1</sup>	32,700	1981	November 25, 1980	8.00	5,150 <sup>2</sup>
1943	April 20, 1943	22.78 <sup>1</sup>	28,800	1982	June 13, 1982	16.02	15,100 <sup>2</sup>
1944	September 19, 1944	31.10 <sup>1</sup>	55,900	1983	April 10, 1983	23.60	29,200 <sup>2</sup>
1945	September 19, 1945	28.30 <sup>1</sup>	44,100	1984	February 14, 1984	18.81	19,300 <sup>2</sup>
1946	January 8, 1946	20.00 <sup>1</sup>	21,300	1985	August 18, 1985	19.51	20,600 <sup>2</sup>
1947	January 21, 1947	17.50 <sup>1</sup>	16,400	1986	November 5, 1985	27.38	35,700 <sup>2</sup>
1948	August 5, 1948	24.53 <sup>1</sup>	32,100	1987	September 8, 1987	34.45	62,100 <sup>2</sup>
1949	December 4, 1948	30.84 <sup>1</sup>	54,600	1988	January 19, 1988	11.17	8,310 <sup>2</sup>
1950	June 1, 1950	25.80 <sup>1</sup>	35,800	1989	May 6, 1989	18.87	18,600 <sup>2</sup>
1951	December 8, 1950	22.14 <sup>1</sup>	26,000	1990	January 1, 1990	15.88	14,900 <sup>2</sup>
1952	September 1, 1952	27.46	41,200	1991	October 23, 1990	23.44	25,900 <sup>2</sup>
1953	March 24, 1953	22.15	26,300	1992	April 22, 1992	23.25	25,600 <sup>2</sup>
1954	January 22, 1954	19.04	19,300	1993	March 4, 1993	20.81	21,600 <sup>2</sup>
1955	October 16, 1954	31.23	52,000	1994	March 28, 1994	18.89	18,600 <sup>2</sup>
1956	April 16, 1956	14.93	12,000	1995	June 23, 1995	28.42	38,700 <sup>2</sup>
1957	April 6, 1957	23.96	30,100	1996	September 6, 1996	25.87	31,600 <sup>2</sup>

1958	May 6, 1958	20.34	22,000	1997	December 2, 1996	15.94	15,000 <sup>2</sup>
1959	December 30, 1958	24.71	31,800	1998	January 28, 1998	19.32	19,300 <sup>2</sup>
1960	October 1, 1959	26.15	35,600	1999	September 30, 1999	10.60	8,630 <sup>2</sup>
1961	February 23, 1961	16.81	15,200	2000	April 18, 2000	14.77	13,700 <sup>2</sup>
1962	December 12, 1961	21.78	25,300	2001	March 30, 2001	14.22	13,100 <sup>2</sup>
1963	November 10, 1962	22.20	26,100 <sup>2</sup>	2002	May 5, 2002	5.20	2,340 <sup>2</sup>
1964	September 1, 1964	20.11	21,500 <sup>2</sup>	2003	February 22, 2003	20.03	20,300 <sup>2</sup>
1965	February 8, 1965	15.30	12,700 <sup>2</sup>	2004	September 29, 2004	15.37	14,400 <sup>2</sup>
1966	March 1, 1966	15.39	12,800 <sup>2</sup>	2005	March 28, 2005	13.59	12,400 <sup>2</sup>
1967	August 25, 1967	18.55	18,400 <sup>2</sup>	2006	June 27, 2006	14.20	13,800 <sup>2</sup>
1968	January 15, 1968	14.90	12,000 <sup>2</sup>	2007	November 16, 2006	15.39	15,300 <sup>2</sup>
1969	March 25, 1969	17.52	16,400 <sup>2</sup>				

---

<sup>1</sup>Gage height at different site and (or) datum.

<sup>2</sup>Discharge is affected by regulation or diversion.

**Table 425. 02061000 Big Otter River near Bedford, Va.**

(Formerly published as Otter River near Bedford.)

LOCATION.--Latitude 37°21'50", Longitude 079°25'10", NAD27, Bedford County, Hydrologic Unit 03010101, on left bank 10 ft upstream from bridge on U.S. Highway 460, 1 mi downstream from Roaring Run, 5 mi upstream from Elk Creek, 6.5 mi northeast of Bedford, and 8 mi upstream from Little Otter River.

DRAINAGE AREA.--114 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 647.16 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 4,000 ft<sup>3</sup>/s and extended above on basis of slope-area measurements at gage heights 12.1 ft and 17 ft.

BANKFULL STAGE.--7 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Flow in 1937 or 1939 reached a stage of 21.8 ft, from high-water marks at present site. Subsequent to June 30, 1957, records were provided by the Virginia Department of Environmental Quality - Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1940	August 1940	12.10	8,080 <sup>1,2</sup>	1952	August 9, 1952	16.10	11,100
1944	September 18, 1944	12.00	8,000	1953	March 24, 1953	6.54	3,080
1945	January 1, 1945	4.67	1,320	1954	March 1, 1954	7.62	4,240
1946	February 10, 1946	5.37	1,880	1955	October 15, 1954	11.96	8,000
1947	June 14, 1947	7.91	4,620	1956	April 16, 1956	4.88	1,510
1948	August 4, 1948	15.62	10,700	1957	February 28, 1957	6.19	2,750
1949	March 23, 1949	17.30	12,100	1958	March 27, 1958	7.30	3,950
1950	May 31, 1950	7.59	4,240	1959	September 30, 1959	9.39	5,860
1951	February 7, 1951	6.05	2,580	1960	May 27, 1960	8.22	4,780

<sup>1</sup>Discharge is a historic peak.

<sup>2</sup>Month or day of occurrence is unknown or not exact.

**Table 426. 02061150 Chestnut Branch near Forest, Va.**

LOCATION.--Latitude 37°22'10", Longitude 079°23'16", NAD27, Bedford County, Hydrologic Unit 03010101, at culvert on U.S. Highway 460, 0.8 mi north of Goode, 2.8 mi upstream from mouth, and 5.5 mi west of Forest.

DRAINAGE AREA.--1.54 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 750 ft NGVD of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Records were furnished by the U.S. Department of Agriculture, Soil Conservation Service.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1960	September 18, 1960	1.09	16.0	1969	March 25, 1969	1.58	44.0
1961	February 23, 1961	2.30	109	1970	July 14, 1970	4.67	339
1962	November 6, 1961	4.11	256	1971	September 12, 1971	4.22	311
1963	November 9, 1962	2.48	124	1972	July 31, 1972	3.06	176
1964	July 22, 1964	1.65	49.0	1973	June 24, 1973	12.55	2,300
1965	February 7, 1965	2.47	123	1974	August 4, 1974	5.05	341
1966	September 14, 1966	2.08	87.0	1975	March 19, 1975	4.61	300
1967	August 23, 1967	5.72	404	1976	May 29, 1976	2.09	88.0
1968	August 14, 1968	1.97	76.0				

**Table 427. 02061300 Nininger Creek near Bedford, Va.**

LOCATION.--Latitude 37°16'26", Longitude 079°29'31", NAD27, Bedford County, Hydrologic Unit 03010101, at bridge on State Highway 43, 4.5 mi southeast of Bedford.

DRAINAGE AREA.--4.87 mi<sup>2</sup>.

GAGE.--Water-stage recorder (flood-hydrograph recorder). Datum of gage is 720 ft NGVD of 1929, from topographic map. Prior to Sept. 28, 1965, crest-stage gage at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 6 ft<sup>3</sup>/s and extended on basis of slope-area measurements and contracted-opening measurements at 1,000 ft<sup>3</sup>/s and by flow through culvert measurement at 2,200 ft<sup>3</sup>/s.

BANKFULL STAGE.--4 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1949	March 23, 1949	7.70	2,200	1962	June 14, 1962	3.61	570
1950	May 31, 1950	3.73	600	1963	November 10, 1962	4.53	900
1951	February 7, 1951	4.17	760	1964	August 31, 1964	2.96	355
1952	August 1952	3.44	520 <sup>1</sup>	1965	February 7, 1965	3.40	495
1953	February 1953	3.58	560 <sup>1</sup>	1966	February 28, 1966	2.82	320
1954		2.10 <sup>2</sup>	180 <sup>1,3</sup>	1967	August 24, 1967	3.97	705
1955	October 15, 1954	5.10	1,140	1968	January 14, 1968	2.92	340
1956		4.05	720 <sup>1</sup>	1969	August 20, 1969	3.25	445
1957	May 1957	5.95	1,450 <sup>1</sup>	1970	April 2, 1970	3.37	484
1958	March 27, 1958	3.06	400	1971	September 19, 1971	5.82	1,400
1959	December 29, 1958	2.87	340	1972	June 21, 1972	4.42	852
1960	March 9, 1960	2.54	270	1973	November 14, 1972	3.72	607
1961	June 21, 1961	3.54	550	1974	April 4, 1974	3.59	562

<sup>1</sup>Month or day of occurrence is unknown or not exact.

<sup>2</sup>Gage height below minimum recordable elevation.

<sup>3</sup>Discharge is less than indicated value, which is minimum recordable discharge at this site.

**Table 428. 02061500 Big Otter River near Evington, Va.**

(Formerly published as Otter River near Evington.)

LOCATION.--Latitude 37°12'30", Longitude 079°18'14", NAD27, Campbell County, Hydrologic Unit 03010101, on right bank 60 ft upstream from bridge on State Highway 682, 2.0 mi southwest of Evington, and 2.1 mi upstream from Flat Creek.

DRAINAGE AREA.--315 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 544.02 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 23,800 ft<sup>3</sup>/s and extended above on basis of slope-area measurement at 41,900 ft<sup>3</sup>/s.

BANKFULL STAGE.--14 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Subsequent to Sept. 30, 1979, records were provided by the Virginia Department of Environmental Quality - Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1937	January 3, 1937	15.17	6,070	1973	October 5, 1972	17.59	9,200
1938	October 19, 1937	23.14	27,500	1974	September 7, 1974	16.22	6,490
1939	August 19, 1939	23.13	27,500	1975	March 19, 1975	19.83	14,700
1940	August 14, 1940	22.42	24,600	1976	January 1, 1976	14.10	5,370
1941	April 5, 1941	9.80	2,950	1977	October 9, 1976	17.40	8,860
1942	August 8, 1942	19.84	14,600	1978	January 26, 1978	19.78	14,500
1943	December 30, 1942	16.26	7,280	1979	September 22, 1979	21.47	20,500
1944	September 19, 1944	19.64	14,000	1980	March 21, 1980	15.43	6,430
1945	October 21, 1944	12.00	3,870	1981	June 7, 1981	9.00	3,040
1946	February 10, 1946	13.94	4,950	1982	June 13, 1982	17.53	9,130
1947	June 14, 1947	13.35	4,610	1983	April 10, 1983	19.29	13,100
1948	August 4, 1948	17.82	9,580	1984	August 14, 1984	17.30	8,740
1949	March 23, 1949	21.86	22,300	1985	August 18, 1985	12.92	5,170
1950	May 31, 1950	14.66	5,600	1986	November 5, 1985	22.69	27,100
1951	June 13, 1951	16.14	7,040	1987	September 8, 1987	24.96	41,900
1952	August 9, 1952	18.56	11,300	1988	November 29, 1987	5.97	2,340
1953	March 24, 1953	13.63	4,970	1989	May 6, 1989	22.27	25,600
1954	March 1, 1954	14.94	6,010	1990	January 1, 1990	12.58	5,630
1955	October 15, 1954	19.42	13,400	1991	October 23, 1990	20.82	20,600
1956	April 16, 1956	10.88	3,370	1992	April 22, 1992	20.08	18,200
1957	May 19, 1957	15.18	6,250	1993	March 4, 1993	18.03	12,400
1958	March 27, 1958	13.49	4,890	1994	March 28, 1994	16.99	10,300
1959	June 2, 1959	11.05	3,420	1995	June 23, 1995	29.93	45,900
1960	October 1, 1959	15.67	6,670	1996	September 6, 1996	22.98	29,200
1961	September 20, 1961	13.92	5,210	1997	December 1, 1996	14.28	6,700
1962	March 12, 1962	15.15	6,250	1998	January 28, 1998	15.78	8,260

1963	November 10, 1962	15.18	6,250	1999	September 30, 1999	16.45	9,280
1964	February 19, 1964	11.70	3,740	2000	April 18, 2000	8.16	3,500
1965	February 8, 1965	17.34	8,700	2001	March 30, 2001	8.28	3,560
1966	February 28, 1966	14.21	5,450	2002	July 26, 2002	2.80	933
1967	August 24, 1967	18.61	11,300	2003	February 22, 2003	19.44	16,300
1968	December 29, 1967	9.30	2,650	2004	September 28, 2004	14.59	6,990
1969	August 20, 1969	14.67	5,830	2005	January 14, 2005	11.79	5,410
1970	December 31, 1969	13.60	4,970	2006	October 8, 2005	20.30	13,100
1971	May 30, 1971	15.52	6,510	2007	March 16, 2007	12.33	4,740
1972	June 21, 1972	21.03	18,800				

---

**Table 429.** 02062000 Big Otter River near Altavista, Va.

LOCATION.--Latitude 37°11'05", Longitude 079°16'45", NAD27, Campbell County, Hydrologic Unit 03010101, on left bank 1.2 mi downstream from Flat Creek and 5 mi north of Altavista.

DRAINAGE AREA.--362 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 540 ft NGVD of 1929, from topographic map. Prior to Aug. 23, 1930, staff gage at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 1,900 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1930	October 2, 1929	21.20	14,500	1935	September 6, 1935	21.00	14,100
1931	August 23, 1931	16.98	7,800	1936	March 17, 1936	21.70	15,500
1932	March 6, 1932	18.90	10,500	1937	October 17, 1936	15.10	5,690
1933	October 17, 1932	20.88	13,900	1938	October 19, 1937	26.80	28,000
1934	March 28, 1934	11.91	3,420				

**Table 430. 02062500 Roanoke (Staunton) River at Brookneal, Va.**

LOCATION.--Latitude 37°02'28", Longitude 078°57'02", NAD27, Campbell County, Hydrologic Unit 03010102, on left bank 1,600 ft upstream from bridge on U.S. Highway 501 at Brookneal, 2.9 mi upstream from Falling River, and at mile 256.

DRAINAGE AREA.--2,404 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 351.96 ft NGVD of 1929. Apr. 30, 1923, to Aug. 29, 1929, nonrecording gage at site 1,800 ft downstream at present datum. Aug. 30, 1929, to Aug. 15, 1940, water-stage recorder at site 1,800 ft downstream at present datum. Aug. 16 to Oct. 1, 1940, nonrecording gage at site 1,800 ft downstream at present datum. Oct. 2, 1940 to Sept. 30, 1941, nonrecording gage at site 1,600 ft downstream at present datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 54,000 ft<sup>3</sup>/s and extended above on basis of slope-area measurements by Geological Survey, unit hydrograph and flood-routing studies by U.S. Army Corps of Engineers, and records for other stations in Roanoke River basin.

BANKFULL STAGE.--23 ft.

REGULATION.--High-flow conditions at this site are considered regulated after 1961. Flow regulated since 1962 by Leesville Lake 40.1 mi upstream and since 1963 by Smith Mountain Lake 58.1 mi upstream. Usable capacity 1,615,000 acre-ft.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1878	November 1877	36.00 <sup>1</sup>		1965	February 8, 1965	20.16	16,700 <sup>2</sup>
1924	January 17, 1924	26.90 <sup>1</sup>	25,100	1966	March 1, 1966	17.75	13,800 <sup>2</sup>
1925	October 1, 1924	31.46 <sup>1</sup>	41,000	1967	August 25, 1967	24.60	26,500 <sup>2</sup>
1926	January 19, 1926	21.00 <sup>1</sup>	18,100	1968	January 16, 1968	15.58	11,300 <sup>2</sup>
1927	December 26, 1926	20.00 <sup>1</sup>	16,900	1969	March 25, 1969	21.10	18,200 <sup>2</sup>
1928	August 12, 1928	37.15 <sup>1</sup>	76,300	1970	January 1, 1970	18.97	15,200 <sup>2</sup>
1929	April 16, 1929	21.00 <sup>1</sup>	20,200	1971	May 31, 1971	22.41	21,000 <sup>2</sup>
1930	October 3, 1929	33.35 <sup>1</sup>	57,700	1972	June 22, 1972	34.27	58,400 <sup>2</sup>
1931	August 23, 1931	22.19 <sup>1</sup>	22,300	1973	February 3, 1973	25.86	29,600 <sup>2</sup>
1932	March 7, 1932	24.12 <sup>1</sup>	25,800	1974	December 22, 1973	24.97	27,400 <sup>2</sup>
1933	October 18, 1932	31.64 <sup>1</sup>	49,900	1975	March 20, 1975	31.81	48,200 <sup>2</sup>
1934	March 28, 1934	20.44 <sup>1</sup>	19,300	1976	April 1, 1976	18.83	15,100 <sup>2</sup>
1935	September 6, 1935	29.70 <sup>1</sup>	42,000	1978	April 27, 1978	32.02	49,100 <sup>2</sup>
1936	January 20, 1936	30.80 <sup>1</sup>	45,700	1979	September 23, 1979	30.82	44,600 <sup>2</sup>
1937	January 3, 1937	28.60 <sup>1</sup>	38,500	1980	March 22, 1980	24.40	25,800 <sup>2</sup>
1938	October 20, 1937	34.47 <sup>1</sup>	60,400	1981	June 7, 1981	13.48	7,030 <sup>2</sup>
1939	August 20, 1939	32.40 <sup>1</sup>	51,200	1982	June 14, 1982	23.50	23,800 <sup>2</sup>
1940	August 15, 1940	46.00 <sup>1</sup>	130,000	1983	April 11, 1983	29.64	40,500 <sup>2</sup>
1941	April 6, 1941	19.50 <sup>1</sup>	17,700	1984	February 14, 1984	29.06	38,600 <sup>2</sup>
1942	May 23, 1942	27.76	35,500	1985	August 18, 1985	30.21	42,700 <sup>2</sup>
1943	April 20, 1943	25.55	29,800	1986	November 5, 1985	33.77	56,100 <sup>2</sup>
1944	September 19, 1944	37.47	75,500	1987	September 9, 1987	39.80	85,800 <sup>2</sup>
1945	September 19, 1945	30.90	44,200	1988	January 20, 1988	16.80	10,400 <sup>2</sup>
1946	January 8, 1946	22.68	23,200	1989	May 6, 1989	29.50	40,000 <sup>2</sup>
1947	January 19, 1947	19.90	17,900	1990	March 18, 1990	23.98	24,900 <sup>2</sup>

1948	April 1, 1948	28.15	36,100	1991	October 23, 1990	32.37	48,300 <sup>2</sup>
1949	December 5, 1948	33.93	55,100	1992	April 22, 1992	29.08	38,600 <sup>2</sup>
1950	June 1, 1950	28.50	37,000	1993	March 4, 1993	30.56	43,700 <sup>2</sup>
1951	December 9, 1950	21.61	21,000	1994	March 28, 1994	28.74	37,500 <sup>2</sup>
1952	September 2, 1952	30.68	43,600	1995	June 23, 1995	37.39	73,100 <sup>2</sup>
1953	March 25, 1953	22.84	23,400	1996	September 7, 1996	38.78	80,300 <sup>2</sup>
1954	January 23, 1954	21.14	20,100	1997	December 2, 1996	23.86	24,600 <sup>2</sup>
1955	October 16, 1954	32.35	49,100	1998	January 28, 1998	27.92	34,900 <sup>2</sup>
1956	April 16, 1956	17.81	14,500	1999	September 30, 1999	21.63	20,400 <sup>2</sup>
1957	April 6, 1957	26.36	31,000	2000	April 18, 2000	20.58	18,500 <sup>2</sup>
1958	May 7, 1958	24.41	26,000	2001	March 30, 2001	19.97	17,400 <sup>2</sup>
1959	December 30, 1958	26.98	32,500	2002	March 19, 2002	8.74	3,240 <sup>2</sup>
1960	October 2, 1959	27.31	33,200	2003	February 23, 2003	28.62	37,100 <sup>2</sup>
1961	February 24, 1961	21.08	18,300	2004	September 29, 2004	18.79	15,400 <sup>2</sup>
1962	March 13, 1962	26.18	30,500	2005	January 14, 2005	18.69	15,300 <sup>2</sup>
1963	November 11, 1962	22.22	20,500 <sup>2</sup>	2006	June 28, 2006	17.92	14,300 <sup>2</sup>
1964	September 1, 1964	19.71	16,100 <sup>2</sup>	2007	March 17, 2007	22.41	21,800 <sup>2</sup>

<sup>1</sup>Gage height at different site and (or) datum.

<sup>2</sup>Discharge is affected by regulation or diversion.

**Table 431. 02063000 Caldwell's Creek near Appomattox, Va.**

(Formerly published as East Fork Falling River near Appomattox.)

LOCATION.--Latitude 37°19'40", Longitude 078°51'08", NAD27, Appomattox County, Hydrologic Unit 03010102, on right bank 130 ft downstream from bridge on State Highway 644 and 2.0 mi southwest of Appomattox.

DRAINAGE AREA.--3.85 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 740 ft NGVD of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 60 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered regulated. Flow regulated since August 1956 by Soil Conservation Service flood-detention reservoir 0.25 mi above station.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1928		8.00		1958	November 19, 1957	2.77	122 <sup>1</sup>
1955	August 17, 1955	5.24	338	1959	September 30, 1959	2.61	101 <sup>1</sup>
1956	April 15, 1956	2.80	84.0	1960	August 7, 1960	2.85	122 <sup>1</sup>
1957	September 17, 1957	2.30	46.0 <sup>1</sup>				

<sup>1</sup>Discharge affected by regulation or diversion.

**Table 432.** 02063500 Falling River at Spring Mills, Va.

(Formerly published as East Fork Falling River at Spring Mills.)

LOCATION.--Latitude 37°14'40", Longitude 078°55'07", NAD27, Appomattox County, Hydrologic Unit 03010102, on right bank 300 ft downstream from bridge on State Highway 646 at Spring Mills, 0.6 mi upstream from Burger Branch, and 5 mi upstream from South Fork Falling River.

DRAINAGE AREA.--49.3 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 470 ft NGVD of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 1,000 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated. Flow from 9.8 mi<sup>2</sup> above station slightly regulated by three Soil Conservation Service flood-detention reservoirs (two completed in 1956, one in 1958).

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1940	August 1940	19.20	9,500 <sup>1,2</sup>	1958	November 19, 1957	7.70	1,480
1955	August 18, 1955	7.93	1,530	1959	April 12, 1959	4.70	758
1956	April 16, 1956	4.53	710	1960	May 8, 1960	6.92	1,290
1957	April 5, 1957	4.60	734				

<sup>1</sup>Discharge is a historic peak.

<sup>2</sup>Month or day of occurrence is unknown or not exact.

**Table 433.** 02063600 Button Creek near Rustburg, Va.

LOCATION.--Latitude 37°17'25", Longitude 079°04'10", NAD27, Campbell County, Hydrologic Unit 03010102, at culvert on State Highway 24, 2.0 mi northeast of Rustburg.

DRAINAGE AREA.--0.57 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 830 ft NGVD of 1929, from topographic map. Prior to Sept. 26, 1973, flood-hydrograph recorder at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1966	September 20, 1966	3.50	50.0	1971	May 30, 1971	4.05	72.0
1967	August 22, 1967	4.03	70.0	1972	June 21, 1972	5.65	152
1968	March 12, 1968	3.50	50.0	1973	July 16, 1973	4.35	88.0
1969	July 7, 1969	3.35	44.0	1974		3.30 <sup>1</sup>	40.0 <sup>2,3</sup>
1970	August 10, 1970	3.90	66.0	1975	March 19, 1975	7.33	253

<sup>1</sup>Gage height below minimum recordable elevation.

<sup>2</sup>Discharge is less than indicated value, which is minimum recordable discharge at this site.

<sup>3</sup>Month or day of occurrence is unknown or not exact.

**Table 434.** 02063700 Button Creek tributary near Rustburg, Va.

LOCATION.--Latitude 37°17'05", Longitude 079°04'27", NAD27, Campbell County, Hydrologic Unit 03010102, at culvert on State Highway 24, 2.0 mi northeast of Rustburg.

DRAINAGE AREA.--0.15 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is not determined.

STAGE-DISCHARGE RELATION.--Not developed.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1962		2.10 <sup>1</sup>		1970	August 10, 1970	1.18	
1963		0.87 <sup>1</sup>		1971	May 30, 1971	1.39	
1964	August 31, 1964	1.63		1972	June 21, 1972	2.04	
1965	February 7, 1965	0.98 <sup>1</sup>		1973	July 16, 1973	2.40	
1966	February 28, 1966	1.23		1974		0.87 <sup>1</sup>	
1967	August 23, 1967	1.53		1975	March 19, 1975	2.58	
1968	December 29, 1967	1.54		1976	April 1, 1976	1.37	
1969	July 23, 1969	1.19		1977	October 9, 1976	1.34	

<sup>1</sup>Gage height below minimum recordable elevation.

**Table 435. 02064000 Falling River near Naruna, Va.**

LOCATION.--Latitude 37°07'36", Longitude 078°57'36", NAD27, Campbell County, Hydrologic Unit 03010102, on left bank at upstream side of bridge on State Highway 643, 2.7 mi northeast of Naruna, and 3.2 mi upstream from Little Falling River.

DRAINAGE AREA.--165 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 412.32 ft NGVD of 1929. Prior to Jan. 15, 1935, nonrecording gage at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 7,100 ft<sup>3</sup>/s and extended above on basis of slope-area measurements at 15,000 ft<sup>3</sup>/s, 22,000 ft<sup>3</sup>/s, and 32,600 ft<sup>3</sup>/s.

BANKFULL STAGE.--10 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Subsequent to Sept. 30, 1981, records were provided by the Virginia Department of Environmental Quality - Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1930	October 2, 1929	13.00	3,710	1972	June 22, 1972	29.21	32,600
1931	May 23, 1931	7.50	1,510	1973	October 6, 1972	16.23	6,340
1932	March 6, 1932	16.00	5,900	1974	September 7, 1974	15.70	5,920
1933	October 17, 1932	15.00	5,000	1975	March 19, 1975	22.08	12,800
1934	March 28, 1934	12.50	3,500	1976	April 1, 1976	13.00	4,120
1940	August 1940	26.50	22,000 <sup>12</sup>	1977	October 20, 1976	11.30	3,290
1942	May 16, 1942	12.96	4,120	1978	January 26, 1978	20.12	10,100
1943	October 15, 1942	16.12	6,240	1979	February 25, 1979	20.55	10,800
1944	September 19, 1944	23.90	15,800	1980	January 18, 1980	12.03	3,640
1945	September 18, 1945	19.80	9,760	1981	June 7, 1981	10.48	2,910
1946	May 4, 1946	9.40	2,440	1982	February 3, 1982	13.41	4,380
1947	January 20, 1947	9.38	2,440	1983	April 3, 1983	13.78	4,600
1948	February 14, 1948	13.25	4,240	1984	February 14, 1984	17.54	7,500
1949	December 4, 1948	17.34	7,270	1985	August 18, 1985	18.14	8,060
1950	September 22, 1950	11.68	3,470	1986	November 4, 1985	19.17	9,160
1951	December 4, 1950	11.78	3,520	1987	September 8, 1987	28.53	29,800
1952	December 21, 1951	15.48	5,760	1988	December 11, 1987	7.74	1,730
1953	March 15, 1953	7.86	1,800	1989	May 6, 1989	15.13	5,520
1954	January 22, 1954	14.36	4,970	1990	March 18, 1990	16.15	6,290
1955	August 14, 1955	12.65	3,910	1991	October 23, 1990	17.96	7,890
1956	April 16, 1956	8.83	2,180	1992	April 22, 1992	11.44	3,350
1957	April 9, 1957	10.16	2,790	1993	March 4, 1993	21.01	11,400
1958	November 19, 1957	12.32	3,760	1994	November 28, 1993	15.31	5,650
1959	December 29, 1958	9.84	2,610	1995	June 6, 1995	12.28	3,780
1960	May 8, 1960	14.19	4,840	1996	September 6, 1996	36.14	62,800

1961	February 23, 1961	10.75	3,060	1997	December 1, 1996	10.66	2,980
1962	June 13, 1962	15.98	6,160	1998	March 21, 1998	16.36	6,470
1963	November 10, 1962	10.64	2,970	1999	September 30, 1999	13.81	4,620
1964	February 7, 1964	7.49	1,630	2000	April 18, 2000	7.58	1,660
1965	February 7, 1965	13.70	4,540	2001	March 30, 2001	9.81	2,600
1966	March 1, 1966	12.61	3,910	2002	March 17, 2002	5.58	888
1967	October 19, 1966	10.21	2,790	2003	July 3, 2003	17.82	7,760
1968	May 27, 1968	8.35	1,990	2004	February 7, 2004	10.85	3,070
1969	March 25, 1969	12.23	3,720	2005	January 14, 2005	14.34	4,970
1970	August 10, 1970	6.08	1,070	2006	September 5, 2006	14.66	5,190
1971	May 13, 1971	18.83	8,730	2007	March 16, 2007	14.59	5,140

---

<sup>1</sup>Discharge is a historic peak.

<sup>2</sup>Month or day of occurrence is unknown or not exact.

**Table 436.** 02064500 Little Falling River at Hat Creek, Va.

LOCATION.--Latitude 37°07'50", Longitude 078°54'50", NAD27, Campbell County, Hydrologic Unit 03010102, at highway bridge 1 mi northwest of village of Hat Creek and 4.7 mi upstream from mouth.

DRAINAGE AREA.--39.2 mi<sup>2</sup>.

GAGE.--Nonrecording gage (chain gage). Datum of gage is 440 ft NGVD of 1929, revised, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 800 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1928	August 1928	22.00		1932	March 6, 1932	18.00	2,300
1930	October 2, 1929	6.90	428	1933	October 17, 1932	9.26	854
1931	August 22, 1931	6.60	358	1934	August 13, 1934	7.09	508

**Table 437.** 02065000 Falling River near Brookneal, Va.

LOCATION.--Latitude 37°04'54", Longitude 078°56'07", NAD27, Campbell County, Hydrologic Unit 03010102, 300 ft downstream from Hat Creek and 2.25 mi north of Brookneal.

DRAINAGE AREA.--222 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 378.69 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 7,000 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1935	September 6, 1935	26.30	17,500	1939	August 13, 1939	17.45	6,280
1936	March 17, 1936	28.00	20,400	1940	August 15, 1940	29.35	23,000
1937	April 26, 1937	22.76	12,200	1941	July 17, 1941	17.50	6,260
1938	June 22, 1938	26.70	18,200				

**Table 438. 02065100 Snake Creek near Brookneal, Va.**

LOCATION.--Latitude 37°00'42", Longitude 078°57'52", NAD27, Halifax County, Hydrologic Unit 03010102, on left upstream wingwall of culvert on U.S. Highway 501, 0.5 mi upstream from mouth, and 2.1 mi south of Brookneal.

DRAINAGE AREA.--1.65 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 418 ft NGVD of 1929, from topographic map. Prior to Aug. 9, 1978, flood-hydrograph recorder at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--8 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1967	August 24, 1967	5.70	260	1983	April 3, 1983	7.54	424
1968	January 14, 1968	3.85	100	1984	February 14, 1984	6.83	353
1969		3.00 <sup>1</sup>	35.0 <sup>2,3</sup>	1985	August 18, 1985	7.02 <sup>1</sup>	
1970	August 10, 1970	2.90	35.0	1986	November 4, 1985	7.02	372
1971	May 30, 1971	4.66	120	1987	September 8, 1987	15.90	1,500
1972	June 21, 1972	10.00	715	1988	May 23, 1988	3.87	92.0
1973	October 5, 1972	9.70	676	1989	May 6, 1989	7.27	397
1974	September 6, 1974	6.10	280	1990	July 14, 1990	3.36	62.0
1975	March 30, 1975	8.60	537	1991	March 30, 1991	5.63	237
1976	December 31, 1975	4.50	115	1992	April 21, 1992	3.88	93.0
1977	October 9, 1976	4.18	114	1993	March 4, 1993	6.40	310
1980	November 12, 1979	3.28	57.0	1994	March 28, 1994	8.77	
1981	June 7, 1981	6.30	300	1995	March 9, 1995	3.95	97.0
1982	October 27, 1981	7.77	447				

<sup>1</sup>Gage height below minimum recordable elevation.

<sup>2</sup>Discharge is less than indicated value, which is minimum recordable discharge at this site.

<sup>3</sup>Month or day of occurrence is unknown or not exact.

**Table 439. 02065200 Roanoke (Staunton) River at Clarkton, Va.**

LOCATION.--Latitude 36°58'38", Longitude 078°53'50", NAD27, Halifax County, Hydrologic Unit 03010102, on right bank 100 ft downstream from bridge on State Highway 620, 1,300 ft upstream from Catawba Creek, 0.8 mi southeast of Clarkton, 1.0 mi downstream from Childrey Creek, and at mile 249.

DRAINAGE AREA.--2,682 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 340.00 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 47,000 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered regulated after 1961. Flow regulated since 1962 by Leesville Lake 46.8 mi upstream and since 1963, by Smith Mountain Lake 64.8 mi upstream. Usable capacity 1,615,200 acre-ft.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1940	August 1940	27.00		1970	January 1, 1970	20.02	16,500 <sup>1</sup>
1964	September 1, 1964	19.49	15,800 <sup>1</sup>	1971	May 16, 1971	24.85	24,600 <sup>1</sup>
1965	February 8, 1965	22.62	20,700 <sup>1</sup>	1972	June 22, 1972	35.56	85,500 <sup>1</sup>
1966	March 1, 1966	20.70	17,600 <sup>1</sup>	1973	February 3, 1973	26.40	31,400 <sup>1</sup>
1967	August 25, 1967	24.87	24,700 <sup>1</sup>	1974	September 7, 1974	25.26	27,800 <sup>1</sup>
1968	January 16, 1968	16.38	11,200 <sup>1</sup>	1975	March 20, 1975	32.69	63,800 <sup>1</sup>
1969	March 25, 1969	22.60	20,700 <sup>1</sup>				

<sup>1</sup>Discharge is affected by regulation or diversion.

**Table 440. 02065300 Right Hand Fork near Appomattox, Va.**

LOCATION.--Latitude 37°16'12", Longitude 078°49'14", NAD27, Appomattox County, Hydrologic Unit 03010102, on right upstream wingwall of culvert on State Highway 727, 0.5 mi upstream from Maple Spring Branch, and 5.2 mi south of the city of Appomattox.

DRAINAGE AREA.--2.20 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 580 ft NGVD of 1929, from topographic map. Prior to Feb. 24, 1978, flood-hydrograph recorder at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--3 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1967	August 24, 1967	5.85	164	1982	February 3, 1982	6.02	171
1968	December 11, 1967	3.19	40.0	1983	April 10, 1983	5.22	129
1969	May 19, 1969	4.30	83.0	1984	March 29, 1984	5.79	158
1970	August 10, 1970	4.20	78.0	1985	August 18, 1985	4.31	84.0
1971	May 30, 1971	9.50	400	1986	November 4, 1985	5.59	148
1972	June 21, 1972	15.54	705	1987	September 8, 1987	16.80	962
1973	October 5, 1972	8.80	356	1988	November 11, 1987	3.78	61.0
1974	September 6, 1974	5.13	124	1989	May 6, 1989	6.89	223
1975	March 19, 1975	11.56	534	1990	March 18, 1990	6.98	229
1976	December 31, 1975	4.90	113	1991	March 30, 1991	5.04	120
1977	October 9, 1976	4.77	106	1992	April 21, 1992	3.54	52.0
1978	January 26, 1978	8.25	318	1993	March 4, 1993	8.49	334
1979	February 25, 1979	9.84	420	1994	November 28, 1993	10.71	300
1980		2.78 <sup>1</sup>	25.0 <sup>2,3</sup>	1995	June 23, 1995	5.39 <sup>1</sup>	137
1981	July 4, 1981	3.84	64.0				

<sup>1</sup>Gage height below minimum recordable elevation.

<sup>2</sup>Discharge is less than indicated value, which is minimum recordable discharge at this site.

<sup>3</sup>Month or day of occurrence is unknown or not exact.

**Table 441. 02065500 Cub Creek at Phenix, Va.**

LOCATION.--Latitude 37°04'45", Longitude 078°45'50", NAD27, Charlotte County, Hydrologic Unit 03010102, on right bank 10 ft upstream from bridge on State Highway 40, 0.9 mi west of Phenix, 1.9 mi downstream from Rough Creek, and 6.4 mi upstream from Louse Creek.

DRAINAGE AREA.--97.6 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 370.19 ft NGVD of 1929. Prior to July 14, 1950, nonrecording gage at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 5,410 ft<sup>3</sup>/s and extended above on basis of contracted-opening measurement at 10,600 ft<sup>3</sup>/s.

BANKFULL STAGE.--8 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Subsequent to June 30, 1957, records were provided by the Virginia Department of Environmental Quality - Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1940	August 1940	17.50	4,000 <sup>12</sup>	1977	October 21, 1976	10.15	2,000
1947	March 14, 1947	8.30	1,250	1978	January 26, 1978	16.45	7,170
1948	April 1, 1948	11.88	2,340	1979	February 25, 1979	15.86	6770
1949	December 4, 1948	13.00	2,720	1980	January 19, 1980	8.65	1,570
1950	September 13, 1950	9.62	1,600	1981	June 7, 1981	4.83	506
1951	December 5, 1950	7.09	938	1982	February 4, 1982	11.72	3,430
1952	December 21, 1951	11.80	2,300	1983	April 10, 1983	9.37	1,900
1953	November 21, 1952	11.76	2,300	1984	March 29, 1984	10.75	2,700
1954	January 23, 1954	10.37	1,870	1985	August 19, 1985	14.61	5,740
1955	August 18, 1955	12.68	2,620	1986	November 4, 1985	12.74	4,240
1956	March 17, 1956	4.44	430	1987	September 8, 1987	19.31	10,600
1957	April 9, 1957	7.73	1,090	1988	May 23, 1988	5.95	722
1958	February 27, 1958	8.72	1,370	1989	May 2, 1989	9.62	2,030
1959	December 30, 1958	9.07	1,480	1990	February 11, 1990	9.58	2,010
1960	April 6, 1960	9.98	1,870	1991	March 30, 1991	11.01	2,880
1961	February 24, 1961	9.38	1,690	1992	April 22, 1992	7.68	1,200
1962	December 13, 1961	10.25	1,930	1993	March 5, 1993	14.38	5,550
1963	March 7, 1963	7.77	1,210	1994	November 28, 1993	15.39	6,460
1964	February 7, 1964	5.83	695	1995	June 13, 1995	7.89	1,200
1965	February 8, 1965	9.05	1,570	1996	September 6, 1996	21.89	15,200
1966	March 1, 1966	9.10	1,600	1997	December 2, 1996	9.24	1,680
1967	August 26, 1967	5.56	655	1998	January 28, 1998	11.39	2,690
1968	January 15, 1968	6.25	785	1999	January 25, 1999	9.25	1,690
1969	March 26, 1969	7.53	1,120	2000	October 1, 1999	5.81	704
1970	April 3, 1970	3.04	229	2001	March 30, 2001	9.16	1,640
1971	May 14, 1971	10.33	1,960	2002	March 18, 2002	4.96	537

1972	June 22, 1972	20.37	7,380	2003	September 19, 2003	15.12	6,170
1973	October 6, 1972	12.12	2,800	2004	November 7, 2003	8.47	1,360
1974	September 7, 1974	10.82	2,120	2005	March 29, 2005	9.70	1,520
1975	September 25, 1975	15.85	4,550	2006	September 6, 2006	6.27	665
1976	January 1, 1976	9.61	1,780	2007	January 2, 2007	11.53	2,580

---

<sup>1</sup>Discharge is a historic peak.

<sup>2</sup>Month or day of occurrence is unknown or not exact.

**Table 442. 02066000 Roanoke (Staunton) River at Randolph, Va.**

LOCATION.--Latitude 36°54'54", Longitude 078°44'28", NAD27, Halifax County, Hydrologic Unit 03010102, on right bank 6 ft downstream from bridge on State Highway 746, 2.8 mi northwest of Randolph, 3.6 mi upstream from Roanoke Creek, and at mile 227.

DRAINAGE AREA.--2,966 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 307.59 ft NGVD of 1929. Aug. 27, 1900, to Oct. 13, 1902, nonrecording gage at site 3.2 mi downstream at datum of 301.69 ft NGVD of 1929. Oct. 14, 1902, to Aug. 11, 1906 nonrecording gage 3.2 mi downstream at datum of 303.66 ft NGVD of 1929. Oct. 1, 1927, to Mar. 31, 1930, nonrecording gage 3.2 mi downstream at datum of 303.66 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--For periods 1901-6 and 1928-30, defined by current-meter measurements below 58,000 ft<sup>3</sup>/s and extended above. Since 1950, defined by current-meter measurements below 57,000 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--22 ft.

REGULATION.--High-flow conditions at this site are considered regulated after 1961. Flow regulated since 1962 by Leesville Lake 68.7 mi upstream and since 1963, by Smith Mountain Lake 86.7 mi upstream. Usable capacity 1,615,200 acre-ft.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1878	November 1877	39.00 <sup>1</sup>	130,000 <sup>23</sup>	1954	January 23, 1954	23.79	25,000
1901	May 23, 1901	28.60 <sup>1</sup>	60,000	1955	October 17, 1954	27.08	39,700
1902	December 31, 1901	35.00 <sup>1</sup>	97,000	1956	April 17, 1956	19.62	14,800
1903	February 18, 1903	26.80 <sup>1</sup>	47,000	1957	April 7, 1957	27.44	28,600
1904	June 2, 1904	12.50 <sup>1</sup>	10,000	1958	May 8, 1958	24.72	28,200
1905	July 15, 1905	23.20 <sup>1</sup>	34,000	1959	December 31, 1958	25.74	33,800
1906	January 5, 1906	25.80 <sup>1</sup>	39,000	1960	October 2, 1959	24.36	28,600
1907	October 21, 1906	25.70 <sup>1,4</sup>	38,000 <sup>5</sup>	1961	February 24, 1961	22.88	23,800
1908	January 9, 1908	24.80 <sup>1,4</sup>	34,000 <sup>5</sup>	1962	March 13, 1962	25.26	32,200
1909	May 23, 1909	21.60 <sup>1,4</sup>	23,000 <sup>5</sup>	1963	November 11, 1962	23.65	24,500 <sup>6</sup>
1910	June 15, 1910	20.80 <sup>1,4</sup>	21,000 <sup>5</sup>	1964	September 2, 1964	19.55	14,800 <sup>6</sup>
1911	April 7, 1911	19.80 <sup>1,4</sup>	19,000 <sup>5</sup>	1965	February 9, 1965	22.59	21,800 <sup>6</sup>
1912	March 16, 1912	30.60 <sup>1,4</sup>	63,000 <sup>5</sup>	1966	March 1, 1966	21.14	18,000 <sup>6</sup>
1913	March 16, 1913	28.40 <sup>1,4</sup>	52,000 <sup>5</sup>	1967	August 26, 1967	23.37	23,800 <sup>6</sup>
1914	November 19, 1913	21.40 <sup>1,4</sup>	23,000 <sup>5</sup>	1968	January 16, 1968	16.83	10,600 <sup>6</sup>
1915	January 9, 1915	25.20 <sup>1,4</sup>	36,000 <sup>5</sup>	1969	March 26, 1969	22.47	21,400 <sup>6</sup>
1916	October 3, 1915	24.80 <sup>1,4</sup>	34,000 <sup>5</sup>	1970	January 1, 1970	19.09	13,900 <sup>6</sup>
1917	March 6, 1917	26.60 <sup>1,4</sup>	42,000 <sup>5</sup>	1971	May 31, 1971	23.91	25,300 <sup>6</sup>
1918	April 22, 1918	22.00 <sup>1,4</sup>	24,000 <sup>5</sup>	1972	June 23, 1972	30.96	72,500 <sup>6</sup>
1919	January 4, 1919	24.90 <sup>1,4</sup>	35,000 <sup>5</sup>	1973	February 3, 1973	25.04	30,800 <sup>6</sup>
1920	February 5, 1920	30.90 <sup>1,4</sup>	65,000 <sup>5</sup>	1974	September 8, 1974	24.46	27,300 <sup>6</sup>
1921	January 16, 1921	20.00 <sup>1,4</sup>	20,000 <sup>5</sup>	1975	March 20, 1975	29.07	58,900 <sup>6</sup>
1922	March 5, 1922	21.60 <sup>1,4</sup>	23,000 <sup>5</sup>	1976	January 1, 1976	21.77	17,400 <sup>6</sup>
1923	March 18, 1923	27.80 <sup>1,4</sup>	48,000 <sup>5</sup>	1977	April 6, 1977	23.15	21,600 <sup>6</sup>
1924	January 18, 1924	22.60 <sup>1,4</sup>	26,000 <sup>5</sup>	1978	April 28, 1978	29.73	56,200 <sup>6</sup>

1925	October 2, 1924	27.50 <sup>1,4</sup>	47,000 <sup>5</sup>	1979	February 26, 1979	29.59	55,200 <sup>6</sup>
1926	January 20, 1926	21.90 <sup>1,4</sup>	24,000 <sup>5</sup>	1980	March 22, 1980	23.50	23,100 <sup>6</sup>
1927	February 21, 1927	23.30 <sup>1,4</sup>	29,000 <sup>5</sup>	1981	June 7, 1981	15.52	9,280 <sup>6</sup>
1928	August 13, 1928	32.46 <sup>1</sup>	74,500	1982	February 4, 1982	23.86	24,100 <sup>6</sup>
1929	April 17, 1929	22.08 <sup>1</sup>	24,800	1983	April 12, 1983	26.58	36,800 <sup>6</sup>
1930	October 4, 1929	28.04 <sup>1</sup>	49,500	1984	February 15, 1984	25.96	33,200 <sup>6</sup>
1931	August 24, 1931	21.40 <sup>4</sup>	23,000 <sup>5</sup>	1985	August 20, 1985	27.28	37,000 <sup>6</sup>
1932	March 8, 1932	24.20 <sup>4</sup>	32,000 <sup>5</sup>	1986	November 6, 1985	29.58	51,200 <sup>6</sup>
1933	October 18, 1932	28.90 <sup>4</sup>	54,000 <sup>5</sup>	1987	September 10, 1987	33.18	76,300 <sup>6</sup>
1934	March 5, 1934	22.80 <sup>4</sup>	27,000 <sup>5</sup>	1988	January 20, 1988	18.08	12,400 <sup>6</sup>
1935	December 3, 1934	27.00 <sup>4</sup>	44,000 <sup>5</sup>	1989	May 7, 1989	26.79	34,300 <sup>6</sup>
1936	March 19, 1936	29.10 <sup>4</sup>	55,000 <sup>5</sup>	1990	May 30, 1990	24.51	24,500 <sup>6</sup>
1937	January 4, 1937	26.40 <sup>4</sup>	42,000 <sup>5</sup>	1991	October 24, 1990	28.08	41,600 <sup>6</sup>
1938	October 22, 1937	29.20 <sup>4</sup>	56,000 <sup>5</sup>	1992	April 23, 1992	26.59	33,300 <sup>6</sup>
1939	August 21, 1939	26.90 <sup>4</sup>	44,000 <sup>5</sup>	1993	March 5, 1993	28.35	43,200 <sup>6</sup>
1940	August 16, 1940	41.60	150,000	1994	March 30, 1994	27.15	36,300 <sup>6</sup>
1941	April 6, 1941	19.60 <sup>4</sup>	19,000 <sup>5</sup>	1995	June 24, 1995	29.93	53,600 <sup>6</sup>
1942	August 10, 1942	23.40 <sup>4</sup>	29,000 <sup>5</sup>	1996	September 7, 1996	34.94	89,300 <sup>6</sup>
1943	February 6, 1943	25.00 <sup>4</sup>	35,000 <sup>5</sup>	1997	December 3, 1996	25.16	26,700 <sup>6</sup>
1944	September 30, 1944	32.60 <sup>4</sup>	75,000 <sup>5</sup>	1998	January 29, 1998	27.17	36,400 <sup>6</sup>
1945	September 20, 1945	28.70 <sup>4</sup>	53,000 <sup>5</sup>	1999	January 25, 1999	16.96	11,000 <sup>6</sup>
1946	January 9, 1946	23.60 <sup>4</sup>	30,000 <sup>5</sup>	2000	April 19, 2000	22.99	20,600 <sup>6</sup>
1947	January 22, 1947	22.20 <sup>4</sup>	25,000 <sup>5</sup>	2001	March 31, 2001	22.41	19,400 <sup>6</sup>
1948	February 16, 1948	26.40 <sup>4</sup>	42,000 <sup>5</sup>	2002	March 19, 2002	11.21	5,200 <sup>6</sup>
1949	December 6, 1948	28.70 <sup>4</sup>	53,000 <sup>5</sup>	2003	February 24, 2003	27.18	36,400 <sup>6</sup>
1950	June 2, 1950	25.70 <sup>4</sup>	38,000 <sup>5</sup>	2004	February 7, 2004	22.48	19,500 <sup>6</sup>
1951	December 9, 1950	22.76	22,800	2005	January 15, 2005	23.60	22,000 <sup>6</sup>
1952	September 2, 1952	26.50	31,600	2006	October 9, 2005	21.05	16,800 <sup>6</sup>
1953	March 25, 1953	23.39	23,100	2007	March 17, 2007	24.26	23,800 <sup>6</sup>

<sup>1</sup>Gage height at different site and (or) datum.

<sup>2</sup>Discharge is a historic peak.

<sup>3</sup>Month or day of occurrence is unknown or not exact.

<sup>4</sup>Records of stage were collected by the U.S. Weather Bureau.

<sup>5</sup>Discharge is an estimate.

<sup>6</sup>Discharge is affected by regulation or diversion.

**Table 443. 02066500 Roanoke Creek at Saxe, Va.**

LOCATION.--Latitude 36°55'49", Longitude 078°39'56", NAD27, Charlotte County, Hydrologic Unit 03010102, on right bank at downstream side of bridge on State Highway 612, 500 ft northwest of Saxe, and 5.2 mi upstream from mouth.

DRAINAGE AREA.--135 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 322.36 ft NGVD of 1929. Prior to July 21, 1950, nonrecording gage at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 2,600 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--8 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1940	August 16, 1940	25.70 <sup>1</sup>		1959	December 30, 1958	10.37	2,020
1947	September 25, 1947	11.40	2,790	1961	February 24, 1961	9.66	1,530
1948	February 15, 1948	11.44	2,790	1962	January 7, 1962	11.28	2,710
1949	December 5, 1948	12.00 <sup>1</sup>	2,400	1963	March 7, 1963	10.35	2,020
1950	November 1, 1949	11.90	3,190	1964	February 8, 1964	7.78	615
1951	December 5, 1950	8.70	960	1965	August 26, 1965	9.40	1,350
1952	December 22, 1951	10.80	2,310	1966	March 1, 1966	9.81	1,600
1953	November 21, 1952	11.33	2,710	1967	February 22, 1967	8.69	925
1954	March 2, 1954	9.54	1,410	1968	January 15, 1968	8.91	1,040
1955	August 18, 1955	13.58	4,710	1969	March 26, 1969	10.00	1,740
1956	April 13, 1956	8.52	870	1970	April 3, 1970	8.20	680
1957	September 18, 1957	11.18	2,630	1971	May 31, 1971	11.08	2,530
1958	May 7, 1958	9.78	1,600	1972	October 24, 1971	15.83	7,110

<sup>1</sup>Gage height affected by backwater.

**Table 444.** 02066600 Sandy Creek near Wylliesburg, Va.

LOCATION.--Latitude 36°50'35", Longitude 078°38'30", NAD27, Charlotte County, Hydrologic Unit 03010102, at culvert on State Highway 608, 3.0 mi southwest of Wylliesburg, and 1.4 mi upstream from mouth.

DRAINAGE AREA.--8.97 mi<sup>2</sup>.

GAGE.--Water-stage recorder (flood-hydrograph recorder). Datum of gage is not determined.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--6 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1966	February 28, 1966	8.65	540	1971	May 30, 1971	8.95	620
1967	February 18, 1967	7.90	230	1972	October 24, 1971	15.32	
1968	March 12, 1968	8.43	360	1973	October 5, 1972	11.25	1,500
1969	January 20, 1969	7.85	340	1974	September 6, 1974	10.80	
1970	March 22, 1970	6.55		1975	March 30, 1975	10.95	

**Table 445. 02067000 Roanoke (Staunton) River near Clover, Va.**

LOCATION.--Latitude 36°50'17", Longitude 078°40'02", NAD27, Halifax County, Hydrologic Unit 03010102, on left bank 150 ft downstream from bridge on U.S. Highway 360, 3.7 mi downstream from Roanoke Creek, 3.7 mi east of Clover, and at mile 220.

DRAINAGE AREA.--3,227 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 302.91 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 70,000 ft<sup>3</sup>/s and extended above by logarithmic plotting on basis of slope-area measurements by Geological Survey, unit hydrograph and flood-routing studies by U.S. Army Corps of Engineers, and records for other stations in Roanoke River basin.

BANKFULL STAGE.--14 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1930	October 4, 1929	22.90	52,300	1942	August 10, 1942	18.33	28,000
1931	August 24, 1931	15.44	19,600	1943	December 31, 1942	17.30	24,600
1932	March 8, 1932	18.24	27,600	1944	September 20, 1944	27.50	77,000
1933	October 19, 1932	23.19	54,300	1945	September 20, 1945	23.40	51,700
1934	March 29, 1934	15.77	20,500	1946	January 9, 1946	17.20	24,300
1935	December 3, 1934	21.95	46,500	1947	January 22, 1947	15.90	20,800
1936	March 19, 1936	23.48	56,400	1948	February 16, 1948	20.20	35,800
1937	January 5, 1937		48,000	1949	December 5, 1948		62,000
1938	October 21, 1937		70,000	1950	June 2, 1950	18.97	30,600
1939	August 21, 1939	21.37	42,800	1951	December 9, 1950	15.98	21,000
1940	August 16, 1940	37.15	160,000	1952	September 3, 1952	19.88	34,400
1941	April 6, 1941	14.18	16,900				

**Table 446. 02067810 Maple Swamp Branch near Meadows of Dan, Va.**

LOCATION.--Latitude 36°44'10", Longitude 080°26'28", NAD27, Patrick County, Hydrologic Unit 03010103, at culvert on U.S. Highway 58, 1.8 mi west of Meadows of Dan.

DRAINAGE AREA.--0.46 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is not determined. Prior to Aug. 5, 1970, flood-hydrograph recorder at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--4 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1970	July 20, 1970	4.90	87.0	1975	September 18, 1975	5.34	113
1971	May 13, 1971	3.07	27.0	1976	May 29, 1976	4.67	80.0
1972	June 21, 1972	4.04	56.0	1977	March 13, 1977	4.51	72.0
1973	February 2, 1973	3.59	43.0	1978	January 26, 1978	4.79	86.0
1974	May 4, 1974	3.87	51.0	1979	September 21, 1979	6.60	181

**Table 447.** 02069600 Anglin Branch near Stuart, Va.

LOCATION.--Latitude 36°38'15", Longitude 080°12'55", NAD27, Patrick County, Hydrologic Unit 03010103, at culvert on U.S. Highway 58, 3 mi east of Stuart.

DRAINAGE AREA.--3.39 mi<sup>2</sup>.

GAGE.--Water-stage recorder (flood-hydrograph recorder). Datum of gage is 1,165 ft NGVD of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--4 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1967	May 7, 1967	4.87	240	1972	January 13, 1972	5.25	260
1968	June 9, 1968	3.63	160	1973		3.00 <sup>1</sup>	30.0 <sup>2,3</sup>
1969	June 21, 1969	5.53	418	1974	April 4, 1974	3.90	108
1970	July 20, 1970	5.00	250	1975	March 30, 1975	5.90	570
1971	October 31, 1970	5.10	235	1976	March 31, 1976	4.45	340

<sup>1</sup>Gage height below minimum recordable elevation.

<sup>2</sup>Discharge is less than indicated value, which is minimum recordable discharge at this site.

<sup>3</sup>Month or day of occurrence is unknown or not exact.

**Table 448. 02069700 South Mayo River near Nettleridge, Va.**

LOCATION.--Latitude 36°34'15", Longitude 080°07'47", NAD27, Patrick County, Hydrologic Unit 03010103, on right bank 60 ft downstream from bridge on State Highway 700, 1.2 mi southeast of Nettleridge, 1.4 mi downstream from Russell Creek, and 3.6 mi upstream from Spoon Creek.

DRAINAGE AREA.--85.5 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 871.60 ft NGVD of 1929. Prior to Oct. 9, 1964, nonrecording gage and crest-stage gage at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 2,940 ft<sup>3</sup>/s and extended above on basis of contracted-opening measurements at 12,500 ft<sup>3</sup>/s, 18,300 ft<sup>3</sup>/s, and 20,600 ft<sup>3</sup>/s.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Records were provided by the Virginia Department of Environmental Quality - Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1963	March 12, 1963	10.40	2,990	1986	November 4, 1985	16.18	9,170
1964	September 1, 1964	9.20	2,310	1987	March 1, 1987	12.33	4,480
1965	October 16, 1964	8.91	2,150	1988	June 19, 1988	6.79	1,130
1966	February 13, 1966	7.94	1,660	1989	July 6, 1989	11.05	3,390
1967	August 24, 1967	6.24	930	1990	March 17, 1990	9.83	2,660
1968	March 12, 1968	6.42	990	1991	March 29, 1991	8.89	2,140
1969	October 19, 1968	8.48	1,950	1992	April 21, 1992	17.10	10,600
1970	August 10, 1970	10.36	2,990	1993	March 24, 1993	11.35	3,630
1971	October 31, 1970	10.91	3,290	1994	March 28, 1994	9.08	2,240
1972	June 21, 1972	18.32	12,500	1995	January 15, 1995	8.01	1,710
1973	February 2, 1973	9.03	2,200	1996	June 9, 1996	8.61	2,000
1974	April 4, 1974	12.16	4,350	1997	December 1, 1996	8.67	2,030
1975	March 30, 1975	9.69	2,580	1998	April 17, 1998	7.95	1,680
1976	April 1, 1976	6.93	1,210	1999	September 30, 1999	6.44	1,000
1977	October 9, 1976	10.32	2,930	2000	March 21, 2000	5.95	782
1978	January 26, 1978	11.33	3,590	2001	May 22, 2001	6.28	931
1979	September 22, 1979	22.00	20,600	2002	March 18, 2002	5.33	503
1980	April 9, 1980	13.27	5,490	2003	February 22, 2003	9.15	2,280
1981	September 16, 1981	6.51	1,040	2004	September 28, 2004	16.26	9,290
1982	June 13, 1982	8.83	2,120	2005	January 14, 2005	7.80	1,620
1983	April 10, 1983	10.45	3,020	2006	October 8, 2005	7.57	1,510
1984	March 29, 1984	7.27	1,380	2007	September 14, 2007	8.56	1,980
1985	August 18, 1985	20.89	18,100				

**Table 449. 02070000 North Mayo River near Spencer, Va.**

LOCATION.--Latitude 36°34'05", Longitude 079°59'15", NAD27, Henry County, Hydrologic Unit 03010103, on left bank 800 ft downstream from bridge on State Highway 629 at Moores Mill, 2.1 mi downstream from Horse Pasture Creek, and 3.8 mi southeast of Spencer.

DRAINAGE AREA.--108 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 730.94 ft NGVD of 1929 (levels by U.S. Army Corps of Engineers). Prior to Jan. 23, 1936, nonrecording gage at site 800 ft upstream at datum of 732.44 ft NGVD 1929. July 25 to Sept. 27, 1936, nonrecording gage at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 6,470 ft<sup>3</sup>/s since 1936 and extended above on basis of slope-area measurements at 12,800 ft<sup>3</sup>/s and velocity-area study. Relation prior to 1936 extended on basis of difference in ratings at 3.4 ft.

BANKFULL STAGE.--7 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Subsequent to June 30, 1957, records were provided by the Virginia Department of Environmental Quality - Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1929	February 28, 1929	5.80 <sup>1</sup>	1,660	1969	October 19, 1968	6.10	2,340
1930	October 2, 1929	9.00 <sup>1</sup>	4,600	1970	August 10, 1970	6.32	2,500
1931	May 21, 1931	6.20 <sup>1</sup>	1,980	1971	October 31, 1970	7.63	3,620
1932	March 6, 1932	7.20 <sup>1</sup>	2,840	1972	June 21, 1972	13.41	12,600
1933	October 17, 1932	11.00 <sup>1</sup>	7,200	1973	February 2, 1973	6.56	2,740
1934	March 29, 1934	5.50 <sup>1</sup>	1,450	1974	April 5, 1974	7.35	3,420
1935	January 23, 1935	5.26 <sup>1</sup>	1,310	1975	March 14, 1975	7.53	3,520
1936	January 19, 1936	7.60 <sup>1,2</sup>	3,200	1976	May 30, 1976	4.77	1,460
1937	January 3, 1937	6.95	3,060	1977	October 9, 1976	6.77	2,900
1938	October 19, 1937	14.33	14,300	1978	January 26, 1978	7.27	3,330
1939	August 19, 1939	7.75	3,820	1979	September 22, 1979	13.70	13,100
1940	August 14, 1940	10.11	6,800	1980	April 9, 1980	7.96	4,040
1941	December 29, 1940	4.45	1,180	1981	September 16, 1981	3.52	745
1942	June 10, 1942	8.75	4,980	1982	October 27, 1981	4.30	1,190
1943	April 19, 1943	6.48	2,660	1983	April 10, 1983	7.17	3,210
1944	September 30, 1944	6.38	2,580	1984	February 14, 1984	5.48	1,920
1945	September 18, 1945	10.40	7,280	1985	August 18, 1985	14.22	14,100
1946	January 8, 1946	5.38	1,850	1986	November 5, 1985	11.95	9,910
1947	January 20, 1947	4.86	1,480	1987	September 7, 1987	13.39	12,500
1948	October 9, 1947	15.80	17,200	1988	November 10, 1987	3.71	845
1949	June 29, 1949	6.32	2,500	1989	July 6, 1989	10.16	6,900
1950	September 10, 1950	4.68	1,390	1990	March 17, 1990	7.96	4,000
1951	February 7, 1951	5.17	1,680	1991	October 23, 1990	8.51	4,620
1952	December 21, 1951	6.05	2,270	1992	June 5, 1992	9.32	5,670

1953	March 24, 1953	6.28	2,500	1993	March 4, 1993	7.97	4,010
1954	January 22, 1954	5.88	2,200	1994	March 28, 1994	6.69	2,820
1955	October 15, 1954	6.15	2,420	1995	June 29, 1995	6.65	2,790
1956	April 16, 1956	5.16	1,680	1996	June 10, 1996	9.54	5,880
1957	September 17, 1957	9.77	6,350	1997	March 3, 1997	6.29	2,490
1958	November 19, 1957	6.42	2,580	1998	January 28, 1998	6.48	2,650
1959	December 29, 1958	7.11	3,150	1999	September 29, 1999	4.33	1,160
1960	October 1, 1959	8.38	4,490	2000	March 21, 2000	4.16	1,070
1961	March 8, 1961	5.43	1,870	2001	March 30, 2001	4.64	1,340
1962	December 12, 1961	5.90	2,200	2002	March 18, 2002	4.13	1,050
1963	March 12, 1963	6.87	2,980	2003	March 20, 2003	9.04	5,250
1964	September 1, 1964	6.33	2,500	2004	September 28, 2004	7.51	3,570
1965	February 8, 1965	6.04	2,270	2005	March 28, 2005	5.64	2,000
1966	February 13, 1966	6.02	2,270	2006	October 8, 2005	5.52	1,910
1967	August 24, 1967	4.50	1,310	2007	January 1, 2007	6.25	2,460
1968	March 12, 1968	5.35	1,870				

<sup>1</sup>Gage height at different site and (or) datum.

<sup>2</sup>Gage datum changed during this year.

**Table 450. 02071530 Smith River at Smith River Church near Woolwine, Va.**

LOCATION.--Latitude 36°46'42", Longitude 080°14'58", NAD27, Patrick County, Hydrologic Unit 03010103, on left bank 10 ft downstream from bridge on State Highway 708, 1.9 mi southeast of Woolwine, and 29 mi upstream from Philpott Dam.

DRAINAGE AREA.--26.3 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 1,210 ft NGVD of 1929, from topographic map.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

<b>Water year</b>	<b>Date</b>	<b>Gage height (ft)</b>	<b>Discharge (ft<sup>3</sup>/s)</b>	<b>Water year</b>	<b>Date</b>	<b>Gage height (ft)</b>	<b>Discharge (ft<sup>3</sup>/s)</b>
Annual maximum stages and discharges							
1995	January 15, 1995	8.23	1,340	2002	March 17, 2002	4.14	217
1996	August 12, 1996	8.45	1,420	2003	February 22, 2003	8.27	1,480
1997	December 1, 1996	8.36	1,390	2004	September 28, 2004	12.20	3,520
1998	August 17, 1998	7.68	1,150	2005	January 14, 2005	8.69	1,660
1999	May 14, 1999	5.43	492	2006	January 13, 2006	7.69	1,250
2000	March 20, 2000	5.18	433	2007	November 16, 2006	8.41	1,540
2001	March 29, 2001	5.74	552				

**Table 451. 02071800 Nicholas Creek near Ferrum, Va.**

LOCATION.--Latitude 36°52'11", Longitude 080°03'10", NAD27, Franklin County, Hydrologic Unit 03010103, at bridge on State Highway 605, 4.1 mi southwest of Ferrum.

DRAINAGE AREA.--12.1 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 1,100.00 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 15 ft<sup>3</sup>/s and extended above to discharges below 500 ft<sup>3</sup>/s.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1949	June 28, 1949	13.40	11,800 <sup>1</sup>	1963	November 10, 1962	4.60	400
1950		3.44 <sup>2</sup>	75 <sup>3,4</sup>	1964	August 31, 1964	12.77	
1951		3.44 <sup>2</sup>	75 <sup>3,4</sup>	1965	July 11, 1965	9.30	
1952	September 1, 1952	9.55		1966	February 13, 1966	6.92	
1953	February 1953	8.49		1967	August 24, 1967	5.17	
1954	January 1954	3.74	135 <sup>3,4</sup>	1968		3.44 <sup>2</sup>	75 <sup>3,4</sup>
1955	March 6, 1955	7.41		1969	July 30, 1969	6.22	
1956	April 1956	6.10		1970	August 22, 1970	11.32	
1957	April 1957	6.97		1971	May 30, 1971	6.55	
1958	November 1957	5.22		1972	June 21, 1972	9.30	
1959	December 28, 1958	9.10		1974	September 6, 1974	9.72	
1960	May 8, 1960	5.43		1975	March 14, 1975	9.72	
1961	February 23, 1961	4.86	490	1976	June 17, 1976	11.53	
1962	November 21, 1961	4.34	300				

<sup>1</sup>Discharge is a historic peak.

<sup>2</sup>Gage height below minimum recordable elevation.

<sup>3</sup>Discharge less than indicated value, which is minimum recordable discharge at this site.

<sup>4</sup>Month or day of occurrence is unknown or not exact.

**Table 452. 02072000 Smith River near Philpott, Va.**

LOCATION.--Latitude 36°46'50", Longitude 080°01'30", NAD27, Franklin County, Hydrologic Unit 03010103, on left bank 900 ft downstream from Philpott Dam, 3.1 mi west of Philpott, 11.6 mi upstream from Reed Creek, and at mile 44.1.

DRAINAGE AREA.--215 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 804.27 ft NGVD of 1929 (U.S. Army Corps of Engineers bench mark). Prior to Oct. 8, 1952 water-stage recorder at site 1.9 mi downstream at different datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 1,500 ft<sup>3</sup>/s and extended above. Prior to 1952, defined by current-meter measurements below 9,600 ft<sup>3</sup>/s and extended above on basis of slope-area measurements at 13,000 ft<sup>3</sup>/s and 17,000 ft<sup>3</sup>/s.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered regulated. Flow regulated since August 1950, by Philpott Lake, capacity 247,400 acre-ft, 0.2 mi upstream.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1947	June 14, 1947	11.34 <sup>1</sup>	5,710	1978	April 27, 1978	7.34	3,650 <sup>2</sup>
1948	October 9, 1947	13.15 <sup>1</sup>	7,600	1979	September 22, 1979	7.22	3,510 <sup>2</sup>
1949	June 29, 1949	20.30 <sup>1</sup>	17,000	1980	April 15, 1980	7.43	3,760 <sup>2</sup>
1950	September 10, 1950	15.40 <sup>1</sup>	9,980 <sup>2</sup>	1981	August 20, 1981	5.01	1,360 <sup>2</sup>
1951	December 7, 1950	15.00 <sup>1</sup>	9,500 <sup>2</sup>	1982	February 15, 1982	5.17	1,480 <sup>2</sup>
1952	December 4, 1951	8.44 <sup>1</sup>	3,300 <sup>2</sup>	1983	April 13, 1983	7.47	3,730 <sup>2</sup>
1953	December 13, 1952	8.90	4,030 <sup>2</sup>	1984	April 2, 1984	5.35	1,620 <sup>2</sup>
1954	November 10, 1953	5.00	1,300 <sup>2</sup>	1985	May 23, 1985	5.18	1,480 <sup>2</sup>
1955	June 28, 1955	5.60	1,720 <sup>2</sup>	1986	November 8, 1985	8.37	4,840 <sup>2</sup>
1956	July 17, 1956	5.48	1,650 <sup>2</sup>	1987	April 18, 1987	7.44	3,690 <sup>2</sup>
1957	June 7, 1957	5.03	1,340 <sup>2</sup>	1988	August 29, 1988	5.11	1,430 <sup>2</sup>
1958	February 28, 1958	8.36	4,920 <sup>2</sup>	1989	November 21, 1988	5.07	1,400 <sup>2</sup>
1959	September 30, 1959	5.27	1,560 <sup>2</sup>	1990	October 3, 1989	8.46	4,960 <sup>2</sup>
1960	June 2, 1960	5.27	1,560 <sup>2</sup>	1991	November 1, 1990	5.19	1,490 <sup>2</sup>
1961	April 17, 1961	5.28	1,600 <sup>2</sup>	1992	April 23, 1992	9.51	5,900 <sup>2</sup>
1962	April 13, 1962	5.15	1,480 <sup>2</sup>	1993	March 26, 1993	7.51	3,740 <sup>2</sup>
1963	August 23, 1963	5.21	1,520 <sup>2</sup>	1994	March 30, 1994	6.44	2,610 <sup>2</sup>
1964	November 1, 1963	5.07	1,400 <sup>2</sup>	1995	January 19, 1995	5.22	1,510 <sup>2</sup>
1965	March 2, 1965	5.14	1,480 <sup>2</sup>	1996	June 12, 1996	7.35	3,570 <sup>2</sup>
1966	April 13, 1966	5.15	1,480 <sup>2</sup>	1997	December 4, 1996	6.61	2,780 <sup>2</sup>
1967	August 22, 1967	5.01	1,370 <sup>2</sup>	1998	October 2, 1997	5.10	1,420 <sup>2</sup>
1968	September 12, 1968	5.05	1,410 <sup>2</sup>	1999	September 1, 1999	5.19	1,490 <sup>2</sup>
1969	September 24, 1969	5.09	1,430 <sup>2</sup>	2000	October 11, 1999	5.18	1,480 <sup>2</sup>
1970	August 27, 1970	5.18	1,500 <sup>2</sup>	2001	January 4, 2001	5.13	1,440 <sup>2</sup>
1971	May 20, 1971	5.27	1,580 <sup>2</sup>	2002	January 23, 2002	5.21	1,510 <sup>2</sup>
1972	June 22, 1972	8.10	4,560 <sup>2</sup>	2003	December 6, 2002	5.27	1,550 <sup>2</sup>
1973	February 16, 1973	5.15	1,480 <sup>2</sup>	2004	October 3, 2003	5.18	1,480 <sup>2</sup>

1974	May 14, 1974	5.08	1,420 <sup>2</sup>	2005	September 29, 2005	5.17	1,480 <sup>2</sup>
1975	June 7, 1975	5.13	1,450 <sup>2</sup>	2006	October 4, 2005	5.18	1,480 <sup>2</sup>
1977	September 13, 1977	5.14	1,470 <sup>2</sup>	2007	September 14, 2007	5.20	1,500 <sup>2</sup>

---

<sup>1</sup>Gage height at different site and (or) datum.

<sup>2</sup>Discharge is affected by regulation or diversion.

**Table 453. 02072500 Smith River at Bassett, Va.**

LOCATION.--Latitude 36°46'12", Longitude 080°00'04", NAD27, Henry County, Hydrologic Unit 03010103, on left bank 25 ft upstream from bridge on State Highway 666 at north edge of North Bassett, 1.0 mi northwest of Bassett, 3.0 mi downstream from Town Creek, 5.6 mi upstream from Reed Creek, 6.2 mi downstream from Philpott Dam, and at mile 38.1.

DRAINAGE AREA.--259 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 753.09 ft NGVD of 1929 (levels by U.S. Army Corps of Engineers).

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 22,000 ft<sup>3</sup>/s and extended above on basis of backwater studies and records for station at Martinsville.

BANKFULL STAGE.--8 ft.

REGULATION.--High-flow conditions at this site are considered regulated after 1949. Flow regulated since August 1950, by Philpott Lake, capacity 247,400 acre-ft, 6.2 mi upstream. Diversion upstream from station since 1985, has average less than 1.0 ft<sup>3</sup>/s.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1938	October 19, 1937	22.90	38,200	1973	February 2, 1973	5.96	3,360 <sup>1</sup>
1939	August 18, 1939	16.93	23,300	1974	July 26, 1974	9.60	7,940 <sup>1</sup>
1940	August 14, 1940	18.28	26,600	1975	March 19, 1975	7.53	4,530 <sup>1</sup>
1941	July 4, 1941	7.63	5,380	1976	May 29, 1976	6.83	3,910 <sup>1</sup>
1942	June 11, 1942	9.15	7,730	1977	October 9, 1976	5.99	3,240 <sup>1</sup>
1943	July 10, 1943	15.00	19,000	1978	January 26, 1978	7.38	4,390 <sup>1</sup>
1944	September 29, 1944	7.21	4,860	1979	September 22, 1979	11.64	10,800 <sup>1</sup>
1945	September 18, 1945	15.10	19,200	1980	April 15, 1980	6.80	3,890 <sup>1</sup>
1946	January 7, 1946	8.34	6,350	1981	September 16, 1981	3.85	1,560 <sup>1</sup>
1947	June 14, 1947	6.95	6,100	1982	May 28, 1982	11.87	11,200 <sup>1</sup>
1948	October 9, 1947	8.58	8,560	1983	April 9, 1983	9.17	6,400 <sup>1</sup>
1949	June 29, 1949	16.00	21,600	1984	August 12, 1984	4.99	2,440 <sup>1</sup>
1950	September 10, 1950	13.04	16,000 <sup>1</sup>	1985	August 18, 1985	8.43	5,480 <sup>1</sup>
1951	December 7, 1950	11.20	12,800 <sup>1</sup>	1986	November 8, 1985	7.98	5,060 <sup>1</sup>
1952	December 4, 1951	5.58	4,000 <sup>1</sup>	1987	September 7, 1987	15.20	17,700 <sup>1</sup>
1953	December 13, 1952	4.50	2,470 <sup>1</sup>	1988	July 12, 1988	4.20	1,830 <sup>1</sup>
1954	January 22, 1954	4.43	2,410 <sup>1</sup>	1989	May 6, 1989	8.72	5,920 <sup>1</sup>
1955	October 15, 1954	4.81	2,850 <sup>1</sup>	1990	October 3, 1989	8.11	5,210 <sup>1</sup>
1956	July 17, 1956	5.50	2,930 <sup>1</sup>	1991	October 22, 1990	6.54	3,680 <sup>1</sup>
1957	September 17, 1957	6.49	5,350 <sup>1</sup>	1992	April 25, 1992	8.88	6,130 <sup>1</sup>
1958	November 19, 1957	6.41	5,200 <sup>1</sup>	1993	March 4, 1993	7.75	4,810 <sup>1</sup>
1959	September 30, 1959	7.00	6,100 <sup>1</sup>	1994	March 29, 1994	5.83	3,110 <sup>1</sup>
1960	February 5, 1960	5.53	3,850 <sup>1</sup>	1995	January 15, 1995	6.45	3,610 <sup>1</sup>
1961	June 21, 1961	4.27	2,080 <sup>1</sup>	1996	September 6, 1996	10.50	8,680 <sup>1</sup>
1962	December 12, 1961	4.14	1,960 <sup>1</sup>	1997	December 7, 1996	5.84	3,120 <sup>1</sup>
1963	November 9, 1962	5.19	3,400 <sup>1</sup>	1998	April 19, 1998	6.11	3,340 <sup>1</sup>
1964	August 31, 1964	6.85	5,800 <sup>1</sup>	1999	September 30, 1999	4.25	1,880 <sup>1</sup>

1965	October 16, 1964	5.43	3,780 <sup>1</sup>	2000	April 17, 2000	4.11	1,760 <sup>1</sup>
1966	February 13, 1966	4.56	2,460 <sup>1</sup>	2001	May 22, 2001	6.43	3,650 <sup>1</sup>
1967	October 19, 1966	4.18	2,000 <sup>1</sup>	2002	January 23, 2002	3.94	1,630 <sup>1</sup>
1968	March 12, 1968	3.99	1,790 <sup>1</sup>	2003	February 22, 2003	5.80	3,120 <sup>1</sup>
1969	June 21, 1969	4.44	2,310 <sup>1</sup>	2004	September 8, 2004	6.29	3,500 <sup>1</sup>
1970	August 22, 1970	6.16	4,840 <sup>1</sup>	2005	January 14, 2005	4.89	2,400 <sup>1</sup>
1971	February 22, 1971	5.35	3,620 <sup>1</sup>	2006	June 27, 2006	4.68	2,240 <sup>1</sup>
1972	June 21, 1972	8.61	6,300 <sup>1</sup>	2007	September 14, 2007	5.65	3,000 <sup>1</sup>

---

<sup>1</sup>Discharge is affected by regulation or diversion.

**Table 454. 02073000 Smith River at Martinsville, Va.**

LOCATION.--Latitude 36°39'40", Longitude 079°52'51", NAD27, Henry County, Hydrologic Unit 03010103, on right bank at south edge of Martinsville, 800 ft downstream from bridge on U.S. Highways 58 and 220, and 5.0 mi downstream from Beaver Creek.

DRAINAGE AREA.--379 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 657.22 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 16,700 ft<sup>3</sup>/s and extended above on basis of computations of flow over dam at 28,900 ft<sup>3</sup>/s and 38,200 ft<sup>3</sup>/s.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered regulated after 1949. Flow regulated since August 1950 by Philpott Lake, 19.6 mi upstream, and by Martinsville Reservoir, 10.3 mi upstream. Some additional regulation by powerplant 1,000 ft upstream from station. Total usable capacity estimated at 250,700 acre-ft.

REMARKS.--Subsequent to June 30, 1957, records were provided by the Virginia Department of Environmental Quality - Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1930	October 2, 1929	12.27	15,200	1969	July 3, 1969	6.87	5,690 <sup>1</sup>
1931	August 22, 1931	7.70	6,620	1970	August 10, 1970	5.87	4,390 <sup>1</sup>
1932	March 6, 1932	6.60	5,660	1971	October 31, 1970	7.00	5,840 <sup>1</sup>
1933	October 17, 1932	17.50	27,200	1972	June 21, 1972	14.95	20,900 <sup>1</sup>
1934	September 16, 1934	8.70	8,520	1973	February 2, 1973	7.89	7,220 <sup>1</sup>
1935	September 6, 1935	8.43	8,040	1974	April 4, 1974	7.94	7,300 <sup>1</sup>
1936	January 3, 1936	11.75	14,000	1975	March 19, 1975	8.95	8,920 <sup>1</sup>
1937	October 17, 1936	11.57	13,600	1976	May 30, 1976	6.08	4,620 <sup>1</sup>
1938	October 19, 1937	21.50	39,000	1977	October 9, 1976	8.84	8,740 <sup>1</sup>
1939	August 18, 1939	16.76	25,400	1978	January 26, 1978	10.77	12,100 <sup>1</sup>
1940	August 14, 1940	19.50	34,200	1979	September 22, 1979	16.59	24,900 <sup>1</sup>
1941	July 8, 1941	10.10	10,900	1980	April 9, 1980	8.99	8,980 <sup>1</sup>
1942	June 10, 1942	11.38	14,200	1981	September 16, 1981	3.85	1,940 <sup>1</sup>
1943	July 10, 1943	12.48	16,600	1982	May 28, 1982	6.93	5,740 <sup>1</sup>
1944	September 30, 1944	7.95	7,600	1983	April 10, 1983	9.65	10,100 <sup>1</sup>
1945	September 18, 1945	15.30	21,600	1984	February 14, 1984	5.81	4,800 <sup>1</sup>
1946	January 7, 1946	9.32	9,510	1985	August 18, 1985	15.43	21,900 <sup>1</sup>
1947	June 14, 1947	7.80	7,080	1986	November 4, 1985	8.09	7,880 <sup>1</sup>
1948	October 9, 1947	12.00	14,400	1987	September 8, 1987	20.08	34,600 <sup>1</sup>
1949	June 29, 1949	12.72	15,800	1988	July 27, 1988	7.81	7,480 <sup>1</sup>
1950	September 10, 1950	14.50	19,700 <sup>1</sup>	1989	July 6, 1989	10.98	12,500 <sup>1</sup>
1951	December 7, 1950	10.95	12,500 <sup>1</sup>	1990	March 17, 1990	7.86	7,550 <sup>1</sup>
1952	September 1, 1952	7.36	6,440 <sup>1</sup>	1991	March 29, 1991	7.38	6,880 <sup>1</sup>
1953	March 24, 1953	6.37	4,880 <sup>1</sup>	1992	June 5, 1992	10.42	11,500 <sup>1</sup>
1954	January 22, 1954	7.14	5,960 <sup>1</sup>	1993	March 4, 1993	10.15	11,000 <sup>1</sup>

1955	October 15, 1954	8.98	9,000 <sup>1</sup>	1994	March 28, 1994	6.25	5,320 <sup>1</sup>
1956	April 16, 1956	6.06	4,430 <sup>1</sup>	1995	January 15, 1995	7.99	7,740 <sup>1</sup>
1957	September 17, 1957	10.10	10,900 <sup>1</sup>	1996	September 6, 1996	16.75	25,300 <sup>1</sup>
1958	November 19, 1957	7.94	7,240 <sup>1</sup>	1997	April 29, 1997	6.08	5,090 <sup>1</sup>
1959	September 30, 1959	9.30	9,510 <sup>1</sup>	1998	April 19, 1998	6.75	6,010 <sup>1</sup>
1960	February 5, 1960	8.18	7,720 <sup>1</sup>	1999	September 30, 1999	4.93	3,520 <sup>1</sup>
1961	February 23, 1961	5.73	4,040 <sup>1</sup>	2000	March 21, 2000	4.22	2,570 <sup>1</sup>
1962	December 12, 1961	6.66	5,400 <sup>1</sup>	2001	May 22, 2001	7.06	6,430 <sup>1</sup>
1963	November 9, 1962	8.15	7,720 <sup>1</sup>	2002	March 18, 2002	4.41	2,820 <sup>1</sup>
1964	August 31, 1964	8.88	8,840 <sup>1</sup>	2003	March 20, 2003	10.27	11,200 <sup>1</sup>
1965	February 7, 1965	7.39	6,440 <sup>1</sup>	2004	September 8, 2004	8.56	8,530 <sup>1</sup>
1966	February 13, 1966	6.50	5,170 <sup>1</sup>	2005	March 28, 2005	6.13	5,160 <sup>1</sup>
1967	August 24, 1967	4.97	3,300 <sup>1</sup>	2006	August 31, 2006	6.46	5,610 <sup>1</sup>
1968	March 12, 1968	5.31	3,660 <sup>1</sup>	2007	January 1, 2007	6.88	6,180 <sup>1</sup>

---

<sup>1</sup>Discharge is affected by regulation or diversion.

**Table 455. 02073500 Leatherwood Creek near Old Liberty, Va.**

LOCATION.--Latitude 36°38'10", Longitude 079°47'30", NAD27, Henry County, Hydrologic Unit 03010103, at highway bridge, 1.7 mi upstream from mouth, 3 mi southeast of Old Liberty, and 6 mi southeast of Martinsville.

DRAINAGE AREA.--68.4 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 627.95 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 400 ft<sup>3</sup>/s and extended above on basis of logarithmic plotting and velocity-area study.

BANKFULL STAGE.--6 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

<b>Water year</b>	<b>Date</b>	<b>Gage height (ft)</b>	<b>Discharge (ft<sup>3</sup>/s)</b>	<b>Water year</b>	<b>Date</b>	<b>Gage height (ft)</b>	<b>Discharge (ft<sup>3</sup>/s)</b>
Annual maximum stages and discharges							
1926	November 13, 1925	8.10	1,040	1931	May 23, 1931	5.70	616
1927	December 29, 1926	4.90	481	1932	January 9, 1932	5.10	511
1928	August 11, 1928	14.38	2,970	1933	October 18, 1932	8.00	1,090
1929	July 14, 1929	6.10	690	1934	March 4, 1934		1,000
1930	October 2, 1929	5.44	562				

**Table 456. 02074500 Sandy River near Danville, Va.**

LOCATION.--Latitude 36°37'10", Longitude 079°30'16", NAD27, Pittsylvania County, Hydrologic Unit 03010103, on right bank 200 ft downstream from Hickory Forest Creek, 400 ft upstream from bridge on State Highway 863 between Callahans Store and Mount Cross, 5.5 mi northwest of city limits of Danville, and 5.8 mi upstream from mouth.

DRAINAGE AREA.--111 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 460.38 ft NGVD of 1929. Prior to June 26, 1942, water-stage recorder at site 1,200 ft downstream at datum of 454.81 ft NGVD 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 10,500 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--7 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Records were provided by the Virginia Department of Environmental Quality - Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1930	October 2, 1929		1,000	1969	July 8, 1969	5.30	2,390
1931	August 22, 1931	9.45 <sup>1</sup>	4,590	1970	August 10, 1970	5.68	2,900
1932	March 6, 1932	8.69 <sup>1</sup>	3,990	1971	May 13, 1971	6.01	3,330
1933	October 17, 1932	9.29 <sup>1</sup>	4,500	1972	June 21, 1972	9.92	10,500
1934	September 7, 1934	11.60 <sup>1</sup>	7,140	1973	November 14, 1972	6.18	3,630
1935	December 1, 1934	9.76 <sup>1</sup>	4,980	1974	September 6, 1974	6.60	4,270
1936	January 19, 1936	10.95 <sup>1</sup>	6,330	1975	March 30, 1975	10.90	12,700
1937	August 25, 1937	9.20 <sup>1</sup>	4,410	1976	January 27, 1976	4.65	1,700
1938	October 20, 1937	9.98 <sup>1</sup>	5,180	1977	October 9, 1976	5.47	2,580
1939	August 18, 1939	7.40 <sup>1</sup>	3,000	1978	April 26, 1978	8.77	8,210
1940	August 14, 1940	17.38 <sup>1</sup>	23,000	1979	September 22, 1979	10.38	11,600
1941	July 19, 1941	5.42 <sup>1</sup>	1,650	1980	April 9, 1980	6.95	4,860
1942	May 15, 1942	7.11 <sup>1,2</sup>	2,780	1981	February 20, 1981	3.66	934
1943	April 19, 1943	5.33	2,400	1982	January 4, 1982	5.14	2,200
1944	September 19, 1944	10.51	11,800	1983	April 2, 1983	7.11	5,130
1945	September 17, 1945	6.58	4,270	1984	August 13, 1984	6.69	4,410
1946	January 8, 1946	5.04	2,100	1985	August 18, 1985	10.10	10,900
1947	September 24, 1947	5.83	3,110	1986	November 4, 1985	7.54	5,870
1948	April 1, 1948	5.81	3,180	1987	April 16, 1987	10.97	12,800
1949	November 28, 1948	5.24	2,330	1988	July 23, 1988	5.72	2,930
1950	July 14, 1950	6.07	3,400	1989	July 5, 1989	10.63	12,100
1951	June 18, 1951	6.18	3,630	1990	October 1, 1989	6.62	4,300
1952	August 31, 1952	5.30	2,270	1991	October 23, 1990	9.01	8,620
1953	March 24, 1953	4.18	1,330	1992	January 4, 1992	6.80	4,600
1954	January 22, 1954	5.60	2,840	1993	March 4, 1993	7.82	6,380
1955	October 15, 1954	8.65	7,830	1994	March 2, 1994	6.51	4,120
1956	March 16, 1956	4.52	1,570	1995	June 29, 1995	10.26	11,200

1957	April 8, 1957	5.94	3,260	1996	September 6, 1996	11.06	13,000
1958	November 19, 1957	6.52	4,110	1997	April 29, 1997	6.12	3,510
1959	December 29, 1958	6.56	4,270	1998	May 7, 1998	7.63	6,020
1960	April 5, 1960	5.55	2,700	1999	September 30, 1999	5.97	3,210
1961	March 5, 1961	5.50	2,640	2000	September 3, 2000	7.05	5,000
1962	December 12, 1961	5.43	2,580	2001	May 22, 2001	6.30	3,780
1963	March 12, 1963	6.66	4,430	2002	May 9, 2002	7.49	5,770
1964	August 31, 1964	5.40	2,510	2003	March 20, 2003	7.83	6,380
1965	July 12, 1965	5.45	2,580	2004	September 28, 2004	7.49	5,770
1966	February 28, 1966	5.56	2,700	2005	July 8, 2005	7.19	5,240
1967	August 24, 1967	9.58	9,820	2006	October 8, 2005	5.43	2,550
1968	December 28, 1967	4.63	1,700	2007	January 1, 2007	8.60	7,820

---

<sup>1</sup>Gage height at different site and (or) datum.

<sup>2</sup>Gage datum changed during this year.

**Table 457. 02075000 Dan River at Danville, Va.**

LOCATION.--Latitude 36°35'15", Longitude 079°22'55", NAD27, Danville City, Hydrologic Unit 03010104, on left bank 50 ft downstream from Southern Railway bridge, 1,000 ft upstream from Fall Creek, and at mile 62.7.

DRAINAGE AREA.--2,060 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 379.29 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 56,000 ft<sup>3</sup>/s and extended above on basis of computations of flow over dam at 80,000 ft<sup>3</sup>/s.

BANKFULL STAGE.--12 ft.

REGULATION.--High-flow conditions at this site are considered regulated after 1949. Flow regulated since August 1950 by Philpott Lake 74.7 mi upstream and by Belews Lake 37.0 mi upstream, by Martinsville Reservoir, 65.4 mi upstream, and by several small water-supply reservoirs. Diurnal fluctuation caused by mills and hydroelectric generating facility at Schoolfield Dam 3.3 mi upstream. Total usable capacity estimated at 492,200 acre-ft.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1935	December 1, 1934	12.32	28,100	1966	March 1, 1966	11.91	23,000 <sup>3</sup>
1936	January 20, 1936	17.30	52,400	1967	August 24, 1967	11.25	20,800 <sup>3</sup>
1937	August 26, 1937	13.45	31,800	1968	March 13, 1968	8.99	13,700 <sup>3</sup>
1938	October 21, 1937	18.34	54,100	1969	October 20, 1968	8.61	12,500 <sup>3</sup>
1939	August 20, 1939	12.90	30,600	1970	August 12, 1970	13.95	25,000 <sup>3</sup>
1940	August 15, 1940	20.96	75,000	1971	May 13, 1971	11.65	19,900 <sup>3</sup>
1941	July 18, 1941	9.60	19,300	1972	June 22, 1972	21.34	59,200 <sup>3</sup>
1942	May 23, 1942	11.39	25,600	1973	February 3, 1973	12.99	26,900 <sup>3</sup>
1943	April 20, 1943	11.95 <sup>2</sup>	25,000 <sup>1</sup>	1974	December 21, 1973	12.70	25,800 <sup>3</sup>
1944	September 30, 1944	13.08	31,400	1975	March 30, 1975	17.69	46,600 <sup>3</sup>
1945	September 19, 1945	19.00	59,400	1976	January 1, 1976	8.78	13,200 <sup>3</sup>
1946	January 8, 1946	10.46	22,200	1977	October 10, 1976	11.79	22,600 <sup>3</sup>
1947	September 25, 1947	12.95	30,700	1978	April 27, 1978	18.56	37,000 <sup>1,3</sup>
1948	October 11, 1947	13.96	34,400	1979	September 24, 1979	17.89	42,900 <sup>3</sup>
1949	November 29, 1948	10.90	23,500	1980	April 9, 1980	13.62	26,000 <sup>3</sup>
1950	September 11, 1950	9.74	19,300 <sup>3</sup>	1981	September 8, 1981	6.37	7,230 <sup>3</sup>
1951	June 18, 1951	10.10	20,900 <sup>3</sup>	1982	January 5, 1982	9.21	14,400 <sup>3</sup>
1952	March 25, 1952	10.92	23,500 <sup>3</sup>	1983	April 11, 1983	11.36	21,200 <sup>3</sup>
1953	March 25, 1953	10.36	21,900 <sup>3</sup>	1984	March 29, 1984	13.19	27,600 <sup>3</sup>
1954	January 23, 1954	11.53	25,500 <sup>3</sup>	1985	August 18, 1985	14.78	33,800 <sup>3</sup>
1955	October 16, 1954	15.20	39,200 <sup>3</sup>	1986	November 6, 1985	11.86	22,900 <sup>3</sup>
1956	April 17, 1956	9.34	18,400 <sup>3</sup>	1987	April 16, 1987	20.81	55,400 <sup>3</sup>
1957	September 19, 1957	11.82	25,500 <sup>3</sup>	1988	January 21, 1988	6.91	8,400 <sup>3</sup>
1958	November 20, 1957	12.18 <sup>2</sup>	25,500 <sup>1,3</sup>	1989	July 6, 1989	11.99	23,300 <sup>3</sup>
1959	December 29, 1958	13.43	32,100 <sup>3</sup>	1990	October 3, 1989	14.90	34,300 <sup>3</sup>
1960	October 11, 1959	12.24	27,700 <sup>3</sup>	1991	October 23, 1990	17.78	46,900 <sup>3</sup>
1961	March 9, 1961	10.58	22,000 <sup>3</sup>	1992	April 22, 1992	13.69	29,500 <sup>3</sup>

1962	June 14, 1962	10.73	21,000 <sup>3</sup>	1993	March 5, 1993	16.46	36,000 <sup>3</sup>
1963	March 14, 1963	14.40	31,900 <sup>3</sup>	1994	March 29, 1994	16.59	35,100 <sup>3</sup>
1964	September 2, 1964	11.04	23,400 <sup>3</sup>	1995	June 29, 1995	16.60	41,500 <sup>3</sup>
1965	October 18, 1964	12.04	23,300 <sup>3</sup>				

---

<sup>1</sup>Discharge is a maximum daily average.

<sup>2</sup>Gage height affected by backwater.

<sup>3</sup>Discharge is affected by regulation or diversion.

**Table 458.** 02075045 Dan River at sewage treatment plant near Danville, Va.

LOCATION.--Latitude 36°33'45", Longitude 079°22'12", NAD27, Pittsylvania County, Hydrologic Unit 03010104, on right bank at foot- bridge at Danville sewage treatment plant, 0.1 mi downstream from Pumpkin Creek, and 0.6 mi southeast of Danville.

DRAINAGE AREA.--2,116 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 365.19 ft NGVD of 1929.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered regulated after 1949. Flow regulated since August 1950 by Philpott Lake 76.6 mi upstream and by Belews Lake 38.9 mi upstream, by Martinsville Reservoir, 67.3 mi upstream, and by several small water-supply reservoirs. Diurnal fluctuation caused by mills and hydroelectric generating facility 5 mi upstream. Total usable capacity estimated at 492,200 acre-ft.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1996	September 6, 1996	28.65	47,100 <sup>1</sup>	2002	May 9, 2002	11.00	8,850 <sup>1</sup>
1997	April 29, 1997	21.24	28,900 <sup>1</sup>	2003	March 21, 2003	25.38	38,500 <sup>1</sup>
1998	January 28, 1998	21.91	28,200 <sup>1</sup>	2004	September 30, 2004	20.82	27,800 <sup>1</sup>
1999	September 30, 1999	16.42	18,200 <sup>1</sup>	2005	July 8, 2005	17.66	20,600 <sup>1</sup>
2000	June 6, 2000	12.16	10,800 <sup>1</sup>	2006	September 14, 2006	14.65	15,000 <sup>1</sup>
2001	March 30, 2001	14.29	14,300 <sup>1</sup>	2007	January 1, 2007	25.45	40,400 <sup>1</sup>

<sup>1</sup>Discharge affected by regulation or diversion.

**Table 459. 02075350 Powells Creek near Turbeville, Va.**

LOCATION.--Latitude 36°34'50", Longitude 079°11'20", NAD27, Halifax County, Hydrologic Unit 03010104, at culvert on U.S. Highway 58, 0.8 mi upstream from mouth, 1.1 mi east of Halifax-Pittsylvania-County line, and 8.8 mi southwest of Turbeville.

DRAINAGE AREA.--0.29 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 383.95 ft NGVD of 1929. Prior to Dec. 18, 1969, water-stage recorder at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by indirect methods by U.S. Department of Agriculture, Soil Conservation Service.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Prior to 1970, records were provided by the U.S. Department of Agriculture, Soil Conservation Service.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1958	April 6, 1958	1.88 <sup>1</sup>	67.0	1983	April 15, 1983	2.45 <sup>1</sup>	92.0
1959	December 28, 1958	1.66 <sup>1</sup>	56.0	1984	March 29, 1984	2.80 <sup>1</sup>	108
1960	October 10, 1959	2.88 <sup>1</sup>	111	1985	August 18, 1985	2.69 <sup>1</sup>	103
1961	April 9, 1961	2.18 <sup>1</sup>	79.0	1986	August 12, 1986	2.35 <sup>1</sup>	88.0
1962	May 31, 1962	5.16 <sup>1</sup>	238	1987	September 8, 1987	3.60 <sup>1</sup>	147
1963	March 12, 1963	2.69 <sup>1</sup>	102	1988	August 4, 1988	4.19	40.0
1964	July 22, 1964	2.62 <sup>1</sup>	99.0	1989	July 6, 1989	5.08	83.0
1965	July 11, 1965	7.86 <sup>1</sup>	384	1990	May 2, 1990	3.97	30.0
1966	May 27, 1966	1.34 <sup>1</sup>	38.0	1991	March 29, 1991	4.36	50.0
1967	August 23, 1967	0.86 <sup>1</sup>	17.0	1992	August 13, 1992	3.94	28.0
1968	March 12, 1968	1.19 <sup>1</sup>	32.0	1993	March 4, 1993	4.60	60.0
1970	February 17, 1970	2.66 <sup>1</sup>	101	1994	July 29, 1994	6.04	129
1971	September 11, 1971	1.64 <sup>1</sup>	54.0	1995	June 28, 1995	6.22	137
1972	June 21, 1972	2.60 <sup>1</sup>	98.0	1996	October 20, 1995	4.41	52.0
1973	August 15, 1973	3.61 <sup>1</sup>	148	1997	April 28, 1997	3.85	24
1974	September 6, 1974	2.00 <sup>1</sup>	70.0	1998		4.21 <sup>2</sup>	42 <sup>3,4</sup>
1975	March 30, 1975	3.13 <sup>1</sup>	124	1999	April 2, 1999	4.09	36
1976	December 31, 1975	1.33 <sup>1</sup>	38.0	2000	June 16, 2000	7.56	215
1977	October 9, 1976	1.21 <sup>1</sup>	32.0	2001	March 29, 2001	4.01	32
1978	January 26, 1978	3.66 <sup>1</sup>	150	2002	May 3, 2002	3.39	6.7
1979	September 22, 1979	3.25 <sup>1</sup>	130	2003	September 23, 2003	6.94	178
1980	June 26, 1980	1.29 <sup>1</sup>	37.0	2004	February 6, 2004	4.35	49
1981	February 20, 1981	0.74 <sup>1</sup>	11.0	2005	January 14, 2005	5.02	80
1982	October 26, 1981	1.52 <sup>1</sup>	48.0	2006	June 27, 2006	3.50	10.4

<sup>1</sup>Gage height at different site and (or) datum.

<sup>2</sup>Gage height below minimum recordable elevation.

<sup>3</sup>Discharge is less than indicated value, which is minimum recordable discharge at this site.

<sup>4</sup>Month or day of occurrence is unknown or not exact.

**Table 460.** 02075450 Little Winns Creek near Turbeville, Va.

LOCATION.--Latitude 36°35'20", Longitude 079°05'20", NAD27, Halifax County, Hydrologic Unit 03010104, at culvert on U.S. Highway 58, 1.0 mi upstream from mouth, and 3.6 mi southwest of Turbeville.

DRAINAGE AREA.--2.23 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 385 ft NGVD of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by indirect methods by U.S. Department of Agriculture, Soil Conservation Service.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Records were provided by the U.S. Department of Agriculture, Soil Conservation Service.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1958	January 24, 1958	3.04	208	1967	July 14, 1967	1.96	75.0
1959	June 4, 1959	3.79	297	1968	March 12, 1968	2.07	86.0
1960	October 10, 1959	9.42	865	1969	June 15, 1969	3.70	290
1961	June 24, 1961	3.83	301	1970	April 2, 1970	1.66	48.0
1962	January 6, 1962	3.50	269	1971	August 27, 1971	2.70	166
1963	March 6, 1963	3.60	282	1972	June 21, 1972	3.24	242
1964	July 12, 1964	3.00	203	1973	October 5, 1972	5.19	638
1965	October 4, 1964	4.03	322	1974	September 6, 1974	6.40	731
1966	February 28, 1966	2.69	160				

**Table 461. 02075500 Dan River at Paces, Va.**

LOCATION.--Latitude 36°38'32", Longitude 079°05'23", NAD27, Halifax County, Hydrologic Unit 03010104, on right bank 100 ft upstream from bridge on State Highway 658, 0.5 mi southeast of Paces, 0.5 mi upstream from Big Toby Creek, 2.7 mi upstream from Birch Creek, and at mile 36.0.

DRAINAGE AREA.--2,587 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 322.48 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 32,000 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered regulated after 1949. Flow regulated since August 1950 by Philpott Lake 101.4 mi upstream and by Belews Lake 63.7 mi upstream, by Martinsville Reservoir, 92.1 mi upstream, and by several small water-supply reservoirs. Diurnal fluctuation by mills 23 mi upstream at Danville. Total usable capacity estimated at 492,200 acre-ft.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1940	August 16, 1940	32.30		1980	April 11, 1980	22.39	23,400 <sup>1</sup>
1951	April 10, 1951	20.50	23,200 <sup>1</sup>	1981	February 20, 1981	12.38	7,920 <sup>1</sup>
1952	March 26, 1952	22.12	25,700 <sup>1</sup>	1982	January 5, 1982	19.36	17,500 <sup>1</sup>
1953	March 26, 1953	20.00	20,200 <sup>1</sup>	1983	April 12, 1983	20.95	20,700 <sup>1</sup>
1954	January 24, 1954	22.13	24,800 <sup>1</sup>	1984	March 30, 1984	23.16	26,100 <sup>1</sup>
1955	October 17, 1954	25.40	34,000 <sup>1</sup>	1985	August 20, 1985	23.74	27,600 <sup>1</sup>
1956	April 17, 1956	18.67	17,300 <sup>1</sup>	1986	November 6, 1985	21.12	21,100 <sup>1</sup>
1957	September 19, 1957	22.46	26,100 <sup>1</sup>	1987	April 17, 1987	30.91	54,200 <sup>1</sup>
1958	April 30, 1958	22.19	25,300 <sup>1</sup>	1988	January 21, 1988	14.44	10,400 <sup>1</sup>
1959	December 30, 1958	24.30	30,300 <sup>1</sup>	1989	May 7, 1989	20.89	20,600 <sup>1</sup>
1960	April 6, 1960	24.48	30,900 <sup>1</sup>	1990	October 4, 1989	25.58	33,000 <sup>1</sup>
1961	March 10, 1961	19.91	19,800 <sup>1</sup>	1991	March 31, 1991	26.87	37,600 <sup>1</sup>
1962	January 8, 1962	22.18	25,000 <sup>1</sup>	1992	April 23, 1992	24.39	29,400 <sup>1</sup>
1963	March 14, 1963	24.72	31,500 <sup>1</sup>	1993	March 5, 1993	26.71	37,000 <sup>1</sup>
1964	September 2, 1964	20.54	21,100 <sup>1</sup>	1994	March 30, 1994	25.88	34,100 <sup>1</sup>
1965	October 19, 1964	21.24	22,600 <sup>1</sup>	1995	June 30, 1995	26.65	36,800 <sup>1</sup>
1966	March 2, 1966	21.41	21,100 <sup>1</sup>	1996	September 7, 1996	31.43	56,500 <sup>1</sup>
1967	August 25, 1967	18.93	16,900 <sup>1</sup>	1997	April 30, 1997	24.91	30,800 <sup>1</sup>
1968	March 14, 1968	19.00	17,000 <sup>1</sup>	1998	January 29, 1998	24.71	30,300 <sup>1</sup>
1969	October 21, 1968	16.66	13,300 <sup>1</sup>	1999	January 25, 1999	18.22	15,700 <sup>1</sup>
1970	August 13, 1970	23.11	25,200 <sup>1</sup>	2000	October 1, 1999	19.74	18,200 <sup>1</sup>
1971	May 17, 1971	21.05	20,500 <sup>1</sup>	2001	March 31, 2001	17.93	15,300 <sup>1</sup>
1972	June 23, 1972	33.15	64,800 <sup>1</sup>	2002	May 9, 2002	13.47	9,370 <sup>1</sup>
1973	February 4, 1973	23.26	25,600 <sup>1</sup>	2003	March 22, 2003	28.26	42,900 <sup>1</sup>
1974	September 8, 1974	23.32	25,700 <sup>1</sup>	2004	September 30, 2004	22.80	25,200 <sup>1</sup>
1975	March 16, 1975	26.95	37,800 <sup>1</sup>	2005	March 29, 2005	19.18	17,200 <sup>1</sup>

1977	October 11, 1976	19.69	18,100 <sup>1</sup>	2006	September 15, 2006	17.20	16,200 <sup>1</sup>
1978	April 28, 1978	29.08	46,300 <sup>1</sup>	2007	January 2, 2007	25.29	34,700 <sup>1</sup>
1979	September 24, 1979	29.34	47,400 <sup>1</sup>				

---

<sup>1</sup>Discharge affected by regulation or diversion.

**Table 462** 02075900 Lawsons Creek at Turbeville, Va.

LOCATION.--Latitude 36°36'39", Longitude 079°01'28", NAD27, Halifax County, Hydrologic Unit 03010104, at culvert on State Highway 658, 1 mi southeast of Turbeville.

DRAINAGE AREA.--8.64 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is not determined. Aug. 25, 1965 to Sept. 9, 1975, flood-hydrograph recorder at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by flow-through-culvert computations for period prior to 1962. Culvert rebuilt in 1967.

BANKFULL STAGE.--8 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1951	April 10, 1951	9.20	780	1964	August 31, 1964	8.97	
1952	June 1952	9.03	750 <sup>1</sup>	1965	July 12, 1965	9.25	
1953	November 21, 1952	6.60	360	1966	February 28, 1966	8.30	
1954	January 22, 1954	7.92	580	1967	February 18, 1967	5.40	
1955	October 15, 1954	10.81	1,050	1968	March 12, 1968	9.43	
1956	October 3, 1955	8.25	630	1969	May 19, 1969	9.11	
1957	September 17, 1957	11.56	1,200	1970	April 3, 1970	7.31	
1958	August 13, 1958	9.18	780	1971	September 11, 1971	11.15	
1959	April 12, 1959	10.88	1,100	1972	June 21, 1972	12.61	
1960	October 10, 1959	14.00	7,740	1973	October 5, 1972	10.87	
1961	June 22, 1961	9.80	2,000	1974	September 6, 1974	12.02	
1962	January 6, 1962	9.60		1975	July 14, 1975	11.31	
1963	March 12, 1963	9.80		1976	December 31, 1975	7.05	

<sup>1</sup>Month or day of occurrence is unknown or not exact.

**Table 463. 02076000 Dan River at South Boston, Va.**

LOCATION.--Latitude 36°41'37", Longitude 078°54'09", NAD27, South Boston City, Hydrologic Unit 03010104, on left bank 100 ft upstream from Norfolk and Western Railroad bridge at South Boston, 1 mi downstream from Lawsons Creek, 6 mi upstream from Banister, and at mile 22.6.

DRAINAGE AREA.--2,762 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 299.23 ft NGVD of 1929. August 1900 to May 1907, wire or chain gage at present site and datum of 302.29 ft NGVD of 1929. Apr. 28, 1923, to Dec. 8, 1928, chain gage at present site and datum. December 1928 to September 1952 water-stage recorder at present site and datum of 299.23 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 60,000 ft<sup>3</sup>/s and slope-area measurement at 90,000 ft<sup>3</sup>/s for period to 1953.

BANKFULL STAGE.--20 ft.

REGULATION.--High flow conditions at this site are considered regulated after 1949. Flow regulated since August 1950 by Philpott Lake, by Belews Lake, by Martinsville Reservoir, and by several small water-supply reservoirs.

REMARKS.--Flow at high stages (possibly in backwater conditions from Kerr Reservoir) has been affected since March 1953.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1901	May 23, 1901	24.50 <sup>1</sup>	51,000	1955	October 18, 1954	26.38	
1902	December 31, 1901	25.50 <sup>1</sup>	52,600	1956	April 18, 1956	20.75	
1903	March 24, 1903	23.50 <sup>1</sup>	45,000	1957	February 3, 1957	24.30	
1904	August 10, 1904	13.00 <sup>1</sup>	14,000	1958	May 1, 1958	24.09	
1905	February 22, 1905	16.20 <sup>1</sup>	20,000	1959	December 31, 1958	26.30	
1906	January 5, 1906	20.50 <sup>1</sup>	32,000	1960	October 12, 1959	26.35	
1924	January 18, 1924	24.60	29,000	1961	March 10, 1961	21.98	
1925	October 2, 1924	24.41	28,500	1962	January 8, 1962	23.95	
1926	January 20, 1926	21.50	22,300	1980		19.50 <sup>3</sup>	
1927	December 26, 1926	20.50	20,400	1981		19.50 <sup>3</sup>	
1928	August 14, 1928	25.80	31,800	1982	January 6, 1982	22.18	
1929	March 2, 1929	22.76	25,000	1983	April 12, 1983	23.40	
1930	October 4, 1929	27.03	40,000	1984	March 31, 1984	25.62	
1931	August 24, 1931	20.48	20,400	1985	August 21, 1985	26.36	
1932	January 10, 1932	24.90	29,700	1986	November 7, 1985	23.15	
1933	October 20, 1932	26.53	33,500	1987	April 18, 1987	32.57 <sup>4</sup>	
1934	March 6, 1934	23.49	26,500	1988	January 21, 1988	19.51 <sup>3</sup>	
1935	December 2, 1934	24.47	26,100	1989	May 8, 1989	23.23	
1936	January 21, 1936	28.50	51,000 <sup>2</sup>	1990	October 4, 1989	27.33	
1937	January 4, 1937	25.70	32,000	1991	March 31, 1991	29.12	
1938	October 22, 1937	28.25	48,600	1992	April 24, 1992	26.54	
1939	August 21, 1939	24.52	27,500	1993	March 6, 1993	28.79	
1940	August 16, 1940	31.80	81,000	1994	March 30, 1994	28.26	
1941	November 16, 1940	20.94	19,400	1995	March 30, 1995	28.26	

1942	May 24, 1942	23.90	25,700	1996	September 8, 1996	33.21
1943	April 21, 1943	24.26	26,900	1997	May 1, 1997	27.24
1944	September 20, 1944	24.00	26,000	1998	January 30, 1998	27.34
1945	September 20, 1945	30.50	68,000	1999	January 25, 1999	21.90
1946	January 9, 1946	22.50	22,200	2000	October 1, 1999	22.86
1947	September 26, 1947	25.70	32,000	2001	March 31, 2001	21.70
1948	October 12, 1947	25.00	29,000	2002	March 19, 2002	16.90
1949	December 1, 1948	24.20	26,600	2003	March 22, 2003	30.34
1950	November 2, 1949	23.00	23,400	2004	February 8, 2004	23.47
1951	April 11, 1951	22.60	22,400	2005	October 1, 2004	24.78
1952	March 26, 1952	24.12	26,300	2006	September 15, 2006	20.64
1953	February 23, 1953	21.63		2007	January 3, 2007	27.06
1954	January 25, 1954	23.85				

---

<sup>1</sup>Gage height at different site and (or) datum.

<sup>2</sup>Discharge is an estimate.

<sup>3</sup>Gage height below minimum recordable elevation.

<sup>4</sup>Gage height affected by backwater.

**Table 464. 02076200 Bearskin Creek near Chatham, Va.**

LOCATION.--Latitude 36°50'30", Longitude 079°29'05", NAD27, Pittsylvania County, Hydrologic Unit 03010105, on left upstream wingwall of culvert on State Highway 57, 4.5 mi west of Chatham, and 6 mi upstream from mouth.

DRAINAGE AREA.--3.99 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 630 ft NGVD of 1929, from topographic map. Prior to Sept. 9, 1978, flood-hydrograph recorder at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--3 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1967	August 24, 1967	11.50	1,530	1989	July 6, 1989	5.93	450
1968	July 12, 1968	8.28	860	1990	March 18, 1990	5.11	335
1969		3.40 <sup>1</sup>	150 <sup>2,3</sup>	1991	October 23, 1990	7.33	679
1970	July 25, 1970	4.43	252	1992	January 4, 1992	4.75	290
1971	May 13, 1971	5.35	369	1993	March 4, 1993	5.47	386
1972	June 21, 1972	13.12	1,920	1994	March 2, 1994	4.64	277
1973	November 14, 1972	6.85	596	1995	June 29, 1995	19.90	2,850
1974	September 6, 1974	6.45	532	1996	September 6, 1996	12.15	1,690
1975	March 19, 1975	7.45	701	1997	December 1, 1996	4.78	294
1976		3.50 <sup>1</sup>	150 <sup>2,3</sup>	1998	February 4, 1998	5.52	393
1977	October 9, 1976	7.54	717	1999		4.15 <sup>1</sup>	218 <sup>2,3</sup>
1978	January 26, 1978	8.10	820	2000		4.15 <sup>1</sup>	218 <sup>2,3</sup>
1980		3.86 <sup>1</sup>	186 <sup>2,3</sup>	2001		4.15 <sup>1</sup>	218 <sup>2,3</sup>
1981		3.18 <sup>1</sup>	118 <sup>2,3</sup>	2002		4.15 <sup>1</sup>	249 <sup>2,3</sup>
1982	May 26, 1982	4.12	212	2003	March 20, 2003	6.41	525
1983	April 3, 1983	4.93	312	2004	September 28, 2004	8.13	826
1984	August 13, 1984	5.28	359	2005	January 14, 2005	4.89	307
1986	November 4, 1985	16.00	2,300	2006	June 26, 2006	8.05	810
1987	April 16, 1987	10.65	1,350	2007	November 16, 2006	5.06	328
1988		3.18 <sup>1</sup>	118 <sup>2,3</sup>				

<sup>1</sup>Gage height below minimum recordable elevation.

<sup>2</sup>Discharge is less than indicated value, which is minimum recordable discharge at this site.

<sup>3</sup>Month or day of occurrence is unknown or not exact.

**Table 465.** 02076400 Whitethorn Creek tributary at Gretna, Va.

(Formerly published as 02076600.)

LOCATION.--Latitude 36°56'00", Longitude 079°22'10", NAD27, Pittsylvania County, Hydrologic Unit 03010105, at culvert on U.S. Highway 29, 0.9 mi southwest of Gretna.

DRAINAGE AREA.--2.02 mi<sup>2</sup>.

GAGE.--Water-stage recorder (flood-hydrograph recorder). Datum of gage is 725.26 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--6 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

<b>Water year</b>	<b>Date</b>	<b>Gage height (ft)</b>	<b>Discharge (ft<sup>3</sup>/s)</b>	<b>Water year</b>	<b>Date</b>	<b>Gage height (ft)</b>	<b>Discharge (ft<sup>3</sup>/s)</b>
Annual maximum stages and discharges							
1966	February 28, 1966	4.00	120	1971	May 13, 1971	3.85	125
1967	August 24, 1967	5.70	340	1972	June 21, 1972	7.00	510
1968	July 13, 1968	4.75	220	1973	October 5, 1972	4.25	168
1969	March 25, 1969	3.50	90.0	1974	September 6, 1974	4.45	190
1970	August 4, 1970	4.12	153	1975	March 19, 1975	4.90	243

**Table 466. 02076500 Georges Creek near Gretna, Va.**

LOCATION.--Latitude 36°56'11", Longitude 079°18'42", NAD27, Pittsylvania County, Hydrologic Unit 03010105, on left bank 15 ft downstream from bridge on State Highway 40, 2.8 mi southeast of Gretna, and 5.8 mi upstream from Whitethorn Creek.

DRAINAGE AREA.--9.18 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 629.54 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 640 ft<sup>3</sup>/s and extended above on basis of slope-area measurements at 930 ft<sup>3</sup>/s and 1,590 ft<sup>3</sup>/s.

BANKFULL STAGE.--4 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Subsequent to June 30, 1957, records were provided by the Virginia Department of Environmental Quality - Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1950	September 13, 1950	6.48	1,100	1974	September 6, 1974	6.91	935
1951	December 4, 1950	3.77	261	1975	March 19, 1975	6.06	648
1952	September 1, 1952	6.08	865	1976	May 30, 1976	4.45	390
1953	June 22, 1953	3.56	191	1977	October 9, 1976	5.17	540
1954	January 22, 1954	4.93	460	1978	January 26, 1978	7.20	1,010
1955	October 15, 1954	6.23	932	1979	September 22, 1979	8.50	1,480
1956	August 16, 1956	3.59	196	1980	April 9, 1980	3.88	287
1957	September 17, 1957	4.60	390	1981	February 19, 1981	2.85	135
1958	November 19, 1957	6.06	842	1982	January 4, 1982	4.04	311
1959	December 28, 1958	4.57	380	1983	April 2, 1983	6.25	772
1960	February 19, 1960	3.53	246	1984	February 14, 1984	5.60	620
1961	February 23, 1961	3.30	200	1985	August 18, 1985	6.55	905
1962	December 12, 1961	4.56	502	1986	November 4, 1985	7.33	1,160
1963	March 12, 1963	3.53	248	1987	April 16, 1987	6.59	917
1964	February 6, 1964	3.34	208	1988	July 23, 1988	2.73	158
1965	July 11, 1965	7.23	1,250	1989	July 30, 1989	7.07	1,060
1966	February 28, 1966	4.27	408	1990	February 10, 1990	4.60	460
1967	August 24, 1967	7.66	1,440	1991	October 22, 1990	7.03	1,050
1968	July 13, 1968	2.85	115	1992	January 4, 1992	4.58	456
1969	March 25, 1969	3.37	214	1993	April 16, 1993	5.73	697
1970	July 21, 1970	3.03	146	1994	March 28, 1994	4.61	461
1971	May 16, 1971	4.32	419	1995	June 23, 1995	6.92	1,030
1972	June 21, 1972	7.75	1,160	1996	September 6, 1996	10.02	2,260
1973	November 14, 1972	5.79	660	1997	March 3, 1997	3.08	203

**Table 467. 02076700 Blacks Creek near Mount Airy, Va.**

LOCATION.--Latitude 36°56'40", Longitude 079°09'56", NAD27, Pittsylvania County, Hydrologic Unit 03010105, on left upstream wingwall of culvert on State Highway 40, 1.5 mi east of Mt. Airy, and 3.5 mi upstream from mouth.

DRAINAGE AREA.--3.54 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 420 ft NGVD of 1929, from topographic map. Prior to Aug. 9, 1978, flood-hydrograph recorder at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--4 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1966	July 30, 1966	4.70	210	1988	November 10, 1987	2.76	48.0
1967	January 27, 1967	3.35	115	1989	May 6, 1989	5.82	292
1968	December 10, 1967	3.74	140	1990	March 18, 1990	4.59	173
1969		3.00 <sup>1</sup>	60.0 <sup>2,3</sup>	1991	March 30, 1991	6.64	406
1970		3.00 <sup>1</sup>	60.0 <sup>2,3</sup>	1992	April 22, 1992	3.78	110
1971	May 13, 1971	10.45	870	1993	March 4, 1993	5.04	214
1972	June 21, 1972	13.66	1,080	1994	March 2, 1994	5.41	251
1973	November 14, 1972	6.75	308	1995	June 23, 1995	10.82	1,050
1974	September 6, 1974	6.30	355	1996	September 6, 1996	10.71	1,030
1975	March 19, 1975	8.07	620	1997	June 3, 1997	3.65	100
1976	May 30, 1976	4.78	180	1998	January 28, 1998	7.40	526
1977	October 9, 1976	6.45	439	1999	September 29, 1999	4.99	209
1978	January 26, 1978	7.50	575	2000	April 18, 2000	3.97	123
1979	September 22, 1979	10.51 <sup>4</sup>		2001	March 30, 2001	3.75	108
1980		1.62 <sup>1</sup>	8.40 <sup>2,3</sup>	2002	May 3, 2002	4.91	202
1981	September 7, 1981	4.59	173	2003	March 20, 2003	6.36	364
1982	January 4, 1982	4.97	207	2004	February 6, 2004	4.93	204
1983	April 3, 1983	5.92	302	2005	January 14, 2005	4.91	202
1984	February 14, 1984	6.53	390	2006	October 8, 2005	2.86	53.0
1986	November 4, 1985	5.25	235	2007	January 1, 2007	6.13	330
1987	September 8, 1987	19.50	2,200				

<sup>1</sup>Gage height below minimum recordable elevation.

<sup>2</sup>Discharge is less than indicated value, which is minimum recordable discharge at this site.

<sup>3</sup>Month or day of occurrence is unknown or not exact.

<sup>4</sup>Gage height affected by backwater.

**Table 468. 02077000 Banister River at Halifax, Va.**

LOCATION.--Latitude 36°46'35", Longitude 078°54'58", NAD27, Halifax County, Hydrologic Unit 03010105, on left bank 10 ft downstream from bridge on State Highway 360, 1,700 ft downstream from Terrible Creek, 1 mi northeast of Halifax, and 10 mi upstream from mouth.

DRAINAGE AREA.--547 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 315.54 ft NGVD of 1929 (levels by U.S. Army Corps of Engineers). Sept. 28, 1904, to Dec. 31, 1905, nonrecording gage at site 400 ft upstream at different datum. Dec. 9, 1928, to Sept. 20, 1950, water-stage recorder at site 400 ft upstream at datum of 318.54 ft NGVD of 1929. Sept. 20, 1950 to Sept. 24, 2002, at present site and at datum of 318.54 ft NGVD of 1929. Sept. 24, 2002 to current year, at present site and present datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 12,000 ft<sup>3</sup>/s and extended above on basis of slope-area measurement at 50,000 ft<sup>3</sup>/s and velocity-area study.

BANKFULL STAGE.--17 ft.

REGULATION.--High-flow conditions at this site are considered unregulated. Flow regulated by a reservoir and hydroelectric generating facility 0.5 mi upstream from station, usable capacity approximately 4,300 acre-ft.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1905	February 22, 1905		3,650 <sup>1</sup>	1968	January 15, 1968	11.10 <sup>2</sup>	2,890
1929	April 17, 1929	19.36 <sup>2</sup>	6,430	1969	March 26, 1969	8.81 <sup>2</sup>	2,030
1930	October 3, 1929	24.02 <sup>2</sup>	10,100	1970	February 17, 1970	7.83 <sup>2</sup>	1,820
1931	June 24, 1931	14.20 <sup>2</sup>	3,530	1971	September 12, 1971	24.07 <sup>2</sup>	10,800
1932	March 7, 1932	21.89 <sup>2</sup>	8,310	1972	June 22, 1972	28.90 <sup>2</sup>	16,000
1933	October 18, 1932	20.59 <sup>2</sup>	7,270	1973	February 3, 1973	19.46 <sup>2</sup>	7,120
1934	March 5, 1934	19.60 <sup>2</sup>	6,570	1974	September 8, 1974	22.45 <sup>2</sup>	9,360
1935	December 2, 1934	20.64 <sup>2</sup>	7,270	1975	March 31, 1975	25.89 <sup>2</sup>	12,600
1936	March 18, 1936	24.10 <sup>2</sup>	10,200	1976	January 2, 1976	14.42 <sup>2</sup>	4,290
1937	April 26, 1937	22.90 <sup>2</sup>	9,110	1977	December 8, 1976	11.62 <sup>2</sup>	3,100
1938	June 22, 1938	31.22 <sup>2</sup>	19,000	1978	April 27, 1978	29.78 <sup>2</sup>	17,000
1939	August 20, 1939	19.33 <sup>2</sup>	6,360	1979	February 26, 1979	26.26 <sup>2</sup>	12,900
1940	August 16, 1940	37.80 <sup>2</sup>	34,000	1980	October 3, 1979	19.55 <sup>2</sup>	7,170
1941	November 16, 1940	14.60 <sup>2</sup>	3,690	1981	February 21, 1981	10.44 <sup>2</sup>	2,650
1942	August 10, 1942	21.20 <sup>2</sup>	7,750	1982	February 4, 1982	17.49 <sup>2</sup>	5,820
1943	December 31, 1942	16.86 <sup>2</sup>	4,750	1983	April 4, 1983	20.48 <sup>2</sup>	7,850
1944	September 20, 1944	40.80 <sup>2</sup>	50,000	1984	February 15, 1984	21.74 <sup>2</sup>	8,800
1945	September 19, 1945	24.20 <sup>2</sup>	11,100	1985	August 19, 1985	19.50 <sup>2</sup>	7,140
1946	January 8, 1946	21.00 <sup>2</sup>	7,800	1986	November 6, 1985	19.76 <sup>2</sup>	7,320
1947	September 25, 1947	19.40 <sup>2</sup>	6,420	1987	September 8, 1987	26.71 <sup>2</sup>	13,400
1948	February 15, 1948	19.00 <sup>2</sup>	6,100	1988	January 21, 1988	10.04 <sup>2</sup>	2,510
1949	November 29, 1948	20.70 <sup>2</sup>	7,530	1989	May 3, 1989	18.06 <sup>2</sup>	6,170
1950	October 31, 1949	20.40 <sup>2</sup>	7,260	1990	October 3, 1989	18.27 <sup>2</sup>	6,310
1951	December 5, 1950	13.61 <sup>2</sup>	3,320	1991	March 31, 1991	23.23 <sup>2</sup>	10,000
1952	September 2, 1952	19.80 <sup>2</sup>	6,740	1992	April 23, 1992	18.08 <sup>2</sup>	6,180

1953	November 21, 1952	14.10 <sup>2</sup>	3,500	1993	March 5, 1993	24.27 <sup>2</sup>	11,000
1954	January 24, 1954	17.12 <sup>2</sup>	5,260	1994	March 29, 1994	21.37 <sup>2</sup>	8,480
1955	August 19, 1955	23.28 <sup>2</sup>	10,100	1995	June 24, 1995	23.35 <sup>2</sup>	10,100
1956	April 12, 1956	12.54 <sup>2</sup>	3,450	1996	September 7, 1996	33.45 <sup>2</sup>	23,900
1957	April 10, 1957	16.80 <sup>2</sup>	5,400	1997	April 29, 1997	16.45 <sup>2</sup>	5,230
1958	May 7, 1958	18.75 <sup>2</sup>	7,330	1998	January 29, 1998	23.11 <sup>2</sup>	9,900
1959	December 30, 1958	24.30 <sup>2</sup>	11,000	1999	September 30, 1999	15.21 <sup>2</sup>	4,650
1960	April 6, 1960	17.54 <sup>2</sup>	5,800	2000	June 16, 2000	16.37 <sup>2</sup>	5,190
1961	February 24, 1961	15.09 <sup>2</sup>	4,600	2001	May 23, 2001	12.57 <sup>2</sup>	3,470
1962	January 8, 1962	16.71 <sup>2</sup>	5,350	2002	May 4, 2002	9.18 <sup>2</sup>	2,230
1963	March 13, 1963	20.20 <sup>2</sup>	7,640	2003	March 21, 2003	26.19	12,700
1964	September 2, 1964	18.99 <sup>2</sup>	6,800	2004	February 8, 2004	17.61	5,980
1965	February 9, 1965	17.49 <sup>2</sup>	5,800	2005	January 15, 2005	16.19	5,090
1966	March 2, 1966	16.46 <sup>2</sup>	5,250	2006	September 15, 2006	11.98	2,810
1967	August 26, 1967	13.87 <sup>2</sup>	4,040	2007	January 2, 2007	27.61	14,000

<sup>1</sup>Discharge is a historic peak.

<sup>2</sup>Gage height at different site and (or) datum.

**Table 469. 02077500 Hyco River near Denniston, Va.**

LOCATION.--Latitude 36°35'16", Longitude 078°53'56", NAD27, Halifax County, Hydrologic Unit 03010104, on left bank 60 ft upstream from bridge on U.S. Highway 501, 0.8 mi upstream from Mayo Creek, 2.5 mi northeast of Denniston, and 7.3 mi south of South Boston.

DRAINAGE AREA.--288 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 315.24 ft NGVD of 1929. July 10, 1929, to Mar. 14, 1934, nonrecording gage at present site and datum.

STAGE-DISCHARGE RELATION.--Prior to Mar. 15, 1934, defined by current-meter measurements below 1,900 ft<sup>3</sup>/s and extended above. Since October 1950, defined by current-meter measurements below 8,200 ft<sup>3</sup>/s and extended above, based on velocity-area analysis at 10,800 ft<sup>3</sup>/s.

BANKFULL STAGE.--13 ft.

REGULATION.-- High-flow conditions at this site are considered regulated after 1964. Flow regulated since September 1964 by Hyco Lake 15.7 mi upstream, capacity 75,480 acre-ft, and since April 1974 by Afterbay Reservoir, capacity 12,000 acre-ft. Small diurnal fluctuation at low flow in some years caused by mill upstream from station.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1928	August 1928	26.40		1976	January 1, 1976	14.77	1,860 <sup>2</sup>
1930	October 3, 1929	21.88	7,630	1977	March 7, 1977	11.34	931 <sup>2</sup>
1931	April 7, 1931	17.18	4,160	1978	April 27, 1978	22.82	9,340 <sup>2</sup>
1932	March 8, 1932	18.58	5,280	1979	February 26, 1979	22.97	9,490 <sup>2</sup>
1933	December 28, 1932	17.52	4,400	1980	November 13, 1979	16.20	2,840 <sup>2</sup>
1934	March 2, 1934	19.18	5,740	1981	February 11, 1981	9.93	626 <sup>2</sup>
1945	September 1945	25.60		1982	February 5, 1982	16.55	3,100 <sup>2</sup>
1951	April 11, 1951	16.22	2,500	1983	April 17, 1983	17.72	4,060 <sup>2</sup>
1952	March 6, 1952	17.96	2,540	1984	July 30, 1984	18.09	4,360 <sup>2</sup>
1953	November 21, 1952	16.32	2,080	1985	January 6, 1985	15.54	2,420 <sup>2</sup>
1954	June 17, 1954	18.25	2,650	1986	November 24, 1985	16.11	2,790 <sup>2</sup>
1955	August 18, 1955	20.57	3,300	1987	March 2, 1987	21.86	7,960 <sup>2</sup>
1956	October 3, 1955	17.84	2,480	1988	January 21, 1988	12.49	1,380 <sup>2</sup>
1957	February 3, 1957	19.39	5,880 <sup>1</sup>	1989	February 23, 1989	17.77	4,110 <sup>2</sup>
1958	January 16, 1958	17.18	3,800 <sup>1</sup>	1990	October 4, 1989	15.18	2,240 <sup>2</sup>
1959	December 30, 1958	18.92	5,360 <sup>1</sup>	1991	March 31, 1991	18.94	5,090 <sup>2</sup>
1960	February 20, 1960	17.61	4,480	1992	January 5, 1992	17.02	3,480 <sup>2</sup>
1961	February 26, 1961	15.67	2,660	1993	March 5, 1993	20.75	6,810 <sup>2</sup>
1962	January 8, 1962	19.59	6,020	1994	March 4, 1994	18.94	5,090 <sup>2</sup>
1963	March 8, 1963	18.82	5,440	1995	August 29, 1995	20.25	6,330 <sup>2</sup>
1964	February 7, 1964	13.91	1,520	1996	September 7, 1996	23.16	9,430 <sup>2</sup>
1965	February 8, 1965	14.74	1,830 <sup>2</sup>	1997	April 30, 1997	18.32	5,490 <sup>2</sup>
1966	March 2, 1966	16.43	3,400 <sup>2</sup>	1998	March 21, 1998	20.66	8,850 <sup>2</sup>
1967	February 21, 1967	13.53	1,430 <sup>2</sup>	1999	September 17, 1999	18.31	5,530 <sup>2</sup>
1968	March 14, 1968	16.84	3,840 <sup>2</sup>	2000	June 17, 2000	16.09	3,270 <sup>2</sup>

1969	March 8, 1969	15.89	2,870 <sup>2</sup>	2001	March 31, 2001	16.53	3,660 <sup>2</sup>
1970	February 19, 1970	15.23	2,190 <sup>2</sup>	2002	September 1, 2002	9.02	523 <sup>2</sup>
1971	February 9, 1971	16.98	3,980 <sup>2</sup>	2003	March 21, 2003	20.42	7,230 <sup>2</sup>
1972	October 25, 1971	18.04	4,830 <sup>2</sup>	2004	August 31, 2004	16.50	3,440 <sup>2</sup>
1973	December 17, 1972	17.77	4,620 <sup>2</sup>	2005	December 12, 2004	17.28	4,060 <sup>2</sup>
1974	September 8, 1974	22.62	9,170 <sup>2</sup>	2006	July 6, 2006	12.84	1,730 <sup>2</sup>
1975	July 15, 1975	24.27	10,800 <sup>2</sup>	2007	November 24, 2006	17.72	4,430 <sup>2</sup>

---

<sup>1</sup>Discharge is a maximum daily average.

<sup>2</sup>Discharge affected by regulation or diversion.

**Table 470.** 02078000 Hyco River near Omega, Va.

LOCATION.--Latitude 36°38'09", Longitude 078°48'20", NAD27, Halifax County, Hydrologic Unit 03010104, on right bank 100 ft upstream from bridge on State Highway 738, 1.5 mi upstream from Hilly Creek, 2.5 mi south of Omega, and 7 mi upstream from mouth.

DRAINAGE AREA.--412 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 294.45 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 6,700 ft<sup>3</sup>/s and extended above by logarithmic plotting.

BANKFULL STAGE.--17 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1934	September 8, 1934	27.50	11,000	1943	February 8, 1943	16.66	3,470
1935	December 1, 1934	21.15	6,040	1944	September 20, 1944	18.21	4,140
1936	March 19, 1936	22.90	7,230	1945	September 20, 1945	28.44	11,900
1937	January 5, 1937	25.00	8,800	1946	December 29, 1945	17.20	3,660
1938	July 27, 1938	23.21	7,440	1947	September 27, 1947	18.32	4,190
1939	August 31, 1939	18.48	4,030	1948	February 15, 1948	22.28	6,810
1940	August 17, 1940	25.65	9,280	1949	December 1, 1948	17.53	3,790
1941	November 17, 1940	16.16	3,140	1950	November 3, 1949	14.60	2,780
1942	May 3, 1942	15.41	2,890				

**Table 471. 02079000 Roanoke (Staunton) River at Clarksville, Va.**

LOCATION.--Latitude 36°37'40", Longitude 078°33'04", NAD27, Mecklenburg County, Hydrologic Unit 03010102, on right bank 6 ft downstream from highway bridge in Clarksville, 500 ft upstream from Dan River, and at mile 199.0.

DRAINAGE AREA.--7,393 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 258.23 ft NGVD of 1929. July 1, 1891, to Dec. 31, 1933, nonrecording gage at site 0.5 mi upstream (on Dan River) at datum of 259.23. Jan. 1 to Dec. 24, 1934, nonrecording gage at present site and datum.

STAGE-DISCHARGE RELATION.--Defined after 1934 by current-meter measurements below 264,000 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--13 ft.

REGULATION.--High flow conditions at this site are considered regulated after 1949. Flow regulated since August 1950 by Philpott Reservoir, usable capacity 247,400 acre-ft.

REMARKS.--Site flooded since March 1953 by John H. Kerr Reservoir on the Roanoke River. Gage-height records were provided by the National Weather Service prior to Dec. 24, 1934.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1934	March 6, 1934	11.70		1944	September 21, 1944	18.61	138,000
1935	December 3, 1934	14.70	88,000	1945	September 20, 1945	17.80	127,000
1936	January 21, 1936	16.88	114,000	1946	January 10, 1946	11.60	55,400
1937	January 5, 1937	14.74	87,900	1947	September 26, 1947	11.80	57,200
1938	October 22, 1937	16.37	108,000	1948	February 16, 1948	13.53	74,500
1939	August 21, 1939	13.24	71,400	1949	December 6, 1948	14.20	82,400
1940	August 17, 1940	26.66	280,000	1950	November 2, 1949	11.17	51,800
1941	April 6, 1941	9.73	39,600	1951	April 11, 1951	9.98	42,000
1942	May 24, 1942	11.60	55,400	1952	September 3, 1952	12.58	65,000
1943	April 22, 1943	11.69	56,300				

**Table 472. 02079500 Roanoke River at Buggs Island, Va.**

LOCATION.--Latitude 36°36'11", Longitude 078°17'53", NAD27, Mecklenburg County, Hydrologic Unit 03010106, opposite Buggs Island on left bank 1,200 ft downstream from John H. Kerr Dam, 2.4 mi upstream from Allens Creek, 5.3 mi upstream from bridge on State Highway 1, 6.7 mi southeast of Boydton, and at mile 178.4.

DRAINAGE AREA.--7,866 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 196.72 ft NGVD of 1929 (U.S. Army Corps of Engineers bench mark). November 1921, to August 1923, water-stage recorder at site 0.3 mi upstream at a different datum. April 1947 to Sept. 30, 1952, water-stage recorder at site 2,800 ft downstream at datum of 197.10 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined after April 1947 by current-meter measurements below 69,000 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated. Stage affected by backwater from Lake Gaston and flow regulated by Philpott Reservoir on Smith River and by John H. Kerr Dam since August 1950. Usable capacity approximately 247,400 acre-ft.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1940	August 1940	33.90 <sup>1</sup>		1982	June 29, 1982	10.52	
1947	September 26, 1947	11.57 <sup>1</sup>	50,400	1983	February 3, 1983	10.66	
1948	February 15, 1948	14.64 <sup>1</sup>	72,800	1984	March 29, 1984	11.20	
1949	December 7, 1948	14.97 <sup>1</sup>	76,000	1985	September 3, 1985	10.86	
1950	November 2, 1949	11.64 <sup>1</sup>	52,600 <sup>2</sup>	1986	November 21, 1985	10.64	
1951	April 11, 1951	7.41 <sup>1</sup>	30,000 <sup>2</sup>	1987	April 30, 1987	11.05	
1952	December 23, 1951	8.94 <sup>1</sup>	37,500 <sup>2</sup>	1988	July 29, 1988	10.47	
1953	March 26, 1953	9.45	32,300 <sup>2</sup>	1989	September 8, 1989	10.73	
1954	September 7, 1954	8.19	25,100 <sup>2</sup>	1990	August 27, 1990	10.80	
1955	April 19, 1955	9.94	35,300 <sup>2</sup>	1991	February 13, 1991	10.80	
1956	April 17, 1956	10.05	35,900 <sup>2</sup>	1992	August 21, 1992	10.76	
1957	February 4, 1957	10.60	42,000 <sup>2</sup>	1993	December 28, 1992	10.72	
1958	December 13, 1957	10.36	40,400 <sup>2</sup>	1994	November 10, 1993	10.57	
1959	May 29, 1959	10.26	39,600 <sup>2</sup>	1995	November 10, 1994	10.57	
1960	December 22, 1959	10.40	40,400 <sup>2</sup>	1996	March 3, 1996	10.68	
1961	August 28, 1961	10.25	38,800 <sup>2</sup>	1997	February 13, 1997	10.63	
1962	July 31, 1962	10.83	43,600 <sup>2</sup>	1998	February 23, 1998	10.13	
1972	August 9, 1972	11.07		1999	December 7, 1998	10.40	
1973	January 12, 1973	11.02		2000	November 19, 1999	10.02	
1974	December 18, 1973	10.86		2001	August 5, 2001	10.22	
1975	April 22, 1975	10.94		2002	October 19, 2001	10.38	
1976	January 2, 1976	10.64		2003	December 4, 2002	10.02	
1977	October 28, 1976	10.78		2004	August 30, 2004	10.12	
1978	August 18, 1978	10.82		2005	October 26, 2004	10.26	
1979	January 13, 1979	11.11		2006	August 28, 2006	10.52	

1980 November 12, 1979 11.18  
1981 December 22, 1980 10.71

2007 December 22, 2006 10.33

---

<sup>1</sup>Gage height at different site and (or) datum.

<sup>2</sup>Discharge is affected by regulation or diversion.

**Table 473. 02079640 Allen Creek near Boydton, Va.**

LOCATION.--Latitude 36°40'46", Longitude 078°19'37", NAD27, Mecklenburg County, Hydrologic Unit 03010106, on left bank at upstream side of bridge on U.S. Highway 58, 0.8 mi upstream from Coleman Creek, 2.3 mi downstream from Layton Creek, 3.7 mi east of Boydton, and 11.8 mi southwest of South Hill.

DRAINAGE AREA.--53.5 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 216.50 ft NGVD of 1929 (levels by Virginia Department of Transportation). October 1961 to September 1996, recording gage at site 200 feet downstream, on left bank, at present datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 3,020 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--15 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Records were provided by the Virginia Department of Environmental Quality - Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1962	January 7, 1962	20.56 <sup>1</sup>	4,580	1983	April 16, 1983	19.28 <sup>1</sup>	3,550
1963	March 6, 1963	18.50 <sup>1</sup>	3,050	1984	March 29, 1984	17.76 <sup>1</sup>	2,630
1964	February 6, 1964	14.20 <sup>1</sup>	1,200	1985	January 4, 1985	16.99 <sup>1</sup>	2,280
1965	February 8, 1965	18.33 <sup>1</sup>	2,930	1986	November 4, 1985	16.19 <sup>1</sup>	1,970
1966	June 17, 1966	15.10 <sup>1</sup>	1,490	1987	April 25, 1987	19.98 <sup>1</sup>	4,080
1967	February 21, 1967	13.71 <sup>1</sup>	1,080	1988	January 20, 1988	8.95 <sup>1</sup>	541
1968	March 12, 1968	15.30 <sup>1</sup>	1,560	1989	February 21, 1989	16.98 <sup>1</sup>	2,270
1969	April 19, 1969	13.94 <sup>1</sup>	1,130	1990	January 1, 1990	16.66 <sup>1</sup>	2,140
1970	December 26, 1969	9.72 <sup>1</sup>	568	1991	March 30, 1991	16.90 <sup>1</sup>	2,240
1971	May 30, 1971	17.04 <sup>1</sup>	2,250	1992	March 7, 1992	15.71 <sup>1</sup>	1,810
1972	October 23, 1971	21.80 <sup>1</sup>	5,620	1993	March 4, 1993	20.07 <sup>1</sup>	4,160
1973	October 6, 1972	20.60 <sup>1</sup>	4,580	1994	March 2, 1994	18.19 <sup>1</sup>	2,900
1974	September 7, 1974	18.58 <sup>1</sup>	3,110	1995	March 9, 1995	14.78 <sup>1</sup>	1,500
1975	March 30, 1975	19.94 <sup>1</sup>	4,020	1996	September 6, 1996	22.93 <sup>1</sup>	6,870
1976	December 31, 1975	14.43 <sup>1</sup>	1,400	2001	March 30, 2001	18.10	2,850
1977	October 20, 1976	12.80 <sup>1</sup>	1,040	2002	May 3, 2002	11.84	953
1978	April 27, 1978	20.13 <sup>1</sup>	4,180	2003	May 26, 2003	23.35	7,380
1979	September 22, 1979	20.43 <sup>1</sup>	4,420	2004	August 31, 2004	15.94	1,890
1980	October 1, 1979	18.65 <sup>1</sup>	3,140	2005	December 10, 2004	17.76	2,680
1981	July 24, 1981	13.39 <sup>1</sup>	1,140	2006	December 16, 2005	15.86	1,860
1982	July 5, 1982	16.82 <sup>1</sup>	2,210	2007	November 16, 2006	17.44	2,520

<sup>1</sup>Gage height at different site and (or) datum.

**Table 474.** 02079660 Jolly Hollow Branch at Boydton, Va.

LOCATION.--Latitude 36°40'38", Longitude 078°23'13", NAD27, Mecklenburg County, Hydrologic Unit 03010106, at bridge on State Highway 92, 0.5 mi north of Boydton.

DRAINAGE AREA.--3.64 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is not determined.

STAGE-DISCHARGE RELATION.--Not developed; insufficient field data.

BANKFULL STAGE.--8 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1955	August 13, 1955	5.62		1967	May 31, 1967	4.16	
1956	June 2, 1956	6.24		1968		3.22 <sup>1</sup>	
1957	February 1, 1957	3.67		1969		3.22 <sup>1</sup>	
1958	May 6, 1958	4.20		1970		3.22 <sup>1</sup>	
1959	October 22, 1958	3.65		1971	May 30, 1971	3.62	
1960	February 18, 1960	4.00		1972	October 24, 1971	5.26	
1961		3.22 <sup>1</sup>		1973	February 2, 1973	5.26	
1962	July 4, 1962	5.46		1974	September 6, 1974	4.49	
1963	March 6, 1963	4.81		1975	January 10, 1975	4.90	
1964		3.22 <sup>1</sup>		1976		3.22 <sup>1</sup>	
1965	February 7, 1965	3.29		1977		3.22 <sup>1</sup>	
1966		3.22 <sup>1</sup>					

<sup>1</sup>Gage height below minimum recordable elevation.

**Table 475. 02079720 Smith Creek tributary near South Hill, Va.**

LOCATION.--Latitude 36°33'50", Longitude 078°12'10", NAD27, Mecklenburg County, Hydrologic Unit 03010106, on U.S. Highway 1, 12 mi south of South Hill.

DRAINAGE AREA.--0.47 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 249.71 ft NGVD of 1929. Prior to July 21, 1970, flood-hydrograph recorder at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--6 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1966	March 1, 1966	4.50	96.0	1971	May 30, 1971	5.41	145
1967	May 31, 1967	3.71	62.0	1972	June 21, 1972	5.95	177
1968		3.00 <sup>1</sup>	30.0 <sup>2,3</sup>	1973	October 5, 1972	5.41	145
1969	September 2, 1969	3.40	51.0	1974	September 6, 1974	5.96	178
1970	July 23, 1970	3.84	69.0	1975	July 14, 1975	3.94	73.0

<sup>1</sup>Gage height below minimum recordable elevation.

<sup>2</sup>Discharge is less than indicated value, which is minimum recordable discharge at this site.

<sup>3</sup>Month or day of occurrence is unknown or not exact.

## Ohio River Basin: Kanawha River Basin

**Table 476.** 03162700 Wallen Creek near Trout Dale, Va.

LOCATION.--Latitude 36°38'00", Longitude 081°24'10", NAD27, Grayson County, Hydrologic Unit 05050001, at culvert on State Highway 16, 5 mi southeast of Trout Dale.

DRAINAGE AREA.--2.29 mi<sup>2</sup>.

GAGE.--Water-stage recorder (flood-hydrograph recorder). Datum of gage is not determined.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--5 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1966	February 13, 1966	5.84	160	1971	February 13, 1971	5.78	155
1967	August 3, 1967	6.12	185	1972	April 7, 1972	5.20	106
1968		5.00 <sup>1</sup>	90.0 <sup>2,3</sup>	1973	May 28, 1973	5.36	119
1969		5.00 <sup>1</sup>	90.0 <sup>2,3</sup>	1974	June 27, 1974	5.55	134
1970	April 28, 1970	6.00	175	1975	March 30, 1975	5.16	103

<sup>1</sup>Gage height below minimum recordable elevation.

<sup>2</sup>Discharge is less than indicated value, which is minimum recordable discharge at this site.

<sup>3</sup>Month or day of occurrence is unknown or not exact.

**Table 477. 03162800 Mill Creek near Trout Dale, Va.**

LOCATION.--Latitude 36°40'06", Longitude 081°24'24", NAD27, Grayson County, Hydrologic Unit 05050001, at bridge on State Highway 16, 3 mi southeast of Trout Dale.

DRAINAGE AREA.--4.70 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 2,650 ft NGVD of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--3.5 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1951	December 7, 1950	3.57		1969	July 12, 1969	2.80	
1952		2.10 <sup>1</sup>	130 <sup>2,3</sup>	1970	April 28, 1970	2.55	230
1953	February 20, 1953	2.10	130	1971		2.10 <sup>1</sup>	130 <sup>2,3</sup>
1955	March 18, 1955	3.50		1972		2.10 <sup>1</sup>	130 <sup>2,3</sup>
1963	March 12, 1963	2.47		1973	March 16, 1973	2.35	177
1964	March 5, 1964	2.70		1974	June 27, 1974	2.59	223
1965	March 26, 1965	3.40		1975	March 30, 1975	2.37	181
1966	February 13, 1966	2.83	250	1976		2.10 <sup>1</sup>	130 <sup>2,3</sup>
1967	July 9, 1967	2.12		1977	October 28, 1976	4.40	
1968		2.10 <sup>1</sup>	130 <sup>2,3</sup>				

<sup>1</sup>Gage height below minimum recordable elevation.

<sup>2</sup>Discharge is less than indicated value, which is minimum recordable discharge at this site.

<sup>3</sup>Month or day of occurrence is unknown or not exact.

**Table 478.** 03162810 Saddle Creek tributary near Independence, Va.

LOCATION.--Latitude 36°37'11", Longitude 081°12'55", NAD27, Grayson County, Hydrologic Unit 05050001, at culvert on U.S. Highway 58, 3 mi west of Independence.

DRAINAGE AREA.--0.37 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is not determined. Prior to Aug 11, 1970, flood-hydrograph recorder at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--5 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1966		5.00 <sup>1</sup>		1971		4.07 <sup>1</sup>	
1967		5.00 <sup>1</sup>		1972		4.07 <sup>1</sup>	
1968	December 11, 1967	5.27	62.0	1973	May 28, 1973	5.78	84.0
1969		5.00 <sup>1</sup>		1974		4.07 <sup>1</sup>	
1970		5.00 <sup>1</sup>		1975		4.07 <sup>1</sup>	

<sup>1</sup>Gage height below minimum recordable elevation.

**Table 479.** 03163000 New River near Baywood, Va.

LOCATION.--Latitude 36°36'30", Longitude 081°02'40", NAD27, Grayson County, Hydrologic Unit 05050001, at Boyers Ferry, 1 mi downstream from Little River, and 2 mi west of Baywood.

DRAINAGE AREA.--1,004 mi<sup>2</sup>.

GAGE.--Nonrecording gage (staff gage). Datum of gage is 2,260 ft NGVD of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Determined by current-meter measurements below 5,000 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1916	July 16, 1916	28.70		1929	February 28, 1929	5.60	10,400
1928	August 16, 1928	9.50	19,500	1930	October 2, 1929	12.00	25,000

**Table 480. 03164000 New River near Galax, Va.**

LOCATION.--Latitude 36°38'50", Longitude 080°58'45", NAD27. Grayson County, Hydrologic Unit 05050001, on left bank at upstream side of bridge on State Highway 94, 500 ft downstream from Meadow Creek, 1.2 mi southwest of Old Town, 3.1 mi southwest of Galax, and 3.6 mi downstream from Elk Creek.

DRAINAGE AREA.--1,141 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 2,208.04 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 31,000 ft<sup>3</sup>/s and extended above on basis of computation of peak flow over dam at Fries 6 mi downstream at 141,000 ft<sup>3</sup>/s and slope-area measurement at 152,000 ft<sup>3</sup>/s.

BANKFULL STAGE.--5 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1930	October 2, 1929	9.00	33,100	1969	October 19, 1968	5.23	14,600
1931	August 22, 1931	4.35	12,000	1970	August 10, 1970	7.89	27,400
1932	May 1, 1932	3.96	9,470	1971	October 31, 1970	3.81	8,340
1933	October 17, 1932	6.54	22,000	1972	June 21, 1972	8.54	30,700
1934	March 28, 1934	5.18	14,800	1973	May 28, 1973	10.77	42,800
1935	September 6, 1935	7.38	24,900	1974	April 5, 1974	7.86	27,200
1936	November 13, 1935	6.34 <sup>1</sup>	20,800	1975	March 14, 1975	7.66	26,200
1937	October 17, 1936	5.22	14,800	1976	October 18, 1975	7.75	26,600
1938	October 19, 1937	6.00	19,200	1977	April 5, 1977	8.10	28,400
1939	August 18, 1939	6.45	21,400	1978	November 6, 1977	18.59	91,000
1940	August 14, 1940	25.70	141,000	1979	September 22, 1979	9.78	37,300
1941	December 28, 1940	3.84	8,940	1980	April 14, 1980	7.72	26,500
1942	September 6, 1942	5.33	15,000	1981	May 28, 1981	6.37	19,800
1943	December 30, 1942	5.55	15,400	1982	February 3, 1982	5.80	17,200
1944	February 18, 1944	4.97	13,600	1983	February 2, 1983	8.50	30,500
1945	September 18, 1945	9.90	38,000	1984	May 7, 1984	6.83	22,000
1946	January 8, 1946	6.77	22,000	1985	August 18, 1985	4.31	10,500
1947	January 20, 1947	5.64	16,400	1986	November 5, 1985	5.30	14,800
1948	November 3, 1947	5.37	15,400	1987	March 1, 1987	7.29	24,300
1949	August 29, 1949	8.35	30,000	1988	January 20, 1988	3.15	6,200
1950	November 2, 1949	4.88	13,200	1989	September 22, 1989	12.80	54,100
1951	December 7, 1950	9.94	38,000	1990	January 1, 1990	10.24	39,800
1952	March 11, 1952	5.24 <sup>1</sup>	14,500	1991	October 13, 1990	8.09	28,400
1953	February 21, 1953	5.48	15,900	1992	June 5, 1992	12.00	49,500
1954	January 23, 1954	5.60	16,400	1993	March 24, 1993	8.66	31,300
1955	April 14, 1955	7.19	23,900	1994	August 17, 1994	11.83	48,500
1956	April 16, 1956	6.34	19,600	1995	January 15, 1995	15.23	68,700
1957	April 5, 1957	9.04	33,300	1996	January 19, 1996	9.31	34,700

1958	January 14, 1958	5.01	13,700	1997	December 2, 1996	5.15	14,200
1959	September 30, 1959	10.35	40,700	1998	January 8, 1998	7.55	25,600
1960	March 31, 1960	7.44	24,900	1999	January 10, 1999	4.97	13,400
1961	May 12, 1961	7.77	26,900	2000	March 21, 2000	3.51	7,510
1962	December 12, 1961	6.09	18,700	2001	July 30, 2001	5.13	14,300
1963	March 13, 1963	8.67	31,500	2002	March 18, 2002	4.28	11,100
1964	March 5, 1964	4.76	12,600	2003	February 22, 2003	7.31	24,400
1965	October 17, 1964	6.86	22,500	2004	November 19, 2003	11.00	43,900
1966	February 13, 1966	8.47	30,500	2005	March 28, 2005	4.43	11,600
1967	March 7, 1967	4.67	12,000	2006	June 27, 2006	4.59	12,200
1968	March 13, 1968	4.05 <sup>1</sup>	9,350	2007	January 1, 2007	4.01	9,980

---

<sup>1</sup>Gage height is not the maximum for the year.

**Table 481. 03165000 Chestnut Creek at Galax, Va.**

LOCATION.--Latitude 36°38'45", Longitude 080°55'10", NAD27, Galax City, Hydrologic Unit 05050001, on right bank 200 ft upstream from bridge on State Highway 89 and 1.7 mi downstream from Wards Mill Branch.

DRAINAGE AREA.--39.4 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Concrete control since Aug. 30, 1979. Datum of gage is 2,344.17 ft NGVD of 1929. Prior to June 25, 1948, nonrecording gage at site 200 ft upstream at datum of 2,345.03 ft NGVD of 1929. June 25, 1948, to May 28, 1953 water-stage recorder at site 200 ft upstream at datum of 2,345.03 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 2,200 ft<sup>3</sup>/s and extended above on basis of slope-area measurements at 5,000 ft<sup>3</sup>/s and 7,000 ft<sup>3</sup>/s and contracted-opening measurement at 11,000 ft<sup>3</sup>/s.

BANKFULL STAGE.--5 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1940	August 14, 1940	17.40 <sup>1</sup>	11,000 <sup>2</sup>	1976	October 17, 1975	12.93	6,880
1945	October 20, 1944	7.48 <sup>1</sup>	1,560	1977	March 13, 1977	6.94	2,620
1946	January 7, 1946	3.35 <sup>1</sup>	502	1978	January 26, 1978	7.83	3,100
1947	June 14, 1947	6.20 <sup>1</sup>	1,120	1979	September 22, 1979	10.43	4,800
1948	October 17, 1947	14.40 <sup>1</sup>	6,980	1980	April 9, 1980	5.84	2,070
1949	June 17, 1949	9.58 <sup>1</sup>	2,540	1981	February 11, 1981	3.67	1,080
1950	July 28, 1950	4.67 <sup>1</sup>	810	1982	May 31, 1982	4.36	1,390
1951	December 7, 1950	10.80 <sup>1</sup>	3,300	1983	April 10, 1983	5.88	2,200
1952	March 11, 1952	9.60 <sup>1</sup>	2,540	1984	February 13, 1984	4.62	1,490
1953	November 21, 1952	4.63 <sup>1</sup>	780	1985	August 18, 1985	5.97	2,250
1954	March 1, 1954	8.17	2,300	1986	November 4, 1985	5.32	1,840
1955	April 14, 1955	5.30	1,280	1987	March 1, 1987	5.81	2,080
1956	September 27, 1956	6.08	1,560	1988	November 29, 1987	3.22	846
1957	April 5, 1957	5.94	1,500	1989	September 22, 1989	9.53	4,190
1958	December 21, 1957	4.79	1,100	1990	November 16, 1989	8.44	3,510
1959	September 30, 1959	11.25	4,100	1991	October 18, 1990	4.68	1,530
1960	February 5, 1960	4.87	1,140	1992	April 21, 1992	7.59	3,020
1961	May 11, 1961	5.08	1,210	1993	March 23, 1993	7.67	3,070
1962	November 23, 1961	4.83	1,100	1994	August 17, 1994	10.43	4,820
1963	November 9, 1962	6.78	1,800	1995	January 14, 1995	5.87	2,110
1964	August 30, 1964	5.57	1,380	1996	January 19, 1996	8.77	3,700
1965	October 16, 1964	5.72	1,420	1997	November 8, 1996	6.16	2,260
1966	February 13, 1966	8.69	2,480	1998	January 8, 1998	7.32	2,870
1967	March 7, 1967	4.10	860	1999	October 8, 1998	3.31	891
1968	December 10, 1967	3.03	486	2000	November 26, 1999	3.51	996
1969	October 20, 1968	5.81	1,460	2001	May 22, 2001	3.53	1,000
1970	August 10, 1970	5.10	1,210	2002	September 27, 2002	3.09	775

1971	September 11, 1971	6.61	1,740	2003	August 7, 2003	5.13	1,740
1972	June 21, 1972	7.92	2,070	2004	November 19, 2003	11.91	5,940
1973	May 28, 1973	11.07	5,000	2005	March 28, 2005	3.87	1,170
1974	April 4, 1974	5.20	1,060	2006	June 27, 2006	6.16	2,260
1975	May 29, 1975	7.78	3,070	2007	November 16, 2006	4.98	1,670

---

<sup>1</sup>Gage height at different site and (or) datum.

<sup>2</sup>Discharge is a historic peak.

**Table 482.** 03165200 Mill Creek tributary at Galax, Va.

LOCATION.--Latitude 36°40'38", Longitude 080°54'02", NAD27, Carroll County, Hydrologic Unit 05050001, at culvert on U.S. Highway 58 and 221.

DRAINAGE AREA.--1.07 mi<sup>2</sup>.

GAGE.--Water-stage recorder (flood-hydrograph recorder). Datum of gage is not determined.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--5 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1966	February 13, 1966	4.25	120	1971	September 11, 1971	6.05	223
1967	March 7, 1967	3.85	102	1972	June 21, 1972	5.45	187
1968		3.00 <sup>1</sup>	65.0 <sup>2,3</sup>	1973	May 28, 1973	5.30	178
1969	October 19, 1968	3.10	69.0	1974		3.00 <sup>1</sup>	65.0 <sup>2,3</sup>
1970		3.00 <sup>1</sup>	65.0 <sup>2,3</sup>				

<sup>1</sup>Gage height below minimum recordable elevation.

<sup>2</sup>Discharge is less than indicated value, which is minimum recordable discharge at this site.

<sup>3</sup>Month or day of occurrence is unknown or not exact.

**Table 483. 03165500 New River at Ivanhoe, Va.**

LOCATION.--Latitude 36°50'05", Longitude 080°57'10", NAD27, Wythe County, Hydrologic Unit 05050001, on left bank at Ivanhoe, 2.1 mi downstream from Big Branch, and 2.3 mi upstream from Cripple Creek.

DRAINAGE AREA.--1,350 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 1,943.09 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 32,000 ft<sup>3</sup>/s and extended above on basis of flood records for other stations on New River.

BANKFULL STAGE.--11 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Flood in September 1878 was highest known between 1840 and 1916 from information from local residents.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1878	September 1878	30.00	100,000 <sup>1,2</sup>	1962	December 12, 1961	11.00	20,000
1913	May 24, 1913		16,000 <sup>1,3</sup>	1963	March 13, 1963	15.50	32,800
1916	July 16, 1916	34.80	132,000 <sup>1</sup>	1964	August 31, 1964	10.18	17,900
1931	August 22, 1931	8.25	13,200	1965	October 17, 1964	12.40	23,600
1932	January 1, 1932	7.22	10,500	1966	February 14, 1966	14.95	31,000
1933	October 17, 1932	12.44	23,100	1967	March 7, 1967	9.01	14,900
1934	March 28, 1934	10.32	19,200	1968	March 13, 1968	8.35	13,200
1935	September 6, 1935	13.22	25,200	1969	October 19, 1968	9.56	16,300
1936	November 13, 1935	12.32	22,800	1970	August 10, 1970	13.48	26,600
1937	October 17, 1936	10.27	17,700	1971	October 31, 1970	6.74	9,470
1938	October 19, 1937	12.16	22,600	1972	June 21, 1972	16.01	34,500
1939	August 19, 1939	12.29	22,800	1973	May 28, 1973	18.52	44,600
1940	August 14, 1940	38.10	155,000	1974	April 5, 1974	13.18	25,800
1941	December 28, 1940	8.67	13,800	1975	March 14, 1975	13.70	27,300
1942	September 6, 1942	10.26	17,700	1976	October 18, 1975	15.57	33,000
1943	December 30, 1942	10.22	17,400	1977	April 5, 1977	13.80	27,500
1944	February 18, 1944	10.44	18,000	1978	November 7, 1977	28.08	91,600
1945	September 18, 1945	17.30	39,700	1979	September 22, 1979	16.58	36,800
1946	January 8, 1946	12.30	22,800	1980	April 14, 1980	13.42	26,500
1947	January 20, 1947	10.63	18,400	1981	May 28, 1981	11.48	21,300
1948	October 18, 1947	12.02	22,000	1982	February 3, 1982	11.30	20,800
1949	August 29, 1949	14.51	29,200	1996	August 12, 1996	14.82	31,700
1950	November 2, 1949	8.56	13,500	1997	December 2, 1996	11.25	20,200
1951	December 8, 1950	16.97	38,500	1998	January 8, 1998	13.73	27,600
1952	March 11, 1952	11.46	21,300	1999	January 24, 1999	6.20	7,870
1953	March 24, 1953	10.83	19,500	2000	March 21, 2000	6.84	9,500
1954	March 1, 1954	10.80	19,500	2001	July 30, 2001	8.70	13,900
1955	April 14, 1955	12.92	25,000	2002	March 19, 2002	7.58	11,300

1956	April 16, 1956	11.06	20,300	2003	February 23, 2003	12.56	24,100
1957	April 5, 1957	15.90	34,200	2004	November 19, 2003	18.54	46,600
1958	January 14, 1958	12.02	22,700	2005	March 28, 2005	8.64	12,600
1959	September 30, 1959	17.88	42,100	2006	June 27, 2006	8.86	13,200
1960	March 31, 1960	13.24	25,900	2007	January 1, 2007	7.15	9,010
1961	May 12, 1961	14.39	29,200				

---

<sup>1</sup>Discharge is a historic peak.

<sup>2</sup>Month or day of occurrence is unknown or not exact.

<sup>3</sup>Discharge is a maximum daily average.

**Table 484. 03165700 Cripple Creek at Cedar Springs, Va.**

LOCATION.--Latitude 36°49'31", Longitude 081°16'45", NAD27, Wythe County, Hydrologic Unit 05050001, on right downstream wingwall of bridge on State Highway 749, 0.6 mi southeast of Cedar Spring.

DRAINAGE AREA.--11.2 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 2,455 ft NGVD of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 400 ft<sup>3</sup>/s and a contracted-opening measurement at 1,900 ft<sup>3</sup>/s.

BANKFULL STAGE.--14 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1967		13.88 <sup>1</sup>	360 <sup>2,3</sup>	1982		13.88 <sup>1</sup>	360 <sup>2,3</sup>
1968		13.88 <sup>1</sup>	360 <sup>2,3</sup>	1983		13.88 <sup>1</sup>	360 <sup>2,3</sup>
1969	July 21, 1969	14.05	390	1984	May 7, 1984	14.17	414
1970	December 30, 1969	14.10	400	1985		13.88 <sup>1</sup>	360 <sup>2,3</sup>
1971		13.88 <sup>1</sup>	360 <sup>2,3</sup>	1986	November 5, 1985	13.88 <sup>1</sup>	360 <sup>2</sup>
1972	June 21, 1972	14.49	478	1987		13.88 <sup>1</sup>	360 <sup>2,3</sup>
1973	July 3, 1973	13.86	353	1988		13.88 <sup>1</sup>	357 <sup>2,3</sup>
1974	June 27, 1974	14.32	444	1989	September 22, 1989	16.33	873
1975		13.88 <sup>1</sup>	360 <sup>2,3</sup>	1990		13.88 <sup>1</sup>	357 <sup>2,3</sup>
1976		13.88 <sup>1</sup>	360 <sup>2,3</sup>	1991		13.90 <sup>1</sup>	361 <sup>2,3</sup>
1977	April 4, 1977	15.08	598	1992	June 5, 1992	14.52	484
1978	November 6, 1977	20.37	1,860	1993	March 23, 1993	14.60	500
1979	March 24, 1979	14.10	400	1994	March 28, 1994	13.90 <sup>1</sup>	360 <sup>2</sup>
1980		13.88 <sup>1</sup>	360 <sup>2,3</sup>	1995	January 15, 1995	15.44	671
1981		13.88 <sup>1</sup>	360 <sup>2,3</sup>				

<sup>1</sup>Gage height below minimum recordable elevation.

<sup>2</sup>Discharge is less than indicated value, which is minimum recordable discharge at this site.

<sup>3</sup>Month or day of occurrence is unknown or not exact.

**Table 485.** 03165800 Sugar Run near Speedwell, Va.

LOCATION.--Latitude 36°49'45", Longitude 081°10'10", NAD27, Wythe County, Hydrologic Unit 05050001, at bridge on State Highway 684, 1.1 mi north of Speedwell.

DRAINAGE AREA.--3.73 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is not determined.

STAGE-DISCHARGE RELATION.--Not developed.

BANKFULL STAGE.--15 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1967	November 2, 1966	14.11		1973	May 28, 1973	15.50	
1968	May 27, 1968	14.37		1974	June 27, 1974	14.80	
1969	July 21, 1969	13.65		1975	March 30, 1975	14.24	
1970	December 30, 1969	12.55		1976		12.30 <sup>1</sup>	
1971		12.30 <sup>1</sup>		1977	April 4, 1977	16.46	
1972	June 21, 1972	16.37		1978	August 11, 1978	14.54	

<sup>1</sup>Gage height below minimum recordable elevation.

**Table 486.** 03166000 Cripple Creek near Ivanhoe, Va.

LOCATION.--Latitude 36°51'35", Longitude 080°58'50", NAD27, Wythe County, Hydrologic Unit 05050001, at highway bridge 2 mi northwest of Ivanhoe and 2.8 mi upstream from mouth.

DRAINAGE AREA.--136 mi<sup>2</sup>.

GAGE.--Nonrecording gage (chain gage). Datum of gage is 1,990 ft NGVD of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 1,200 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1930	October 2, 1929		4,000 <sup>1</sup>	1933	February 8, 1933		1,240
1931	April 4, 1931		1,440	1934	March 28, 1934		1,190
1932	May 1, 1932		1,190				

<sup>1</sup>Discharge is an estimate.

**Table 487. 03166800 Glade Creek at Grahams Forge, Va.**

LOCATION.--Latitude 36°55'51", Longitude 080°54'02", NAD27, Wythe County, Hydrologic Unit 05050001, on left bank 30 ft downstream from bridge on State Highway 629, 1.0 mi southwest of Grahams Forge, and at mile 0.4.

DRAINAGE AREA.--7.15 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Concrete control since June 1, 1979. Datum of gage is 1,972 ft NGVD of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 60 ft<sup>3</sup>/s and extended above on basis of slope-area measurements at 1,100 ft<sup>3</sup>/s.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1976	June 16, 1976	5.11	1,100	1986	March 14, 1986	2.16	14.0
1977	February 24, 1977	3.26	114	1987	April 25, 1987	3.68	259
1978	March 10, 1978	3.76	268	1988	September 24, 1988	1.90	5.80
1979	September 21, 1979	3.40	170	1989	September 16, 1989	6.75	3,210
1980	July 28, 1980	2.94	84.0	1990	November 16, 1989	3.18	125
1981	July 5, 1981	3.74	279	1991	January 11, 1991	3.15	119
1982	July 9, 1982	4.83	869	1992	June 4, 1992	4.00	382
1983	December 16, 1982	3.19	127	1993	June 12, 1993	5.42	1,400
1984	July 5, 1984	5.37	1,350	1994	March 28, 1994	4.31	533
1985	August 17, 1985	4.01	386	1995	June 2, 1995	3.76	282

**Table 488. 03167000 Reed Creek at Grahams Forge, Va.**

LOCATION.--Latitude 36°56'20", Longitude 080°53'13", NAD27, Wythe County, Hydrologic Unit 05050001, on left bank 20 ft downstream from bridge on State Highway 619 at Grahams Forge, 2.2 mi downstream from Glade Creek, and at mile 7.3.

DRAINAGE AREA.--258 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 1,924.65 ft NGVD of 1929. Prior to Oct. 1, 1916, nonrecording gage at present site at datum of 1923.97 ft NGVD of 1929. Feb. 3, 1927, to Oct. 28, 1934 nonrecording gage at present site and datum. June 11, 1974, to July 22, 1975 nonrecording gage at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 7,600 ft<sup>3</sup>/s and extended above on basis of slope-area measurements at 14,000 ft<sup>3</sup>/s and velocity-area study.

BANKFULL STAGE.--4 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1909	May 1, 1909	5.60 <sup>1</sup>	3,200	1964	March 5, 1964	5.08	3,900
1910	June 13, 1910	5.30 <sup>1</sup>	2,800	1965	March 26, 1965	6.34	6,000
1911	January 30, 1911	5.50 <sup>1</sup>	3,100	1966	February 14, 1966	5.71	4,880
1912	March 29, 1912	6.30 <sup>1</sup>	4,400	1967	March 7, 1967	5.44	4,440
1913	March 27, 1913	10.50 <sup>1</sup>	15,200	1968	March 13, 1968	5.21	4,080
1914	March 12, 1914	4.70 <sup>1</sup>	2,060	1969	February 3, 1969	4.42	2,820
1915	January 7, 1915	5.40 <sup>1</sup>	3,000	1970	December 31, 1969	6.28	5,960
1916	July 16, 1916	11.40 <sup>1</sup>	17,500	1971	February 14, 1971	4.72	3,290
1927	April 22, 1927	4.40	3,040	1972	June 21, 1972	6.83	7,060
1928	August 16, 1928	4.30	2,870	1973	May 28, 1973	6.39	6,180
1929	June 9, 1929	6.40	6,850	1974	May 13, 1974	4.76	3,360
1930	October 2, 1929	6.00	6,020	1975	March 14, 1975	7.10	7,600
1931	April 4, 1931	4.50	3,210	1976	June 20, 1976	5.10	3,900
1932	May 1, 1932	5.00	4,090	1977	April 5, 1977	10.01	14,000
1933	December 28, 1932	4.30	2,870	1978	March 10, 1978	5.33	4,270
1934	March 27, 1934	5.60	5,220	1979	February 25, 1979	5.20	4,060
1935	January 23, 1935	7.33	8,800	1980	July 11, 1980	4.95	3,660
1936	November 13, 1935	6.86	7,920	1981	May 28, 1981	4.00	2,220
1937	August 31, 1937	4.88	3,910	1982	February 3, 1982	5.09	3,840
1938	October 19, 1937	4.83	3,820	1983	April 10, 1983	4.31	2,650
1939	January 30, 1939	3.98	2,390	1984	February 14, 1984	6.17	5,010
1940	August 14, 1940	4.82	3,730	1985	August 18, 1985	4.07	2,060
1941	March 11, 1941	3.31	1,380	1986	November 4, 1985	4.29	2,320
1942	May 22, 1942	5.24	4,230	1987	April 25, 1987	6.08	4,860
1943	December 30, 1942	5.41	4,500	1988	February 4, 1988	3.58	1,400
1944	February 18, 1944	6.60	6,940	1989	September 23, 1989	5.03	2,850
1945	February 18, 1945	5.76	5,200	1990	October 2, 1989	5.59	3,560

1946	January 8, 1946	6.49	6,700	1991	January 12, 1991	4.70	2,470
1947	January 20, 1947	6.10	5,820	1992	June 5, 1992	9.07	8,560
1948	February 14, 1948	6.10	5,820	1993	March 24, 1993	7.29	4,360
1949	December 4, 1948	5.55	4,820	1994	March 28, 1994	6.25	3,000
1950	February 2, 1950	4.92	3,580	1995	January 15, 1995	6.28	3,020
1951	December 8, 1950	5.22	4,090	1996	January 19, 1996	7.26	4,310
1952	January 29, 1952	3.60	1,690	1997	December 1, 1996	5.71	2,560
1953	February 21, 1953	5.21	4,090	1998	April 19, 1998	5.49	2,400
1954	January 23, 1954	5.56	4,820	1999	May 14, 1999	4.23	1,960
1955	April 14, 1955	6.63	6,720	2000	April 17, 2000	3.94	1,700
1956	April 16, 1956	5.72	4,780	2001	July 30, 2001	5.91	4,730
1957	January 30, 1957	7.25	7,800	2002	March 18, 2002	8.94	11,700
1958	March 31, 1958	5.59	4,820	2003	February 23, 2003	7.73	9,390
1959	April 13, 1959	5.30	4,100	2004	November 20, 2003	7.35	8,700
1960	March 31, 1960	5.21	4,060	2005	March 28, 2005	4.39	2,570
1961	May 12, 1961	7.11	7,600	2006	June 28, 2006	3.35	1,220
1962	December 18, 1961	5.70	4,880	2007	March 2, 2007	4.01	2,010
1963	March 13, 1963	6.68	6,800				

---

<sup>1</sup>Gage height at different site and (or) datum.

**Table 489. 03167300 Mira Fork tributary near Dugspur, Va.**

LOCATION.--Latitude 36°50'16", Longitude 080°34'44", NAD27, Carroll County, Hydrologic Unit 05050001, on left upstream wingwall of culvert on U.S. Highway 221, 1.3 mi upstream from mouth, and 2.2 mi northeast of Dugspur.

DRAINAGE AREA.--0.66 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 2,602.96 ft NGVD of 1929. Prior to Aug. 10, 1978, flood-hydrograph recorder at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--4 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1967	July 20, 1967	2.70	38.0	1988	April 4, 1988	3.55	67.0
1968		3.00 <sup>1</sup>	50.0 <sup>2,3</sup>	1989	May 6, 1989	5.98	184
1969	October 19, 1968	4.00	85.0	1990	January 1, 1990	6.98 <sup>4</sup>	
1970		3.00 <sup>1</sup>	50 <sup>2,3</sup>	1991		2.78 <sup>1</sup>	43.0 <sup>2,3</sup>
1971	May 13, 1971	5.25	142	1992	April 21, 1992	7.20	257
1972	May 3, 1972	3.82	78.0	1993	March 23, 1993	3.24	57.0
1973	May 28, 1973	4.48	104	1994	March 28, 1994	3.18	52.0
1974		3.00 <sup>1</sup>	50.0 <sup>2,3</sup>	1995		2.78 <sup>1</sup>	39.4 <sup>2,3</sup>
1975	September 18, 1975	3.27	58.0	1996	June 9, 1996	3.48	64.0
1976		3.00 <sup>1</sup>	50.0 <sup>2,3</sup>	1997	November 8, 1996	3.00 <sup>5</sup>	48
1977	August 11, 1977	3.52	66.0	1998	January 8, 1998	5.67	165
1978	October 25, 1977	4.55	108	1999		2.78 <sup>1</sup>	39.4 <sup>2,3</sup>
1979	September 21, 1979	5.77	171	2000		2.78 <sup>1</sup>	39.4 <sup>2,3</sup>
1980	April 9, 1980	5.52	156	2001	May 22, 2001	3.81	77.3
1981	May 28, 1981	4.45	103	2002		2.92 <sup>1</sup>	43.6 <sup>2,3</sup>
1982		2.79 <sup>1</sup>	44.0 <sup>2,3</sup>	2003	August 7, 2003	4.21	93.4
1983	April 10, 1983	3.31	62.0	2004	November 19, 2003	5.54	157
1984		2.79 <sup>1</sup>	44.0 <sup>2,3</sup>	2005	March 28, 2005	4.14	90.5
1985		2.79 <sup>1</sup>	44.0 <sup>2,3</sup>	2006	June 27, 2006	3.78	76.1
1986	July 27, 1986	5.57	159	2007	April 16, 2007	3.26	55.4
1987		2.79 <sup>1</sup>	44.0 <sup>2,3</sup>				

<sup>1</sup>Gage height below minimum recordable elevation.

<sup>2</sup>Discharge is less than indicated value, which is minimum recordable discharge at this site.

<sup>3</sup>Month or day of occurrence is unknown or not exact.

<sup>4</sup>Gage height affected by backwater from an ice jam.

<sup>5</sup>Gage datum changed during this year.

**Table 490. 03167500 Big Reed Island Creek near Allisonia, Va.**

LOCATION.--Latitude 36°53'20", Longitude 080°43'40", NAD27, Pulaski County, Hydrologic Unit 05050001, on left bank 700 ft downstream from bridge on State Highway 693, 3.5 mi southeast of Allisonia, 4 mi upstream from Little Reed Island Creek, and at mile 4.5.

DRAINAGE AREA.--267 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 1,902.74 ft NGVD of 1929. Prior to Sept. 30, 1916, nonrecording gage at site 4 mi downstream at different datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 1,100 ft<sup>3</sup>/s and extended above on the basis of velocity-area study for 1909-16 site. Defined by current-meter measurements below 6,000 ft<sup>3</sup>/s and extended above on basis of slope-area measurements at 14,500 ft<sup>3</sup>/s.

BANKFULL STAGE.--7 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1909	April 14, 1909	4.20 <sup>1</sup>	4,110	1964	April 14, 1964	6.32	4,070
1910	June 13, 1910	4.60 <sup>1</sup>	4,660	1965	March 26, 1965		4,400 <sup>2</sup>
1911	October 7, 1910	3.40 <sup>1</sup>	3,070	1966	February 13, 1966	10.14	10,100
1912	May 12, 1912	6.60 <sup>1</sup>	7,500	1967	March 7, 1967	8.50	7,350
1913	March 14, 1913	5.40 <sup>1</sup>	5,780	1968	July 27, 1968	7.75	6,220
1914	January 31, 1914	3.60 <sup>1</sup>	3,330	1969	October 19, 1968	10.17	10,200
1915	January 7, 1915	5.80 <sup>1</sup>	6,060	1970	December 31, 1969	6.45	4,280
1939	August 18, 1939	6.52	4,160	1971	February 13, 1971	7.65	6,080
1940	August 14, 1940	11.70	13,000	1972	June 21, 1972	9.89	9,730
1941	July 7, 1941	6.37	4,020	1973	February 2, 1973	8.84	7,870
1942	May 22, 1942	6.33	3,880	1974	December 26, 1973	8.75	7,730
1943	May 26, 1943	7.36	5,550	1975	March 14, 1975	8.94	8,040
1944	July 15, 1944	5.63	3,340	1976	October 18, 1975	7.80	6,300
1945	September 18, 1945	8.77	8,800	1977	October 9, 1976	9.50	9,030
1946	January 8, 1946	7.43	5,550	1978	January 26, 1978	11.29	12,300
1947	June 14, 1947	10.30	10,500	1979	September 22, 1979	12.38	14,200
1948	October 18, 1947	7.73	6,120	1980	April 9, 1980	10.87	11,500
1949	August 29, 1949	7.38	5,550	1981	February 11, 1981	5.89	3,480
1950	May 29, 1950	6.16	3,750	1982	October 27, 1981	7.07	5,120
1951	December 7, 1950	9.70	9,390	1983	April 10, 1983	11.04	11,600
1952	March 11, 1952	9.92	9,750	1984	February 14, 1984	7.51	5,760
1953	March 24, 1953	8.71	8,500	1985	August 18, 1985	7.22	5,330
1954	March 1, 1954	9.05	9,450	1986	November 4, 1985	8.14	6,730
1955	April 14, 1955	7.46	5,550	1987	March 1, 1987	9.97	9,740
1956	April 16, 1956	7.16	5,070	1988	January 20, 1988	5.89	3,480
1957	September 17, 1957	9.00	8,610	1989	September 22, 1989	12.52	14,400
1958	January 14, 1958	6.54	4,010	1990	November 16, 1989	10.17	10,100

1959	September 30, 1959	12.54	14,500	1991	October 18, 1990	7.64	5,960
1960	February 11, 1960	8.15	6,770	1992	April 21, 1992	14.06	17,900
1961	February 25, 1961	6.32	3,730	1993	March 24, 1993	9.71	9,300
1962	December 12, 1961	5.98	3,650	1994	March 28, 1994	9.04	8,210
1963	March 13, 1963	7.50	5,850	1995	January 15, 1995	8.00	6,500

---

<sup>1</sup>Gage height at different site and (or) datum.

<sup>2</sup>Discharge is a maximum daily average.

**Table 491. 03167700 Beaverdam Creek at Route 1009 at Hillsville, Va.**

LOCATION.--Latitude 36°46'05", Longitude 080°43'33", NAD27, Carroll County, Hydrologic Unit 05050001, at bridge on private road to Burlington Industries, 0.2 mi east of Hillsville corporate limits, and 3.0 mi upstream from mouth.

DRAINAGE AREA.--4.47 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 2,373.04 ft NGVD of 1929. Prior to Oct. 22, 1968, nonrecording gage at site 0.4 mi upstream at present datum (drainage area, 4.13 mi<sup>2</sup>). Nov. 6, 1973, to Aug. 10, 1978, flood-hydrograph recorder at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert since 1971. Rating not developed for upstream side.

BANKFULL STAGE.--10 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1962	November 23, 1961	3.05 <sup>1,2</sup>		1979	September 21, 1979	7.42	834
1963	November 9, 1962	4.55 <sup>1,2</sup>		1980	April 9, 1980	4.83	366
1964	January 7, 1964	3.90 <sup>1,2</sup>		1981	February 11, 1981	3.46	186
1965	February 7, 1965	3.75 <sup>1,2</sup>		1982	July 15, 1982	4.68	345
1966	February 13, 1966	7.24 <sup>1,2</sup>		1983	April 10, 1983	4.72	351
1967	August 24, 1967	5.14 <sup>1,2</sup>		1984	February 14, 1984	4.07	260
1968	May 27, 1968	4.56 <sup>1,2</sup>		1985	February 2, 1985	3.20	160
1969	October 19, 1968	8.69 <sup>1,2</sup>		1986	November 4, 1985	3.55	196
1970	July 22, 1970	4.91 <sup>1</sup>		1987	March 1, 1987	4.35	299
1971	February 13, 1971	3.60	202	1988	April 4, 1988	3.06	146
1972	June 21, 1972	4.59	333	1989	July 5, 1989	6.85	720
1973	May 28, 1973	5.98	547	1990	January 1, 1990	8.50 <sup>3</sup>	
1974	April 4, 1974	3.27	167	1991	March 29, 1991	4.47	316
1975	December 3, 1974	3.85	232	1992	April 21, 1992	7.63	876
1976	June 3, 1976	6.03	556	1993	March 23, 1993	4.26	286
1977	March 13, 1977	3.83	229	1994	August 17, 1994	5.50	470
1978	January 26, 1978	5.51	472	1995	August 17, 1995	5.50	470

<sup>1</sup>Gage height below minimum recordable elevation.

<sup>2</sup>Gage height at different site and (or) datum.

<sup>3</sup>Gage height affected by backwater from an ice jam.

**Table 492. 03168000 New River at Allisonia, Va.**

LOCATION.--Latitude 36°56'15", Longitude 080°44'45", NAD27, Pulaski County, Hydrologic Unit 05050001, on left bank on State Highway 653, 0.2 mi downstream from Big Reed Island Creek, and 0.5 mi upstream from Allisonia.

DRAINAGE AREA.--2,212 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 1,848.36 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 52,000 ft<sup>3</sup>/s and extended above on basis of flood records for other stations on New River.

BANKFULL STAGE.--6 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Flow regulated by powerplants 25 mi upstream; peak discharge not materially effected.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1930	October 2, 1929	11.14	59,800	1969	October 19, 1968	6.46	23,500
1931	August 23, 1931	4.78	13,500	1970	August 10, 1970	8.23	35,000
1932	May 2, 1932	4.72	13,000	1971	February 13, 1971	5.31	16,600
1933	October 17, 1932	6.63	25,700	1972	June 21, 1972	11.85	62,800
1934	March 28, 1934	6.48	24,700	1973	May 28, 1973	12.43	68,100
1935	November 29, 1934	8.28	38,000	1974	April 5, 1974	8.79	38,900
1936	November 13, 1935	7.52	32,000	1975	March 14, 1975	10.52	51,200
1937	October 17, 1936	5.85	20,600	1976	October 18, 1975	9.51	44,000
1938	October 19, 1937	8.33	38,000	1977	April 5, 1977	10.70	52,600
1939	August 19, 1939	6.79	27,200	1978	November 7, 1977	16.59	109,000
1940	August 14, 1940	23.42	185,000	1979	September 22, 1979	11.08	55,900
1941	December 28, 1940	5.05	15,600	1980	April 15, 1980	8.75	38,600
1942	May 22, 1942	6.69	26,300	1981	May 28, 1981	7.35	29,200
1943	December 30, 1942	6.82	27,000	1982	February 3, 1982	7.90	32,800
1944	February 18, 1944	6.84	27,000	1983	April 10, 1983	9.55	44,300
1945	September 18, 1945	10.72	54,700	1984	May 8, 1984	9.74	45,800
1946	January 8, 1946	8.39	37,500	1985	August 18, 1985	6.25	21,800
1947	January 21, 1947	7.09	28,900	1986	November 5, 1985	7.82	32,100
1948	February 14, 1948	7.31	30,200	1987	March 1, 1987	10.32	50,300
1949	August 29, 1949	8.63	37,600	1988	January 21, 1988	4.22	10,700
1950	November 2, 1949	5.20	16,000	1989	September 22, 1989	15.68	98,900
1951	December 8, 1950	10.32	49,500	1990	November 16, 1989	9.75	45,800
1952	March 11, 1952	7.67	31,500	1991	October 13, 1990	7.98	33,200
1953	March 24, 1953	7.58	30,800	1992	June 5, 1992	13.72	80,300
1954	March 1, 1954	8.03	33,400	1993	March 24, 1993	11.69	61,600
1955	April 14, 1955	8.37	36,200	1994	August 17, 1994	12.69	70,500
1956	April 16, 1956	7.16	28,200	1995	January 15, 1995	16.56	108,000
1957	April 5, 1957	10.54	51,300	1996	January 19, 1996	12.44	68,200

1958	January 14, 1958	7.05	27,300	1997	December 1, 1996	8.12	34,100
1959	September 30, 1959	12.05	64,200	1998	April 20, 1998	8.82	38,900
1960	March 31, 1960	8.75	39,000	1999	January 24, 1999	4.71	13,000
1961	May 12, 1961	9.98	47,400	2000	March 21, 2000	5.01	14,600
1962	December 12, 1961	7.12	27,600	2001	July 30, 2001	6.45	23,100
1963	March 13, 1963	10.24	48,800	2002	March 18, 2002	7.36	29,100
1964	March 6, 1964	6.22	21,900	2003	February 23, 2003	9.85	46,500
1965	March 27, 1965	7.94	32,800	2004	November 19, 2003	12.73	70,900
1966	February 13, 1966	9.93	46,700	2005	March 28, 2005	6.90	26,200
1967	March 7, 1967	6.52	23,800	2006	June 27, 2006	6.89	26,100
1968	March 13, 1968	5.89	20,000	2007	November 16, 2006	5.88	19,500

---

**Table 493. 03168500 Peak Creek at Pulaski, Va.**

LOCATION.--Latitude 37°02'50", Longitude 080°46'35", NAD27, Pulaski County, Hydrologic Unit 05050001, on right bank at upstream side of bridge on Second street at Pulaski, 0.6 mi downstream from Tract Fork, and 8.7 mi upstream from mouth.

DRAINAGE AREA.--60.8 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 1,897.79 ft NGVD of 1929. Prior to June 1951, nonrecording gage at site 0.2 mi upstream at datum of 1,903.63 ft NGVD 1929. June 1951 to September 1957, recording gage at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 1,200 ft<sup>3</sup>/s and extended above by logarithmic plotting for 1927-33. Defined by current-meter measurements below 2,300 ft<sup>3</sup>/s and extended above on basis of slope-area measurements at 4,900 ft<sup>3</sup>/s.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1927	April 22, 1927	9.20 <sup>1</sup>	2,850	1954	March 1, 1954	10.03	4,830
1928	November 17, 1927	9.10 <sup>1</sup>	2,790	1955	February 6, 1955	6.85	2,000
1929	June 9, 1929	10.60 <sup>1</sup>	3,680	1956	April 16, 1956	5.62	1,400
1930	October 2, 1929	10.80 <sup>1</sup>	3,890	1957	January 29, 1957	9.24	4,140
1931	April 4, 1931	7.00 <sup>1</sup>	1,600	1958		6.12	1,650 <sup>2</sup>
1932	May 1, 1932	8.40 <sup>1</sup>	2,370	1959	September 30, 1959	6.98	2,160
1933	December 28, 1932	6.20 <sup>1</sup>	1,220	1960	February 6, 1960	6.02	1,600
1952	March 23, 1952	4.81	1,010	1961		4.78	1,050 <sup>2</sup>
1953	June 7, 1953	7.65	2,500				

<sup>1</sup>Gage height at different site and (or) datum.

<sup>2</sup>Month or day of occurrence is unknown or not exact.

**Table 494. 03168600 Peak Creek tributary near Pulaski, Va.**

LOCATION.--Latitude 37°04'19", Longitude 080°46'25", NAD27, Pulaski County, Hydrologic Unit 05050001, at culvert on State Highway 636, 2 mi north of Pulaski.

DRAINAGE AREA.--0.55 mi<sup>2</sup>.

GAGE.--Water-stage recorder (flood-hydrograph recorder). Datum of gage is 1,983.82 ft NGVD of 1929. Prior to Aug. 13, 1970, nonrecording gage (crest-stage gage) at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--4.5 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1949	July 21, 1949	9.71	340 <sup>1</sup>	1964		3.40 <sup>2</sup>	12.0 <sup>3,4</sup>
1951		3.40 <sup>2</sup>	12.0 <sup>3,4</sup>	1965	April 9, 1965	4.20	26.0
1952		3.40 <sup>2</sup>	12.0 <sup>3,4</sup>	1966	February 13, 1966	3.58	14.0
1953		3.92	18.0 <sup>4</sup>	1967		3.40 <sup>2</sup>	12.0 <sup>3,4</sup>
1954	March 1, 1954	5.90	80.0	1968		3.40 <sup>2</sup>	12.0 <sup>3,4</sup>
1955	February 6, 1955	5.00	47.0	1969	August 17, 1969	3.31	11.0
1956	April 16, 1956	4.60	35.0	1970		3.45 <sup>2</sup>	13.0 <sup>3,4</sup>
1957	January 29, 1957	5.80	76.0	1971		3.45 <sup>2</sup>	13.0 <sup>3,4</sup>
1958		8.33	228 <sup>4</sup>	1972		3.45 <sup>2</sup>	13.0 <sup>3,4</sup>
1959	December 29, 1958	5.54	64.0	1973	May 28, 1973	11.50 <sup>5</sup>	
1960	March 30, 1960	3.46	13.0	1974	December 20, 1973	3.93	19.0
1961	August 26, 1961	4.50	32.0	1975		3.45 <sup>2</sup>	13.0 <sup>3,4</sup>
1962		3.40 <sup>2</sup>	12.0 <sup>3,4</sup>	1976	October 17, 1975	4.55	34.0
1963	March 12, 1963	3.41	12.0				

<sup>1</sup>Discharge is a historic peak.

<sup>2</sup>Gage height below minimum recordable elevation.

<sup>3</sup>Discharge is less than indicated value, which is minimum recordable discharge at this site.

<sup>4</sup>Month or day of occurrence is unknown or not exact.

<sup>5</sup>Gage height may have been affected by debris in the culvert.

**Table 495. 03168750 Thorne Springs Branch near Dublin, Va.**

LOCATION.--Latitude 37°05'30", Longitude 080°44'34", NAD27, Pulaski County, Hydrologic Unit 05050001, at pond dam just upstream from U.S. Highway 11, 3.3 mi southwest of Dublin, and 4.3 mi upstream from mouth.

DRAINAGE AREA.--4.70 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 1,975 ft NGVD of 1929, from topographic map. Prior to 1970, water-stage recorder at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by computation of flow over weir by Soil Conservation Service.

BANKFULL STAGE.--7 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Prior to May 1970, records were provided by the U.S. Department of Agriculture, Soil Conservation Service.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1957	June 27, 1957	2.56	212	1982	February 3, 1982	1.84	69.0
1958	May 17, 1958	2.99	374	1983	April 10, 1983	1.59	46.0
1959	January 21, 1959	1.51	40.0	1984	May 7, 1984	1.25	24.0
1960	April 3, 1960	2.21	124	1985	February 2, 1985	0.57	4.70
1961	February 12, 1961	1.21	22.0	1986	July 27, 1986	2.58	219
1962	August 22, 1962	2.33	150	1987	April 25, 1987	2.39	165
1963	October 14, 1962	2.41	170	1988	September 17, 1988	1.37	30.0
1964	January 9, 1964	2.03	90.0	1989	September 22, 1989	2.51	198
1965	February 7, 1965	1.08	16.0	1990	May 29, 1990	1.88	73.0
1966	August 11, 1966	2.34	153	1991	January 12, 1991	0.82	8.40
1967	August 24, 1967	1.59	46.0	1992	June 5, 1992	0.93	10.9
1968	July 13, 1968	2.30	144	1993	March 23, 1993	2.66	246
1969	February 10, 1969	1.04	15.0	1994	April 30, 1994	2.09	99.0
1970	December 30, 1969	2.08	98.0	1995	July 7, 1995	7.41	3,760
1971	February 13, 1971	2.37	160	1996	January 19, 1996	2.41	170
1972	June 21, 1972	1.27	26.0	1997	June 3, 1997	1.86	71
1973	May 28, 1973	8.01	2,200	1998	March 21, 1998	2.23	127
1974	May 12, 1974	1.99	85.0	1999	May 14, 1999	0.59	4.90
1975	December 1, 1974	3.65	720	2000	April 18, 2000	1.72	57.4
1976	October 17, 1975	3.29	525	2001	May 17, 2001	0.84	8.78
1977	April 4, 1977	2.58	219	2002	September 28, 2002	1.18	20.6
1978	April 26, 1978	2.17	114	2003	February 22, 2003	2.63	235
1979	February 25, 1979	1.87	72.0	2004	November 19, 2003	1.13	18.3
1980	April 14, 1980	2.10	101	2005	March 28, 2005	1.16	19.7
1981	February 9, 1981	1.52	41.0	2006	June 27, 2006	1.40	32.0

**Table 496. 03169200 Dodd Creek tributary near Floyd, Va.**

LOCATION.--Latitude 36°52'21", Longitude 080°20'00", NAD27, Floyd County, Hydrologic Unit 05050001, at culvert on State Highway 8, 2.8 mi southwest of Floyd.

DRAINAGE AREA.--1.48 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 2,390.45 ft NGVD of 1929. Prior to Sept. 10, 1975, flood-hydrograph recorder at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--3 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1967	March 7, 1967	3.20	53.0	1972	June 21, 1972	5.20	210
1968		2.55 <sup>1</sup>	25.0 <sup>2,3</sup>	1973	May 28, 1973	5.28	225
1969	July 2, 1969	4.00	95.0	1974	September 6, 1974	4.10	47.0
1970	April 2, 1970	3.40	60.0	1975	September 18, 1975	4.00	49.0
1971	May 13, 1971	3.73	43.0	1976	June 16, 1976	5.87	290

<sup>1</sup>Gage height below minimum recordable elevation.

<sup>2</sup>Discharge is less than indicated value, which is minimum recordable discharge at this site.

<sup>3</sup>Month or day of occurrence is unknown or not exact.

**Table 497. 03169350 Brush Creek at Terrys Fork, Va.**

LOCATION.--Latitude 37°02'44", Longitude 080°16'45", NAD27, Floyd County, Hydrologic Unit 05050001, at culvert on State Highway 660 and 0.8 mi west of Terrys Fork.

DRAINAGE AREA.--1.40 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 2,485 ft NGVD of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by indirect methods by Soil Conservation Service.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Records were provided by the U.S. Department of Agriculture, Soil Conservation Service.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1957	September 17, 1957	2.00	81.0	1967	March 7, 1967	2.01	82.0
1958	February 26, 1958	1.83	63.0	1968	December 3, 1967	1.05	15.0
1959	September 30, 1959	8.02	648	1969	October 19, 1968	1.85	65.0
1960	October 10, 1959	4.98	333	1970	July 24, 1970	1.97	77.0
1961	August 22, 1961	2.32	115	1971	May 20, 1971	2.27	110
1962	July 30, 1962	1.75	55.0	1972	June 21, 1972	6.14	456
1963	November 9, 1962	1.80	60.0	1973	May 28, 1973	1.84	348
1964	August 31, 1964	1.52	38.0	1974	April 4, 1974	2.17	101
1965	July 10, 1965	2.07	89.0	1975	September 20, 1975	2.73	154
1966	February 13, 1966	1.94	75.0	1976	June 17, 1976	1.76	56.0

**Table 498.** 03169500 Little River near Copper Valley, Va.

LOCATION.--Latitude 36°59'47", Longitude 080°31'18", NAD27, Floyd County, Hydrologic Unit 05050001, at highway bridge 600 ft upstream from Indian Creek, 0.5 mi north of Copper Valley, and 5 mi south of Childress.

DRAINAGE AREA.--250 mi<sup>2</sup>.

GAGE.--Nonrecording gage (chain gage). Datum of gage is 1,900 ft NGVD of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 800 ft<sup>3</sup>/s and extended above. Peak discharge for flood of August 1940 determined from slope-area measurement.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1900		13.00	9,000 <sup>1,2,3</sup>	1913	March 14, 1913	8.80	4,210
1909	April 14, 1909	8.80	4,210	1914	January 31, 1914	6.80	2,380
1910	June 14, 1910	7.30	2,820	1915	January 7, 1915	8.40	3,830
1911	April 5, 1911	6.00	1,720	1916	July 15, 1916	9.07	4,500
1912	May 12, 1912	8.70	4,120	1940	August 14, 1940		14,000 <sup>2</sup>

<sup>1</sup>Discharge is an estimate.

<sup>2</sup>Discharge is a historic peak.

<sup>3</sup>Month or day of occurrence is unknown or not exact.

**Table 499. 03170000 Little River at Grayson, Va.**

LOCATION.--Latitude 37°02'15", Longitude 080°33'25", NAD27, Pulaski County, Hydrologic Unit 05050001, on left bank at upstream side of bridge on State Highway 693 at Snowville, 0.5 mi southeast of Grayson, 7 mi south of Radford, and at mile 8.6.

DRAINAGE AREA.--309 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 1,816.04 ft NGVD of 1929. Prior to Nov. 20, 1931, nonrecording gage at bridge 1.0 mi downstream at datum of 1,798.05 ft NGVD of 1929. Nov. 20, 1931 to Nov. 12, 1941, water-stage recorder 1.2 mi downstream at datum of 1,795.46 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 2,500 ft<sup>3</sup>/s for 1929-31. Defined by current-meter measurements below 3,500 ft<sup>3</sup>/s and extended above on basis of slope-area measurements near Floyd and near Copper Valley, and on basis of flood records for other stations on New River basin for 1932-41. Defined by current-meter measurements below 16,000 ft<sup>3</sup>/s and extended above on basis of slope-area measurements at 18,500 ft<sup>3</sup>/s and 25,000 ft<sup>3</sup>/s since 1941.

BANKFULL STAGE.--6 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1929	May 2, 1929	8.00 <sup>1</sup>	6,180	1969	October 19, 1968	6.43	6,930
1930	October 2, 1929	12.84 <sup>1</sup>	13,500	1970	December 31, 1969	4.43	3,840
1931	August 22, 1931	4.90 <sup>1</sup>	2,100	1971	February 13, 1971	4.65	4,180
1932	May 1, 1932	4.96 <sup>1</sup>	2,820	1972	June 21, 1972	13.40	22,800
1933	October 17, 1932	11.44 <sup>1</sup>	10,300	1973	May 28, 1973	7.78	9,560
1934	September 16, 1934	6.90 <sup>1</sup>	4,630	1974	April 4, 1974	5.46	5,390
1935	December 1, 1934	11.04 <sup>1</sup>	9,740	1975	March 14, 1975	7.77	9,540
1936	February 14, 1936	14.61 <sup>1,2</sup>	9,200	1976	June 21, 1976	4.86	4,490
1937	October 17, 1936	9.92 <sup>1</sup>	8,240	1977	October 9, 1976	6.55	7,190
1938	October 19, 1937	11.55 <sup>1</sup>	10,600	1978	January 26, 1978	10.33	15,000
1939	August 19, 1939	10.67 <sup>1</sup>	9,320	1979	September 22, 1979	8.78	11,600
1940	August 14, 1940	16.44 <sup>1</sup>	17,700	1980	April 15, 1980	6.47	7,010
1941	April 5, 1941	2.61 <sup>1</sup>	1,290	1981	February 9, 1981	3.89	2,720
1942	August 13, 1942	6.18	7,080	1982	February 3, 1982	5.40	5,080
1943	December 30, 1942	4.68	4,140	1983	April 10, 1983	9.39	12,800
1944	September 18, 1944	6.44	7,520	1984	February 14, 1984	5.08	4,540
1945	September 18, 1945	8.30	11,000	1985	August 18, 1985	5.54	5,330
1946	January 8, 1946	5.70	6,040	1986	November 5, 1985	11.67	18,200
1947	June 14, 1947	6.10	6,870	1987	April 24, 1987	6.90	7,780
1948	February 14, 1948	6.42	7,500	1988	January 20, 1988	3.98	2,850
1949	August 29, 1949	7.64	9,420	1989	September 22, 1989	10.49	15,400
1950	September 10, 1950	4.58	3,950	1990	November 16, 1989	5.73	5,650
1951	December 8, 1950	10.40	13,900	1991	October 19, 1990	4.85	4,160
1952	March 11, 1952	6.28	6,860	1992	April 22, 1992	10.07	14,400
1953	March 24, 1953	6.69	7,610	1993	March 24, 1993	7.10	8,150

1954	March 1, 1954	4.60	3,950	1994	August 17, 1994	5.49	5,240
1955	October 16, 1954	7.11	8,400	1995	January 15, 1995	7.12	8,190
1956	April 16, 1956	5.02	4,600	1996	January 19, 1996	7.80	9,500
1957	September 17, 1957	7.71	9,660	1997	November 8, 1996	5.55	5,340
1958	January 14, 1958	4.59	3,930	1998	January 8, 1998	6.42	6,880
1959	September 30, 1959	12.76	18,500	1999	September 6, 1999	4.13	3,280
1960	February 11, 1960	5.33	5,070	2000	April 18, 2000	4.16	3,340
1961	May 11, 1961	5.33	5,070	2001	March 30, 2001	3.36	2,030
1962	March 12, 1962	4.28	3,650	2002	March 18, 2002	3.67	2,420
1963	November 10, 1962	6.91	7,730	2003	February 22, 2003	7.80	9,500
1964	February 6, 1964	4.08 <sup>3</sup>	3,350	2004	September 28, 2004	11.36	19,400
1965	March 26, 1965	4.70	4,250	2005	March 28, 2005	4.93	4,280
1966	February 13, 1966	6.48	7,050	2006	June 28, 2006	6.45	8,320
1967	March 7, 1967	8.14	9,850	2007	November 16, 2006	4.79	5,160
1968	March 13, 1968	3.26	2,110				

<sup>1</sup>Gage height at different site and (or) datum.

<sup>2</sup>Gage height affected by backwater.

<sup>3</sup>Gage height is not the maximum for the year.

**Table 500. 03171000 New River at Radford, Va.**

LOCATION.--Latitude 37°08'30", Longitude 080°34'10", NAD27, Pulaski County, Hydrologic Unit 05050001, on left bank 2,000 ft downstream from bridge on U.S. Highway 11 at Radford, 5 mi downstream from Little River, and 5.5 mi downstream from Claytor Dam.

DRAINAGE AREA.--2,767 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 1,712.16 ft NGVD of 1929. Prior to Aug. 30, 1939, nonrecording gage at highway bridge 2,000 ft upstream at datum of 1,711.31 ft NGVD of 1929. From October 1907 to September 1915 nonrecording gage at datum of 1,711.75 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--From 1896 through 1939, defined by current-meter measurements below 31,000 ft<sup>3</sup>/s and extended above on basis of curve of relation and 1941 rating. Since 1939, defined by current-meter measurements below 75,200 ft<sup>3</sup>/s and extended above on basis of records for other stations on New River and flow over Claytor Dam (computed by Appalachian Power Company).

BANKFULL STAGE.--7 ft.

REGULATION.--High-flow conditions at this site are considered regulated after 1938. Flow regulated since May 1939 by Claytor Reservoir, capacity 230,100 acre-ft. Some additional regulation at low flow by dam and powerplant on Little River.

REMARKS.--Gage-height records for 1896-97 and 1916-39 from reports of the National Weather Service.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1878	September 15, 1878	37.4 <sup>1</sup>	217,000 <sup>2</sup>	1952	March 11, 1952	9.30	28,100 <sup>3</sup>
1896	April 1, 1896	13.0 <sup>1</sup>	52,400	1953	February 21, 1953	11.00	34,900 <sup>3</sup>
1897	February 22, 1897	16.0 <sup>1</sup>	67,200	1954	March 1, 1954	13.90	48,000 <sup>3</sup>
1898	September 23, 1898	9.6 <sup>1</sup>	37,200	1955	April 15, 1955	10.26	32,100 <sup>3</sup>
1899	March 5, 1899	12.6 <sup>1</sup>	50,600	1956	April 16, 1956	10.63	33,300 <sup>3</sup>
1900	March 1, 1900	8.6 <sup>1</sup>	34,000	1957	April 6, 1957	15.33	54,400 <sup>3</sup>
1901	May 22, 1901	26.8 <sup>1</sup>	147,000	1958	May 8, 1958	7.02	19,700 <sup>3</sup>
1902	December 29, 1901	22.6 <sup>1</sup>	111,000	1959	December 29, 1958	12.16	40,300 <sup>3</sup>
1903	March 23, 1903	15.6 <sup>1</sup>	65,200	1960	October 1, 1959	18.64	71,000 <sup>3</sup>
1904	March 8, 1904	8.0 <sup>1</sup>	18,300	1961	May 12, 1961	13.95	48,400 <sup>3</sup>
1905	July 13, 1905	21.6 <sup>1</sup>	79,800	1962	December 12, 1961	12.06	39,800 <sup>3</sup>
1906	January 23, 1906	18.0 <sup>1</sup>	60,200	1963	March 13, 1963	13.62	46,600 <sup>3</sup>
1907	June 13, 1907	20.0 <sup>1</sup>	70,400	1964	March 6, 1964	8.15	24,000 <sup>3</sup>
1908	January 12, 1908	14.0 <sup>1</sup>	41,600	1965	March 27, 1965	11.23	35,800 <sup>3</sup>
1909	May 21, 1909	15.0 <sup>1</sup>	46,200	1966	February 14, 1966	15.57	55,700 <sup>3</sup>
1910	June 14, 1910	11.0 <sup>1</sup>	31,000	1967	March 8, 1967	8.04	23,400 <sup>3</sup>
1911	April 6, 1911	8.8 <sup>1</sup>	21,900	1968	March 13, 1968	7.86	22,700 <sup>3</sup>
1912	March 16, 1912	10.8 <sup>1</sup>	30,500	1969	October 20, 1968	7.58	21,700 <sup>3</sup>
1913	March 27, 1913	15.0 <sup>1</sup>	46,200	1970	August 10, 1970	10.12	31,400 <sup>3</sup>
1914	February 21, 1914	7.0 <sup>1</sup>	14,000	1971	May 14, 1971	5.80	15,800 <sup>3</sup>
1915	December 5, 1914	13.6 <sup>1</sup>	38,700	1972	June 21, 1972	20.21	80,600 <sup>3</sup>
1916	July 16, 1916	35.7 <sup>1</sup>	200,000	1973	May 28, 1973	20.02	79,300 <sup>3</sup>
1917	March 5, 1917	8.0 <sup>1</sup>	32,000	1974	April 5, 1974	12.36	41,000 <sup>3</sup>

1918	January 29, 1918	10.0 <sup>1</sup>	38,500	1975	March 15, 1975	13.92	48,000 <sup>3</sup>
1919	October 26, 1918	16.5 <sup>1</sup>	69,400	1976	June 21, 1976	14.26	49,600 <sup>3</sup>
1920	April 3, 1920	5.0 <sup>1</sup>	19,600	1977	April 5, 1977	16.46	60,000 <sup>3</sup>
1921	February 12, 1921	6.0 <sup>1</sup>	24,200	1978	November 7, 1977	24.10	108,000 <sup>3</sup>
1922	November 2, 1921	7.7 <sup>1</sup>	31,000	1979	September 22, 1979	15.23	53,900 <sup>3</sup>
1923	June 13, 1923	6.7 <sup>1</sup>	27,500	1980	April 15, 1980	12.42	41,300 <sup>3</sup>
1924	January 17, 1924	10.9 <sup>1</sup>	42,600	1981	May 29, 1981	8.64	25,700 <sup>3</sup>
1925	December 9, 1924	5.7 <sup>1</sup>	22,800	1982	February 3, 1982	12.15	40,100 <sup>3</sup>
1926	January 19, 1926	9.7 <sup>1</sup>	37,000	1983	April 10, 1983	13.79	47,700 <sup>3</sup>
1927	November 16, 1926	9.1 <sup>1</sup>	34,500	1984	February 15, 1984	11.87	39,000 <sup>3</sup>
1928	August 17, 1928	13.8 <sup>1</sup>	55,700	1985	August 18, 1985	6.71	19,100 <sup>3</sup>
1929	March 1, 1929	6.8 <sup>1</sup>	28,000	1986	November 5, 1985	13.60	46,800 <sup>3</sup>
1930	October 2, 1929	17.7 <sup>1</sup>	76,200	1987	March 1, 1987	15.12	54,100 <sup>3</sup>
1931	August 23, 1931	5.0 <sup>1</sup>	19,600	1988	November 17, 1987	4.48	11,200 <sup>3</sup>
1932	May 2, 1932	5.1 <sup>1</sup>	20,100	1989	September 23, 1989	21.73	92,600 <sup>3</sup>
1933	October 18, 1932	8.7 <sup>1</sup>	34,000	1990	November 16, 1989	11.79	38,600 <sup>3</sup>
1934	March 28, 1934	6.0 <sup>1</sup>	24,200	1991	March 30, 1991	8.16	24,400 <sup>3</sup>
1935	November 29, 1934	11.4 <sup>1</sup>	44,800	1992	June 5, 1992	18.81	74,100 <sup>3</sup>
1936	February 15, 1936	10.0 <sup>1</sup>	38,500	1993	March 24, 1993	18.24	70,900 <sup>3</sup>
1937	January 21, 1937	8.0 <sup>1</sup>	32,000	1994	August 18, 1994	16.12	59,300 <sup>3</sup>
1938	October 20, 1937	12.0 <sup>1</sup>	47,500	1995	January 15, 1995	24.04	108,000 <sup>3</sup>
1939	February 17, 1939	4.0 <sup>1</sup>	15,300 <sup>3</sup>	1996	January 19, 1996	19.76	79,900 <sup>3</sup>
1940	August 14, 1940	35.96	218,000 <sup>3</sup>	1997	December 2, 1996	10.50	33,500 <sup>3</sup>
1941	December 29, 1940	4.96	13,200 <sup>3</sup>	1998	April 20, 1998	12.89	43,400 <sup>3</sup>
1942	May 22, 1942	10.13	31,300 <sup>3</sup>	1999	May 15, 1999	4.80	12,500 <sup>3</sup>
1943	December 31, 1942	7.85	22,500 <sup>3</sup>	2000	April 18, 2000	5.13	13,600 <sup>3</sup>
1944	February 18, 1944	10.32	32,100 <sup>3</sup>	2001	July 30, 2001	7.73	22,800 <sup>3</sup>
1945	September 18, 1945	17.00	62,700 <sup>3</sup>	2002	March 18, 2002	10.25	32,500 <sup>3</sup>
1946	January 8, 1946	13.07	44,400 <sup>3</sup>	2003	February 23, 2003	15.08	53,900 <sup>3</sup>
1947	January 20, 1947	10.86	34,500 <sup>3</sup>	2004	November 20, 2003	19.77	80,000 <sup>3</sup>
1948	February 14, 1948	10.86	34,500 <sup>3</sup>	2005	March 29, 2005	9.28	28,700 <sup>3</sup>
1949	August 29, 1949	12.31	40,800 <sup>3</sup>	2006	June 28, 2006	10.87	34,900 <sup>3</sup>
1950	November 2, 1949	5.58	15,200 <sup>3</sup>	2007	November 16, 2006	6.50	18,400 <sup>3</sup>
1951	December 8, 1950	16.86	62,200 <sup>3</sup>				

<sup>1</sup>Gage height at different site and (or) datum.

<sup>2</sup>Discharge is a historic peak.

<sup>3</sup>Discharge is affected by regulation or diversion.

**Table 501. 03171150 Crab Creek tributary near Christiansburg, Va.**

LOCATION.--Latitude 37°07'56", Longitude 080°27'32", NAD27, Montgomery County, Hydrologic Unit 05050001, at culvert on U.S. Highway 11, 1.3 mi upstream from mouth, and 3.0 mi west of Christiansburg.

DRAINAGE AREA.--1.18 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 1,970 ft NGVD of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by indirect methods by Soil Conservation Service.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Records were provided by the U.S. Department of Agriculture, Soil Conservation Service.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1957	July 28, 1957	1.05	58.0	1967	March 13, 1967	1.52	136
1958	February 27, 1958	0.89	26.0	1968	March 12, 1968	0.60	6.80
1959	January 22, 1959	0.90	27.0	1969	July 6, 1969	0.65	9.20
1960	April 3, 1960	1.31	110	1970	August 20, 1970	0.55	6.60
1961	August 25, 1961	1.48	131	1971	August 4, 1971	1.07	62.0
1962	June 23, 1962	1.30	109	1972	October 25, 1971	1.90	182
1963	October 13, 1962	0.83	22.0	1973	May 28, 1973	1.38	118
1964	January 17, 1964	1.04	55.0	1974	August 26, 1974	1.19	90.0
1965	September 16, 1965	1.02	49.0	1975	March 14, 1975	1.42	123
1966	August 21, 1966	1.87	178	1976	June 16, 1976	2.12	207

**Table 502. 03171500 New River at Eggleston, Va.**

LOCATION.--Latitude 37°17'22", Longitude 080°37'01", NAD27, Giles County, Hydrologic Unit 05050002, on left bank 50 ft downstream from highway bridge at Eggleston, 1.9 mi downstream from Spruce Run, and 7.8 mi upstream from Walker Creek.

DRAINAGE AREA.--2,961 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 1,615.59 ft NGVD of 1929. Prior to July 2, 1926, nonrecording gage at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 83,000 ft<sup>3</sup>/s and extended above on basis of flood records for other stations on New River.

BANKFULL STAGE.--9 ft.

REGULATION.--High-flow conditions at this site are considered regulated after 1938. Flow regulated since May 1939 by Claytor Reservoir 30 mi upstream, usable capacity 230,100 acre-ft.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1878	September 1878	40.00	209,000 <sup>12</sup>	1949	August 29, 1949	14.75	40,000 <sup>4</sup>
1915	December 5, 1914	14.20	39,800	1950	November 2, 1949	8.78	15,800 <sup>4</sup>
1916	July 16, 1916	39.50	204,000	1951	December 8, 1950	19.23	61,800 <sup>4</sup>
1917	March 5, 1917	11.86	28,400	1952	March 12, 1952	11.90	27,500 <sup>4</sup>
1918	June 26, 1918	8.93	16,300	1953	February 22, 1953	13.71	35,000 <sup>4</sup>
1919	October 27, 1918	23.00	82,500	1954	March 1, 1954	15.55	43,800 <sup>4</sup>
1920	April 3, 1920	10.57	22,800	1955	April 15, 1955	12.76	31,100 <sup>4</sup>
1921	December 15, 1920	10.47	22,800	1956	April 16, 1956	13.27	33,200 <sup>4</sup>
1922	November 1, 1921	11.70	27,700	1957	April 6, 1957	17.90	55,200 <sup>4</sup>
1923	June 13, 1923	11.40	26,400	1958	May 8, 1958	10.12	20,600 <sup>4</sup>
1924	January 17, 1924	14.98	41,200	1959	December 29, 1958	14.51	38,600 <sup>4</sup>
1925	October 1, 1924	17.02	49,600	1960	October 1, 1959	20.85	70,600 <sup>4</sup>
1926	January 19, 1926	15.10	41,600	1961	May 12, 1961	15.22	41,900 <sup>4</sup>
1927	November 16, 1926	13.13	33,400	1962	December 12, 1961	14.22	37,200 <sup>4</sup>
1928	August 17, 1928	18.04	53,800	1963	March 13, 1963	15.86	45,200 <sup>4</sup>
1929	February 28, 1929	12.20	29,700	1964	March 6, 1964	10.99	23,900 <sup>4</sup>
1930	October 2, 1929	22.44	72,300	1965	March 27, 1965	13.78	35,400 <sup>4</sup>
1931	August 23, 1931	9.15	17,600	1966	February 14, 1966	17.95	55,700 <sup>4</sup>
1932	May 2, 1932	8.99	16,800	1967	March 8, 1967	10.67	22,600 <sup>4</sup>
1933	October 18, 1932	12.77	32,200	1968	March 13, 1968	10.04	20,300 <sup>4</sup>
1934	March 28, 1934	12.71	29,200	1969	October 20, 1968	10.09	20,400 <sup>4</sup>
1935	November 29, 1934	16.18	44,800	1970	August 10, 1970	12.75 <sup>3</sup>	30,900 <sup>4</sup>
1936	February 15, 1936	14.03 <sup>3</sup>	35,800	1971	February 14, 1971	9.24	17,400 <sup>4</sup>
1937	January 20, 1937	12.16	28,500	1972	June 22, 1972	22.81	82,100 <sup>4</sup>
1938	October 20, 1937	16.43	45,700	1973	May 28, 1973	22.41	79,700 <sup>4</sup>
1939	February 16, 1939	9.08	16,500	1974	April 5, 1974	14.83	40,100 <sup>4</sup>
1940	August 14, 1940	41.16	219,000 <sup>4</sup>	1975	March 15, 1975	16.22	46,800 <sup>4</sup>

1941	July 5, 1941	8.77	15,400 <sup>4</sup>	1976	June 21, 1976	16.78	49,600 <sup>4</sup>
1942	May 22, 1942	13.16	32,800 <sup>4</sup>	1977	April 5, 1977	19.01	60,800 <sup>4</sup>
1943	December 31, 1942	11.18	24,500 <sup>4</sup>	1978	November 7, 1977	25.59	99,000 <sup>4</sup>
1944	February 18, 1944	13.18	32,800 <sup>4</sup>	1979	September 22, 1979	17.66	54,000 <sup>4</sup>
1945	September 18, 1945	19.70	64,600 <sup>4</sup>	1980	April 15, 1980	15.12	41,500 <sup>4</sup>
1946	January 8, 1946	16.10	46,200 <sup>4</sup>	1981	May 29, 1981	11.30	25,000 <sup>4</sup>
1947	January 21, 1947	13.67	35,000 <sup>4</sup>	1982	February 4, 1982	14.56	38,900 <sup>4</sup>
1948	February 15, 1948	13.69	35,000 <sup>4</sup>				

---

<sup>1</sup>Discharge is a historic peak.

<sup>2</sup>Month or day of occurrence is unknown or not exact.

<sup>3</sup>Gage height is not the maximum for the year.

<sup>4</sup>Discharge is affected by regulation or diversion.

**Table 503.** 03171600 Little Stony Creek at Pembroke, Va.

LOCATION.--Latitude 37°19'10", Longitude 080°38'25", NAD27, Giles County, Hydrologic Unit 05050002, at culvert on U.S. Highway 460, at Pembroke.

DRAINAGE AREA.--22.5 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is not determined. Prior to Sept. 18, 1973, flood-hydrograph recorder at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--12 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1967	March 7, 1967	10.40	465	1971	May 30, 1971	10.40	395
1968	March 13, 1968	10.08	275	1972	June 21, 1972	14.20	
1969	October 19, 1968	10.35	430	1973	May 28, 1973	11.90	760
1970	December 31, 1969	10.60	490				

**Table 504.** 03171800 Helveys Mill Creek tributary at Point Pleasant, Va.

LOCATION.--Latitude 37°07'24", Longitude 081°01'16", NAD27, Bland County, Hydrologic Unit 05050002, at culvert on State Highway 42, 0.2 mi west of Point Pleasant.

DRAINAGE AREA.--0.39 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is not determined.

STAGE-DISCHARGE RELATION.--Not developed.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1961		0.00 <sup>1</sup>	1.00 <sup>2,3</sup>	1970	December 30, 1969	0.91	
1962		0.00 <sup>1</sup>	1.00 <sup>2,3</sup>	1971	February 13, 1971	1.29	
1963	March 12, 1963	0.32		1972	June 21, 1972	1.00	
1964	March 5, 1964	0.30		1973	December 10, 1972	0.94	
1965	February 8, 1965	0.65		1974	April 4, 1974	1.98	
1966	February 13, 1966	0.91		1975	June 26, 1975	2.28	
1967	November 3, 1966	1.04		1976	October 17, 1975	2.75	
1968	March 13, 1968	1.27		1977	April 4, 1977	3.22	
1969	February 2, 1969	0.59		1978	January 26, 1978	3.14	

<sup>1</sup>Gage height below minimum recordable elevation.

<sup>2</sup>Discharge is less than indicated value, which is minimum recordable discharge at this site.

<sup>3</sup>Month or day of occurrence is unknown or not exact.

**Table 505.** 03172500 Walker Creek at Staffordsville, Va.

LOCATION.--Latitude 37°14'30", Longitude 080°42'40", NAD27, Giles County, Hydrologic Unit 05050002, at highway bridge at Staffordsville, 500 ft downstream from Whitley Creek.

DRAINAGE AREA.--275 mi<sup>2</sup>.

GAGE.--Nonrecording gage (chain gage). Datum of gage is 1,720 ft NGVD of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 1,900 ft<sup>3</sup>/s and extended above on basis of velocity-area studies.

BANKFULL STAGE.--8 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1909	May 27, 1909	9.80	5,100	1913	March 27, 1913	15.80	12,100
1910	June 13, 1910	8.70	4,000	1914	February 20, 1914	7.50	2,820
1911	January 30, 1911	8.10	3,400	1915	January 7, 1915	10.80	6,180
1912	March 29, 1912	12.00	7,500	1916	July 16, 1916	14.50	10,500

**Table 506. 03173000 Walker Creek at Bane, Va.**

LOCATION.--Latitude 37°16'05", Longitude 080°42'35", NAD27, Giles County, Hydrologic Unit 05050002, on left bank at Bane, 0.2 mi downstream from bridge on State Highway 100, 0.2 mi downstream from Sugar Run, and at mile 7.9.

DRAINAGE AREA.--299 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 1,665.92 ft NGVD of 1929. Prior to Aug. 1, 1938, nonrecording gage at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 7,000 ft<sup>3</sup>/s and extended above on basis of slope-area measurements at 16,500 ft<sup>3</sup>/s.

BANKFULL STAGE.--10 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Flood peak of September 1878 was maximum known by local residents as of 1938.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1878	September 1878	23.50	40,000 <sup>1,2,3</sup>	1973	February 2, 1973	11.59	7,700
1938	July 22, 1938	12.40	9,350	1974	April 4, 1974	13.01	10,100
1939	January 30, 1939	9.65	4,450	1975	March 14, 1975	12.91	9,950
1940	April 20, 1940	12.64	9,760	1976	January 1, 1976	11.43	7,430
1941	July 5, 1941	9.16	3,700	1977	April 5, 1977	16.69	16,900
1942	May 22, 1942	11.63	7,430	1978	January 26, 1978	12.90	9,930
1943	December 30, 1942	11.13	6,580	1979	February 25, 1979	11.38	7,350
1944	February 18, 1944	14.00	12,800	1980	April 14, 1980	10.20	5,440
1945	September 18, 1945	10.90	5,890	1981	May 28, 1981	9.24	4,150
1946	January 8, 1946	12.60	9,760	1982	June 13, 1982	11.05	6,770
1947	January 20, 1947	10.23	5,010	1983	April 10, 1983	9.66	4,710
1948	February 14, 1948	12.50	8,700	1984	May 7, 1984	11.38	7,260
1949	June 17, 1949	14.44	13,700	1985	February 2, 1985	8.71	3,490
1950	May 3, 1950	10.77	6,350	1986	May 21, 1986	9.56	4,580
1951	December 8, 1950	12.33	9,150	1987	April 25, 1987	12.76	9,470
1952	April 28, 1952	8.84	3,490	1988	January 20, 1988	7.42	2,130
1953	February 21, 1953	11.82	8,150	1989	September 23, 1989	11.48	7,410
1954	March 1, 1954	10.40	5,670	1990	October 1, 1989	10.92	6,560
1955	April 14, 1955	12.85	10,200	1991	January 12, 1991	10.07	5,260
1956	April 16, 1956	10.47	5,840	1992	June 5, 1992	19.28	25,000
1957	January 30, 1957	16.50	16,500	1993	March 24, 1993	17.43	19,000
1958	March 31, 1958	10.89	6,510	1994	March 28, 1994	11.16	6,930
1959	April 13, 1959	10.87	6,530	1995	January 16, 1995	10.41	5,750
1960	March 30, 1960	10.03	5,020	1996	January 19, 1996	15.80	15,100
1961	May 12, 1961	9.44	4,190	1997	December 1, 1996	11.68	7,710
1962	December 18, 1961	10.40	5,680	1998	April 20, 1998	11.59	7,570
1963	March 12, 1963	12.36	9,080	1999	May 14, 1999	8.15	2,820

1964	March 5, 1964	10.07	5,180	2000	March 12, 2000	7.94	2,590
1965	February 8, 1965	10.74	6,190	2001	May 17, 2001	12.02	8,240
1966	February 13, 1966	12.11	8,570	2002	March 18, 2002	10.29	5,570
1967	March 7, 1967	10.35	5,600	2003	February 22, 2003	15.43	14,400
1968	March 13, 1968	9.13	3,850	2004	November 19, 2003	15.46	14,900
1969	February 3, 1969	7.39	2,120	2005	March 28, 2005	9.35	4,220
1970	December 31, 1969	10.93	6,580	2006	June 28, 2006	7.72	2,490
1971	February 14, 1971	10.38	5,650	2007	March 2, 2007	10.93	6,340
1972	June 21, 1972	13.69	11,300				

---

<sup>1</sup>Discharge is an estimate.

<sup>2</sup>Discharge is a historic peak.

<sup>3</sup>Month or day of occurrence is unknown or not exact.

**Table 507.** 03175100 Cox Branch above Tazewell Reservoir near Gratton, Va.

LOCATION.--Latitude 37°09'12", Longitude 081°24'51", NAD27, Tazewell County, Hydrologic Unit 05050002, in Jefferson National Forest 200 ft upstream from town of Tazewell Reservoir, 1.2 mi north of Gratton, 1.6 mi upstream from bridge on State Highway 61, and 1.8 mi upstream from Clear Fork.

DRAINAGE AREA.--1.90 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 2,990 ft NGVD of 1929, from topographic map.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Field data collected by U.S. Geological Survey; analyses and record computation by the Virginia Department of Environmental Quality - Water Division.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1990	December 31, 1989	2.47	64.0	1992	December 2, 1991	2.38	55.0
1991	March 30, 1991	2.24	45.0				

**Table 508. 03175140 West Fork Cove Creek near Bluefield, Va.**

(Formerly published as 03175000.)

LOCATION.--Latitude 37°11'03", Longitude 081°19'48", NAD27, Tazwell County, Hydrologic Unit 05050002, at old tramway bridge 10 miles southwest of Bluefield, Va.

DRAINAGE AREA.--4.68 mi<sup>2</sup>.

GAGE.--Nonrecording gage (staff gage). Datum of gage is 2,650 ft NGVD of 1929, from topographic map.

STAGE-DISCHARGE REALATION.--Defined by current-meter measurements below 18.2 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.-- Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

<b>Water year</b>	<b>Date</b>	<b>Gage height (ft)</b>	<b>Discharge (ft<sup>3</sup>/s)</b>	<b>Water year</b>	<b>Date</b>	<b>Gage height (ft)</b>	<b>Discharge (ft<sup>3</sup>/s)</b>
Annual maximum stages and discharges							
1930	October 1, 1929	3.60	140	1932	February 2, 1932	3.40	124
1931	April 3, 1931	2.80	83.0				

**Table 509. 03175500 Wolf Creek near Narrows, Va.**

LOCATION.--Latitude 37°18'20", Longitude 080°51'00", NAD27, Giles County, Hydrologic Unit 05050002, on right bank at downstream side of bridge on State Highway 724, 2.8 mi southwest of Narrows, and at mile 3.5.

DRAINAGE AREA.--223 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 1,583.83 ft NGVD of 1929. July 22, 1908 to Sept. 30, 1916 nonrecording gage at present site and datum. Mar. 31, 1938 to Nov. 7, 1938, nonrecording gage at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 5,700 ft<sup>3</sup>/s and extended above on basis of contracted-opening measurements at 12,700 ft<sup>3</sup>/s.

BANKFULL STAGE.--8 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1909	April 30, 1909	9.00	5,500	1969	February 2, 1969	5.79	1,570
1910	January 21, 1910	7.80	3,740	1970	December 31, 1969	10.30	7,460
1911	March 10, 1911	8.20	4,300	1971	May 7, 1971	8.60	4,520
1912	March 15, 1912	9.30	6,010	1972	April 14, 1972	10.09	7,000
1913	March 27, 1913	11.70	8,820	1973	March 17, 1973	9.24	5,300
1914	February 20, 1914	7.00	2,740	1974	December 27, 1973	9.59	5,900
1915	January 7, 1915	10.40	6,800	1975	March 14, 1975	10.87	8,790
1916	July 16, 1916	13.00	11,000	1976	January 1, 1976	8.43	4,320
1938	May 24, 1938	6.14	1,980	1977	April 5, 1977	12.01	11,500
1939	January 30, 1939	7.10	2,740	1978	January 26, 1978	10.10	7,020
1940	April 20, 1940	8.77	5,200	1979	January 21, 1979	9.40	5,540
1941	July 6, 1941	9.31	6,010	1980	July 29, 1980	6.80	2,500
1942	May 22, 1942	7.70	3,360	1981	May 28, 1981	8.08	3,750
1943	December 30, 1942	7.91	3,880	1982	June 13, 1982	9.77	6,240
1944	February 18, 1944	11.10	9,430	1983	March 21, 1983	7.11	2,650
1945	February 17, 1945	8.92	5,350	1984	May 7, 1984	10.21	7,130
1946	January 8, 1946	10.00	7,200	1985	February 1, 1985	7.79	3,400
1947	January 16, 1947	9.43	6,180	1986	March 15, 1986	7.90	3,530
1948	February 14, 1948	10.50	8,200	1987	April 25, 1987	10.89	8,630
1949	June 17, 1949	9.41	6,180	1988	January 20, 1988	5.78	1,490
1950	February 2, 1950	9.62	6,520	1989	September 23, 1989	8.68	4,510
1951	December 7, 1950	10.05	7,200	1990	January 1, 1990	9.82	6,340
1952	March 11, 1952	9.02	5,500	1991	March 30, 1991	8.76	4,610
1953	February 21, 1953	9.26	6,010	1992	June 5, 1992	11.91	11,200
1954	January 22, 1954	7.75	3,110	1993	March 24, 1993	11.88	11,100
1955	March 6, 1955	10.66	7,870	1994	March 28, 1994	8.42	4,170
1956	April 16, 1956	9.50	6,350	1995	January 15, 1995	11.09	9,100
1957	January 29, 1957	13.80	12,900	1996	January 19, 1996	11.59	10,400

1958	March 31, 1958	9.69	6,670	1997	March 3, 1997	9.03	4,980
1959	April 13, 1959	8.25	4,300	1998	February 18, 1998	8.34	4,070
1960	March 31, 1960	9.36	5,540	1999	January 15, 1999	5.63	1,340
1961	February 25, 1961	10.42	7,680	2000	February 14, 2000	5.70	1,390
1962	December 18, 1961	8.80	4,760	2001	May 22, 2001	9.63	5,980
1963	March 12, 1963	11.42	10,100	2002	May 3, 2002	9.63	5,980
1964	March 5, 1964	9.19	5,240	2003	February 22, 2003	11.81	10,900
1965	March 26, 1965	9.03	5,000	2004	November 19, 2003	13.95	16,100
1966	February 13, 1966	8.88	4,880	2005	December 10, 2004	6.61	2,140
1967	March 7, 1967	9.63	5,990	2006	June 27, 2006	7.71	3,310
1968	May 28, 1968	7.44	3,140	2007	March 2, 2007	7.24	2,790

---

**Table 510. 03176500 New River at Glen Lyn, Va.**

LOCATION.--Latitude 37°22'22", Longitude 080°51'39", NAD27, Giles County, Hydrologic Unit 05050002, on right bank 90 ft upstream from bridge on U.S. Highway 460 at Glen Lyn, 0.3 mi upstream from East River, and 6.3 mi downstream from Wolf Creek.

DRAINAGE AREA.--3,783 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 1,490.11 ft NGVD of 1929. Prior to May 16, 1926 nonrecording gage at Narrows, 6.5 mi upstream at different datum. May 16, 1926 to Aug. 10, 1927 nonrecording gage at present site and datum of 1,491.96. Aug. 11, 1927 to Oct. 16, 1934 water-stage recorder on left bank above bridge at present datum. Oct. 16, 1934 to June 16, 1939, water-stage recorder on left bank 200 ft upstream at present datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 88,000 ft<sup>3</sup>/s and extended above on basis of slope-area measurement at 226,000 ft<sup>3</sup>/s at present site.

BANKFULL STAGE.--11 ft.

REGULATION.--High-flow conditions at this site are considered unregulated. Flow regulated since 1939 by Claytor Reservoir 55 mi upstream, capacity 230,100 acre-ft. Water withdraw by American Electric Power at gage.

REMARKS.--Records prior to Aug. 10, 1927, collected by the National Weather Service.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1878	September 13, 1878	33.10 <sup>1</sup>	240,000 <sup>23</sup>	1961	May 13, 1961	12.14	51,000 <sup>4</sup>
1915	December 5, 1914	13.50 <sup>1</sup>	38,000	1962	December 13, 1961	11.28	43,000 <sup>4</sup>
1916	July 16, 1916	31.10 <sup>1</sup>	210,000	1963	March 13, 1963	12.72	57,000 <sup>4</sup>
1917	March 5, 1917	13.50 <sup>1</sup>	34,000	1964	March 6, 1964	9.57	29,200 <sup>4</sup>
1918	January 29, 1918	14.60 <sup>1</sup>	40,000	1965	March 27, 1965	11.39	44,000 <sup>4</sup>
1919	October 26, 1918	19.00 <sup>1</sup>	73,000	1966	February 14, 1966	14.37	74,000 <sup>4</sup>
1920	April 3, 1920	12.00 <sup>1</sup>	27,000	1967	March 7, 1967	10.28	34,200 <sup>4</sup>
1921	February 11, 1921	12.40 <sup>1</sup>	29,000	1968	March 14, 1968	8.65	22,900 <sup>4</sup>
1922	March 16, 1922	10.40 <sup>1</sup>	20,000	1969	October 19, 1968	9.66	29,600 <sup>4</sup>
1923	June 13, 1923	15.00 <sup>1</sup>	43,000	1970	January 1, 1970	9.86	31,000 <sup>4</sup>
1924	January 17, 1924	15.00 <sup>1</sup>	43,000	1971	February 14, 1971	9.31	27,200 <sup>4</sup>
1925	December 9, 1924	9.70 <sup>1</sup>	17,000	1972	June 22, 1972	17.36	105,000 <sup>4</sup>
1926	January 19, 1926	12.00 <sup>1</sup>	27,000	1973	May 29, 1973	16.69	93,600 <sup>4</sup>
1927	November 16, 1926	10.74 <sup>1</sup>	42,000	1974	April 5, 1974	11.75	47,000 <sup>4</sup>
1928	August 17, 1928	13.47 <sup>1</sup>	66,000	1975	March 14, 1975	14.49	71,400 <sup>4</sup>
1929	March 1, 1929	10.40 <sup>1</sup>	36,100	1976	June 21, 1976	12.67	55,000 <sup>4</sup>
1930	October 3, 1929	16.75 <sup>1</sup>	99,000	1977	April 5, 1977	17.16	98,900 <sup>4</sup>
1931	August 23, 1931	7.66 <sup>1</sup>	19,600	1978	November 7, 1977	18.12	110,000 <sup>4</sup>
1932	May 2, 1932	7.94 <sup>1</sup>	21,200	1979	February 26, 1979	13.62	63,600 <sup>4</sup>
1933	October 18, 1932	9.84 <sup>1</sup>	32,500	1980	April 15, 1980	12.08	49,700 <sup>4</sup>
1934	March 28, 1934		35,000 <sup>3</sup>	1981	May 29, 1981	9.59	31,600 <sup>4</sup>
1935	January 23, 1935	13.40 <sup>1</sup>	63,600	1982	February 4, 1982	12.14	50,400 <sup>4</sup>
1936	February 15, 1936	12.00 <sup>1</sup>	51,600	1983	April 10, 1983	12.96	57,100 <sup>4</sup>
1937	January 20, 1937	10.95 <sup>1</sup>	43,500	1984	February 15, 1984	11.96	48,700 <sup>4</sup>

1938	October 20, 1937	12.65 <sup>1</sup>	56,600	1985	August 19, 1985	8.95	24,700 <sup>4</sup>
1939	January 31, 1939	7.60 <sup>1</sup>	20,100 <sup>4</sup>	1986	November 5, 1985	12.55	53,600 <sup>4</sup>
1940	August 14, 1940	27.50	226,000 <sup>4</sup>	1987	April 25, 1987	15.97	85,200 <sup>4</sup>
1941	July 6, 1941	8.30	24,300 <sup>4</sup>	1988	January 20, 1988	6.47	12,900 <sup>4</sup>
1942	May 22, 1942	10.91	43,100 <sup>4</sup>	1989	September 23, 1989	17.71	103,000 <sup>4</sup>
1943	December 31, 1942	9.55	33,200 <sup>4</sup>	1990	November 17, 1989	11.38	44,300 <sup>4</sup>
1944	February 18, 1944	11.01	43,900 <sup>4</sup>	1991	March 31, 1991	9.61	31,600 <sup>4</sup>
1945	September 18, 1945	14.50	76,000 <sup>4</sup>	1992	June 5, 1992	17.47	100,000 <sup>4</sup>
1946	January 8, 1946	13.50	66,000 <sup>4</sup>	1993	March 24, 1993	17.47	100,000 <sup>4</sup>
1947	January 21, 1947	11.10	44,700 <sup>4</sup>	1994	August 18, 1994	13.58	62,400 <sup>4</sup>
1948	February 15, 1948	11.32	46,300 <sup>4</sup>	1995	January 16, 1995	19.83	125,000 <sup>4</sup>
1949	December 4, 1948	11.66	49,700 <sup>4</sup>	1996	January 19, 1996	18.01	105,000 <sup>4</sup>
1950	February 2, 1950	9.09	29,600 <sup>4</sup>	1997	December 2, 1996	11.28	43,500 <sup>4</sup>
1951	December 8, 1950	14.85	79,000 <sup>4</sup>	1998	April 20, 1998	12.93	56,700 <sup>4</sup>
1952	March 12, 1952	9.90	35,400 <sup>4</sup>	1999	May 15, 1999	6.88	16,300 <sup>4</sup>
1953	February 22, 1953	11.42	47,100 <sup>4</sup>	2000	April 19, 2000	7.49	18,100 <sup>4</sup>
1954	March 1, 1954	11.93	51,500 <sup>4</sup>	2001	May 23, 2001	9.82	33,200 <sup>4</sup>
1955	April 15, 1955	10.13	36,900 <sup>4</sup>	2002	March 19, 2002	11.28	43,500 <sup>4</sup>
1956	April 17, 1956	11.13	44,700 <sup>4</sup>	2003	February 23, 2003	15.71	82,700 <sup>4</sup>
1957	April 6, 1957	13.57	66,700 <sup>4</sup>	2004	November 20, 2003	17.40	99,600 <sup>4</sup>
1958	March 31, 1958	10.41	35,300 <sup>4</sup>	2005	March 29, 2005	10.64	38,900 <sup>4</sup>
1959	December 29, 1958	12.15	52,000 <sup>4</sup>	2006	June 28, 2006	11.01	41,500 <sup>4</sup>
1960	March 31, 1960	13.60	66,000 <sup>4</sup>	2007	March 17, 2007	8.54	24,300 <sup>4</sup>

<sup>1</sup>Gage height at different site and (or) datum.

<sup>2</sup>Discharge is a historic peak.

<sup>3</sup>Discharge is an estimate.

<sup>4</sup>Discharge is affected by regulation or diversion.

**Table 511. 03177700 Bluestone River at Bluefield, Va.**

LOCATION.--Latitude 37°15'21", Longitude 081°16'55", NAD27, Tazewell County, Hydrologic Unit 05050002, on right bank 50 ft downstream from pump house and 1,000 ft upstream from outfall of sewage treatment plant at Bluefield, 0.9 mi downstream from Beaverpond Creek, and 3.5 mi upstream from Brush Fork.

DRAINAGE AREA.--39.7 mi<sup>2</sup>.

GAGE.--Nonrecording gage (staff gage). Datum of gage is 2,350 ft NGVD of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 800 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--5 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Records were provided by the Virginia Department of Environmental Quality - Water Division.

<b>Water year</b>	<b>Date</b>	<b>Gage height (ft)</b>	<b>Discharge (ft<sup>3</sup>/s)</b>	<b>Water year</b>	<b>Date</b>	<b>Gage height (ft)</b>	<b>Discharge (ft<sup>3</sup>/s)</b>
Annual maximum stages and discharges							
1966	May 2, 1966	5.10	550	1974	March 12, 1974	4.90	520
1967	March 7, 1967	6.30	783	1975	March 14, 1975	7.40	1,030
1968	May 27, 1968	4.28	432	1976	January 1, 1976	4.72	490
1969	February 9, 1969	2.56	197	1977	April 4, 1977	6.40	805
1970	December 30, 1969	6.10	739	1978	January 26, 1978	7.80	1,120
1971	May 6, 1971	6.24	761	1979	January 21, 1979	5.70	655
1972	April 14, 1972	7.00	937	1980	July 10, 1980	8.40	1,260
1973	December 10, 1972	5.80	675				

**Table 512. 03177710 Bluestone River at Falls Mills, Va.**

LOCATION.--Latitude 37°16'17", Longitude 081°18'18", NAD27, Tazewell County, Hydrologic Unit 05050002, on right bank at downstream side of bridge on U.S. Highway 717, 0.3 mi upstream from Brush Fork, and 0.4 mi southeast of Falls Mills.

DRAINAGE AREA.--44.3 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 2,310.41 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 650 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1981	May 28, 1981	5.68	667	1991	March 30, 1991	5.61	641
1982	June 10, 1982	6.26	738	1992	June 5, 1992	6.09	713
1983	April 10, 1983	4.25	445	1993	March 24, 1993	7.79	960
1984	May 7, 1984	8.37	1,050	1994	February 11, 1994	7.27	885
1985	February 1, 1985	6.33	749	1995	January 15, 1995	7.80	1,340
1986	March 15, 1986	4.81	525	1996	January 27, 1996	8.66	1,560
1987	April 25, 1987	8.21	1,020	2005	July 7, 2005	4.87	651
1988	September 17, 1988	3.19	296	2006	June 27, 2006	5.86	870
1989	September 22, 1989	6.86	825	2007	March 16, 2007	3.99	476
1990	January 1, 1990	5.85	677				

## Ohio River Basin: Big Sandy River Basin

**Table 513.** 03207400 Big Prater Creek at Vansant, Va.

LOCATION.--Latitude 37°13'09", Longitude 082°06'10", NAD27, Buchanan County, Hydrologic Unit 05070202, at bridge on State Highway 620, 1 mi south of Vansant.

DRAINAGE AREA.--20.0 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 1,180.00 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 260 ft<sup>3</sup>/s and extended above on basis of contracted-opening measurements at 1,140 ft<sup>3</sup>/s and 4,550 ft<sup>3</sup>/s.

BANKFULL STAGE.--9 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1951	February 1, 1951	3.54	260	1965	March 26, 1965	5.33	1,500
1952	April 28, 1952		1,500 <sup>1</sup>	1966	May 1, 1966	3.03	100
1953	May 19, 1953	4.30	720	1967	March 7, 1967	4.03	530
1954	January 22, 1954		450 <sup>1</sup>	1968	May 27, 1968	4.19	650
1955	February 27, 1955	5.20	1,400	1969	January 20, 1969	2.35	35.0
1956	April 15, 1956	4.87	1,140	1970	April 28, 1970	4.10	575
1957	January 29, 1957	9.45	4,550	1971	May 7, 1971	4.22	665
1958	August 25, 1958		3,000 <sup>1</sup>	1972	April 12, 1972	4.65	988
1959	December 29, 1958	4.70	1,000	1973	March 16, 1973	3.87	435
1960	November 28, 1959	4.30	700	1974	January 11, 1974	4.66	995
1961	February 25, 1961	4.94	1,210	1975	March 30, 1975	4.70	1,020
1962	December 18, 1961	5.20	1,400	1976	December 31, 1975	2.90	90.0
1963	March 12, 1963	7.50	3,200	1977	April 4, 1977	13.49	8,000 <sup>1</sup>
1964	March 8, 1964	4.15	600				

<sup>1</sup>Discharge is an estimate.

**Table 514. 03207500 Levisa Fork near Grundy, Va.**

LOCATION.--Latitude 37°17'52", Longitude 082°07'34", NAD27, Buchanan County, Hydrologic Unit 05070202, on right bank 200 ft upstream from Six and Twenty Mile Creek, 2.4 mi northwest of Grundy, 2.5 mi downstream from Slate Creek, and 3.0 mi upstream from Poplar Creek.

DRAINAGE AREA.--239 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 988.50 ft NGVD of 1929. Prior to Aug. 20, 1949, nonrecording gage at bridge 1,000 ft downstream at datum of 986.17 ft NGVD of 1929. Aug. 20, 1949 to July 28, 1958, water-stage recorder at site 1,050 ft downstream at datum of 986.17 ft NGVD of 1929. July 29, 1958, to Aug. 1, 1961, water-stage recorder at site 1,020 ft downstream at datum of 984.17 ft NGVD of 1929. Aug. 2, 1961, to Sept. 30, 1974, water-stage recorder at present site and present datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 16,700 ft<sup>3</sup>/s and extended above on basis of slope-area and contracted-opening measurements at 33,000 ft<sup>3</sup>/s.

BANKFULL STAGE.--16 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1929	March 1929	16.00 <sup>1</sup>	21,800 <sup>2,3</sup>	1964	March 8, 1964	6.90 <sup>1</sup>	6,120
1942	June 20, 1942	9.37 <sup>1</sup>	5,720	1965	March 26, 1965	11.11 <sup>1</sup>	12,100
1943	March 13, 1943	11.94 <sup>1</sup>	11,700	1966	May 1, 1966	8.14 <sup>1</sup>	7,680
1944	February 17, 1944	14.00 <sup>1</sup>	16,000	1967	March 7, 1967	16.65 <sup>1</sup>	21,300
1945	February 17, 1945	13.60 <sup>1</sup>	14,900	1968	May 27, 1968	10.70 <sup>1</sup>	11,500
1946	January 7, 1946	14.50 <sup>1</sup>	17,400	1969	January 20, 1969	4.15 <sup>1</sup>	2,220
1947	January 15, 1947	10.50 <sup>1</sup>	8,000	1970	April 28, 1970	11.24 <sup>1</sup>	12,300
1948	February 13, 1948	11.17 <sup>1</sup>	9,700	1971	May 6, 1971	11.92 <sup>1</sup>	13,400
1949	March 18, 1949	10.00 <sup>1</sup>	7,000	1972	January 21, 1972	13.78 <sup>1</sup>	16,200
1950	February 2, 1950	13.00 <sup>1</sup>	13,300	1973	March 16, 1973	13.36 <sup>1</sup>	15,500
1951	February 1, 1951	8.33 <sup>1</sup>	4,370	1974	January 11, 1974	13.63 <sup>1</sup>	16,000
1952	April 28, 1952	10.98 <sup>1</sup>	9,200	1977	April 4, 1977	28.87	52,000 <sup>2</sup>
1953	May 19, 1953	13.17 <sup>1</sup>	13,800	1984	May 7, 1984	23.40	32,800 <sup>2</sup>
1954	January 22, 1954	6.55 <sup>1</sup>	2,680	1986	May 13, 1986	11.08	5,550
1955	February 27, 1955	13.36 <sup>1</sup>	14,400	1987	April 8, 1987	13.42	8,990
1956	April 15, 1956	12.43 <sup>1</sup>	11,800	1988	December 25, 1987	7.32	1,780
1957	January 29, 1957	19.06 <sup>1</sup>	33,200	1989	May 5, 1989	13.80	9,630
1958	August 25, 1958	16.60 <sup>1</sup>	17,700	1990	October 17, 1989	13.04	8,370
1959	April 12, 1959	10.25 <sup>1</sup>	6,420	1991	January 7, 1991	8.91	3,110
1960	November 28, 1959	8.29 <sup>1</sup>	3,830	1992	December 2, 1991	11.24	5,760
1961	July 31, 1961	11.01 <sup>1</sup>	7,700	1993	March 4, 1993	10.78	5,170
1962	February 28, 1962	9.04 <sup>1</sup>	8,600	1994	February 11, 1994	15.46	12,700
1963	March 12, 1963	18.19 <sup>1</sup>	24,100	1995	May 19, 1995	11.14	5,630

<sup>1</sup>Gage height at different site and (or) datum.

<sup>2</sup>Discharge is a historic peak.

<sup>3</sup>Month or day of occurrence is unknown or not exact.

**Table 515. 03207800 Levisa Fork at Big Rock, Va.**

LOCATION.--Latitude 37°21'13", Longitude 082°11'45", NAD27, Buchanan County, Hydrologic Unit 05070202, on left bank at Big Rock, 2,000 ft downstream from Rocklick Creek, and 2,500 ft downstream from bridge on State Highway 645.

DRAINAGE AREA.--297 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 866.37 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 9,070 ft<sup>3</sup>/s and extended above on basis of slope-area measurement at 56,000 ft<sup>3</sup>/s.

BANKFULL STAGE.--22 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1957	January 29, 1957	23.00		1988	December 25, 1987	7.06	2,260
1968	May 27, 1968	10.07	5,460	1989	May 6, 1989	11.70	9,630
1969	January 21, 1969	7.36	2,070	1990	October 17, 1989	12.14	10,600
1970	April 28, 1970	13.00	13,000	1991	March 23, 1991	8.68	5,000
1971	May 6, 1971	13.95	14,900	1992	December 2, 1991	9.92	6,820
1972	January 21, 1972	15.40	18,100	1993	March 4, 1993	9.36	5,940
1973	March 16, 1973	15.16	17,600	1994	February 11, 1994	13.52	13,800
1974	January 11, 1974	15.90	19,200	1995	May 19, 1995	9.64	6,370
1975	March 30, 1975	15.70	18,700	1996	May 16, 1996	11.83	10,000
1976	January 1, 1976	8.37	4,590	1997	March 3, 1997	10.92	8,460
1977	April 4, 1977	27.38	56,000	1998	June 10, 1998	14.56	16,300
1978	January 26, 1978	17.56	24,200	1999	January 24, 1999	7.35	3,330
1979	July 15, 1979	12.46	11,400	2000	July 13, 2000	8.44	4,700
1980	January 18, 1980	8.63	3,910	2001	July 29, 2001	11.01	8,590
1981	June 7, 1981	9.90	6,050	2002	May 3, 2002	14.15	14,700
1982	May 27, 1982	12.48	11,400	2003	February 16, 2003	16.37	20,000
1983	April 24, 1983	7.24	2,410	2004	November 19, 2003	12.56	11,400
1984	May 7, 1984	20.74	33,200	2005	April 3, 2005	7.31	3,320
1985	February 1, 1985	10.41	7,100	2006	April 8, 2006	9.69	6,460
1986	May 13, 1986	9.18	5,040	2007	April 15, 2007	13.96	14,300
1987	April 8, 1987	11.58	10,300				

**Table 516. 03208034 Grissom Creek near Council, Va.**

LOCATION.--Latitude 37°04'43", Longitude 082°02'25", NAD27, Buchanan County, Hydrologic Unit 05070202, on right bank 150 ft upstream from culvert on State Highway 620, 250 ft upstream from mouth, and 1.7 mi east of Council.

DRAINAGE AREA.--2.82 mi<sup>2</sup>.

GAGE.--Water-stage recorder and V-notch sharp-crested weir. Datum of gage is 1,810 ft NGVD of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 30 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--3.5 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1982	February 3, 1982	3.02	85.0	1983	April 24, 1983	2.74	37.0

**Table 517.** 03208036 Barton Fork near Council, Va.

LOCATION.--Latitude 37°04'37", Longitude 082°02'21", NAD27, Buchanan County, Hydrologic Unit 05070202, on left bank on private road, 180 ft upstream from mouth, 200 ft upstream from State Highway 620, 0.5 mi downstream from Coon Flat Branch, and 1.8 mi east of Council.

DRAINAGE AREA.--1.24 mi<sup>2</sup>.

GAGE.--Water-stage recorder and V-notch sharp-crested weir. Datum of gage is 1,800 ft NGVD of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 22 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--2.5 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1982	September 14, 1982	2.52	49.0	1983	October 9, 1982	2.20	22.0

**Table 518.** 03208040 Russell Fork at Council, Va.

LOCATION.--Latitude 37°04'41", Longitude 082°03'56", NAD27, Buchanan County, Hydrologic Unit 05070202, on left bank 50 ft upstream from bridge on State Highway 80, 750 ft downstream from Ball Creek, 0.6 mi southeast of Council, and 4.7 mi upstream from Hurricane Creek.

DRAINAGE AREA.--10.2 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 1,680 ft NGVD of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 130 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--12 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1983	December 16, 1982	1.99	138	1995	May 19, 1995	2.82	275
1984	May 7, 1984	5.98	1,540	1996	May 16, 1996	4.45	646
1985	February 1, 1985	1.91 <sup>1</sup>		1997	July 28, 1997	4.32	612
1986	February 18, 1986	3.18	411	1998	April 17, 1998	6.65	1,320
1987	April 8, 1987	3.87	628	1999	January 24, 1999	2.56	227
1988	April 8, 1988	2.93	343	2000	November 26, 1999	2.95	300
1989	May 5, 1989	4.37	810	2001	July 29, 2001	8.17	1,870
1990	May 5, 1990	4.36	806	2002	March 18, 2002	5.00	797
1991	March 23, 1991	3.54	519	2003	February 16, 2003	4.49	656
1992	December 2, 1991	3.34	458	2004	May 31, 2004	4.92	774
1993	March 4, 1993	3.41	479	2005	December 1, 2004	2.81	273
1994	March 28, 1994	4.64	697	2006	April 8, 2006	3.36	384

<sup>1</sup>Gage height below minimum recordable elevation.

**Table 519.** 03208100 Russell Fork near Birchleaf, Va.

LOCATION.--Latitude 37°09'50", Longitude 082°15'20", NAD27, Dickenson County, Hydrologic Unit 05070202, on right bank 125 ft upstream from bridge on State Highway 80, 150 ft upstream from Fryingpan Creek, 1.3 mi southeast of Birchleaf and 3.5 mi southeast of Haysi.

DRAINAGE AREA.--87.7 mi<sup>2</sup>.

GAGE.--Nonrecording gage. Datum of gage is 1,280 ft NGVD of 1929, from topographic map. Prior to October 1983 water-stage recorder at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 1,100 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--23 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1982	September 14, 1982	8.85	3,470	1989	May 5, 1989	10.98	5,570
1983	March 24, 1983	6.17	1,500	1990	October 17, 1989	9.92	4,460
1984	May 7, 1984	21.30	22,600	1991	June 22, 1991	8.75	3,380
1985	February 1, 1985	9.15	3,730	1992	December 2, 1991	8.74	3,370
1986	February 18, 1986	7.24	2,190	1993	March 4, 1993	7.75	2,560
1987	July 11, 1987	17.92	15,800	1994	March 28, 1994	15.15	11,100
1988	April 8, 1988	4.04	523	1995	May 19, 1995	9.11	3,700

**Table 520. 03208500 Russell Fork at Haysi, Va.**

LOCATION.--Latitude 37°12'25", Longitude 082°17'45", NAD27, Dickenson County, Hydrologic Unit 05070202, on right bank 180 ft downstream from bridge on State Highway 63, at Haysi, and 700 ft downstream from McClure River.

DRAINAGE AREA.--286 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 1,237.61 ft NGVD of 1929. Prior to Dec. 21, 1939, nonrecording gage at highway bridge 180 ft upstream at present datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 31,000 ft<sup>3</sup>/s and extended above on basis of slope-area measurements at 46,600 ft<sup>3</sup>/s and 59,000 ft<sup>3</sup>/s.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1927	December 21, 1926	12.5 <sup>1</sup>	17,500	1968	May 27, 1968	12.09	13,500
1928	April 29, 1928	8.8 <sup>1</sup>	8,800	1969	January 20, 1969	5.24	2,330
1929	March 23, 1929	18.5 <sup>1</sup>	34,500	1970	April 28, 1970	15.71	21,000
1930	November 18, 1929	8.72 <sup>1</sup>	8,600	1971	May 7, 1971	12.56	14,400
1931	July 23, 1931	8.02 <sup>1</sup>	7,200	1972	January 21, 1972	13.29	15,800
1932	January 30, 1932	13.04 <sup>1</sup>	18,800	1973	March 16, 1973	17.27	24,400
1933	December 28, 1932	11.0 <sup>1</sup>	13,800	1974	January 11, 1974	16.21	22,100
1934	March 3, 1934	8.70 <sup>1</sup>	8,600	1975	March 30, 1975	18.03	26,300
1935	March 12, 1935	11.0 <sup>1</sup>	13,800	1976	March 30, 1976	7.70	6,020
1936	April 6, 1936	9.35 <sup>1</sup>	10,100	1977	April 4, 1977	28.24	59,000
1937	February 9, 1937	13.0 <sup>1</sup>	18,800	1978	January 26, 1978	19.12	28,900
1938	March 6, 1938	10.6 <sup>1</sup>	12,800	1979	December 9, 1978	12.99	15,200
1939	February 3, 1939	16.95 <sup>1</sup>	30,000	1980	November 26, 1979	9.40	8,780
1940	August 14, 1940	10.20	11,900	1981	May 20, 1981	7.50	5,640
1941	March 11, 1941	5.72	3,120	1982	September 14, 1982	7.88	6,220
1942	July 8, 1942	7.44	6,250	1983	April 24, 1983	6.49	4,090
1943	March 13, 1943	10.68	13,100	1984	May 7, 1984	22.08	37,000
1944	February 17, 1944	15.46	25,600	1985	February 1, 1985	9.11	8,280
1945	February 17, 1945	10.82	13,300	1986	February 18, 1986	7.52	5,670
1946	January 7, 1946	13.10	19,100	1987	July 11, 1987	12.28	13,800
1947	January 15, 1947	9.65	10,500	1988	December 25, 1987	5.76	3,060
1948	February 14, 1948	11.30	14,500	1989	May 6, 1989	11.73	12,800
1949	December 3, 1948	8.65	8,400	1990	October 19, 1989	10.53	10,700
1950	January 30, 1950	11.45	14,800	1991	March 23, 1991	9.34	8,650
1951	December 7, 1950	9.60	10,500	1992	December 1, 1991	9.43	8,800
1952	March 23, 1952	11.32	14,500	1993	March 4, 1993	8.17	6,690
1953	May 19, 1953	12.62	17,800	1994	March 28, 1994	16.25	22,100
1954	January 22, 1954	5.50	2,820	1995	May 19, 1995	9.57	9,030

1955	March 6, 1955	14.63	23,100	1996	January 19, 1996	9.14	8,320
1956	April 15, 1956	14.32	22,200	1997	March 3, 1997	13.03	15,300
1957	January 29, 1957	23.17	46,600	1998	April 17, 1998	17.21	24,300
1958	May 5, 1958	14.97	24,400	1999	January 24, 1999	6.36	3,900
1959	April 12, 1959	10.39	12,200	2000	March 21, 2000	7.11	5,060
1960	November 28, 1959	10.46	12,500	2001	July 29, 2001	14.72	18,700
1961	July 31, 1961	14.88	24,200	2002	March 18, 2002	17.99	26,100
1962	February 28, 1962	11.78	15,900	2003	February 16, 2003	18.89	28,300
1963	March 12, 1963	21.10	33,800	2004	November 19, 2003	11.75	12,800
1964	April 8, 1964	6.33	3,950	2005	December 1, 2004	7.37	5,440
1965	March 26, 1965	13.00	15,200	2006	April 8, 2006	10.02	9,780
1966	May 1, 1966	8.46	7,300	2007	April 15, 2007	15.18	19,700
1967	March 7, 1967	20.34	31,800				

---

<sup>1</sup>Gage height at different site and (or) datum.

**Table 521. 03208700 North Fork Pound River at Pound, Va.**

LOCATION.--Latitude 37°07'32", Longitude 082°37'36", NAD27, Wise County, Hydrologic Unit 05070202, on right bank at Pound, 700 ft downstream from Stacy Branch, 1,600 ft downstream from North Fork Pound River Dam, and 0.9 mi upstream from confluence with South Fork.

DRAINAGE AREA.--18.5 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 1,500.00 ft NGVD of 1929 (levels by U.S. Army Corps of Engineers). Prior to Oct. 1, 1965, water-stage recorder on left bank at datum of 1,544.88 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 640 ft<sup>3</sup>/s and extended above on basis of slope-area measurement at 4,500 ft<sup>3</sup>/s.

BANKFULL STAGE.--54.5 ft.

REGULATION.--High flow conditions at this site are considered regulated after 1965. Flow regulated since August 1966 by North Fork Pound River Lake, capacity 11,290 acre-ft.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1957	January 29, 1957	63.90 <sup>1</sup>		1985	February 1, 1985	50.60	213 <sup>2</sup>
1962	February 28, 1962	55.02 <sup>1</sup>	865	1986	February 20, 1986	51.31	314 <sup>2</sup>
1963	March 12, 1963	61.58 <sup>1</sup>	4,480	1987	April 10, 1987	51.35	320 <sup>2</sup>
1964	April 4, 1964	52.99 <sup>1</sup>	565	1988	December 25, 1987	50.22	301 <sup>2</sup>
1965	March 26, 1965	54.70 <sup>1</sup>	820 <sup>2</sup>	1989	June 17, 1989	51.65	366 <sup>2</sup>
1966	February 13, 1966	55.16	1,060 <sup>2</sup>	1990	October 17, 1989	52.25	453 <sup>2</sup>
1967	March 15, 1967	53.72	624 <sup>2</sup>	1991	January 7, 1991	51.33	317 <sup>2</sup>
1968	March 14, 1968	51.55	296 <sup>2</sup>	1992	December 2, 1991	52.32	463 <sup>2</sup>
1969	January 20, 1969	51.30	266 <sup>2</sup>	1993	March 23, 1993	51.35	320 <sup>2</sup>
1970	February 17, 1970	51.96	345 <sup>2</sup>	1994	February 11, 1994	51.71	376 <sup>2</sup>
1971	May 13, 1971	51.89	404 <sup>2</sup>	1995	January 16, 1995	51.54	349 <sup>2</sup>
1972	October 22, 1971	51.23	304 <sup>2</sup>	1996	January 29, 1996	51.35	320 <sup>2</sup>
1973	December 9, 1972	51.25	308 <sup>2</sup>	1997	March 3, 1997	51.47	338 <sup>2</sup>
1974	December 26, 1973	51.84	396 <sup>2</sup>	1998	April 17, 1998	51.54	349 <sup>2</sup>
1975	May 18, 1975	55.04	1,010 <sup>2</sup>	1999	January 24, 1999	50.56	208 <sup>2</sup>
1976	January 1, 1976	50.74	252 <sup>2</sup>	2000	March 21, 2000	50.65	220 <sup>2</sup>
1977	April 4, 1977	54.44	860 <sup>2</sup>	2001	July 29, 2001	51.02	273 <sup>2</sup>
1978	March 10, 1978	51.30	325 <sup>2</sup>	2002	March 18, 2002	51.88	401 <sup>2</sup>
1979	May 4, 1979	51.54	356 <sup>2</sup>	2003	February 16, 2003	51.61	360 <sup>2</sup>
1980	March 21, 1980	51.30	325 <sup>2</sup>	2004	November 19, 2003	51.49	341 <sup>2</sup>
1981	April 20, 1981	51.33	321 <sup>2</sup>	2005	January 14, 2005	50.38	185 <sup>2</sup>
1982	September 14, 1982	55.79	1,230 <sup>2</sup>	2006	June 27, 2006	50.61	215 <sup>2</sup>
1983	May 16, 1983	51.72	377 <sup>2</sup>	2007	April 15, 2007	50.31	176 <sup>2</sup>
1984	May 7, 1984	52.20	446 <sup>2</sup>				

<sup>1</sup>Gage height at different site and (or) datum.

<sup>2</sup>Discharge is affected by regulation or diversion.

**Table 522. 03208800 Pound River above Indian Creek at Pound, Va.**

LOCATION.--Latitude 37°07'26", Longitude 082°36'29", NAD27, Wise County, Hydrologic Unit 05070202, on left bank at Pound, 1,600 ft downstream confluence of North and South Forks, 2,400 ft upstream from bridge on U.S. Highway 23, and 3,800 ft upstream Indian Creek.

DRAINAGE AREA.--36.7 mi<sup>2</sup>.

GAGE.--Nonrecording gage. Datum of gage is 1,535.64 ft NGVD of 1929. Prior to October 1978, water-stage recorder with rock and concrete control at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 970 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--Not determined.

REGULATION.--High flow conditions at this site are considered regulated after 1965. Flow regulated since August 1966 by North Fork Pound River Lake 1.4 mi upstream, capacity 11,290 acre-ft.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1942		25.10		1985	February 1, 1985	6.46	466 <sup>1</sup>
1957	January 29, 1957	25.70		1986	February 17, 1986	8.69	934 <sup>1</sup>
1963	March 12, 1963	21.20		1987	April 8, 1987	8.91	981 <sup>1</sup>
1966	February 13, 1966	10.82	1,760 <sup>1</sup>	1988	December 25, 1987	6.32	436 <sup>1</sup>
1967	March 7, 1967	15.67	2,520 <sup>1</sup>	1989	June 17, 1989	10.27	1,270 <sup>1</sup>
1968	March 12, 1968	8.24	888 <sup>1</sup>	1990	October 17, 1989	13.80	2,050 <sup>1</sup>
1969	January 20, 1969	7.07	654 <sup>1</sup>	1991	July 29, 1991	12.89	1,840 <sup>1</sup>
1970	December 30, 1969	11.92	1,620 <sup>1</sup>	1992	December 2, 1991	13.96	2,090 <sup>1</sup>
1971	May 7, 1971	9.58	1,160 <sup>1</sup>	1994	February 11, 1994	13.67	2,020 <sup>1</sup>
1972	February 24, 1972	8.76	992 <sup>1</sup>	1995	May 19, 1995	11.44	1,520 <sup>1</sup>
1973	March 16, 1973	10.29	1,300 <sup>1</sup>	1996	January 19, 1996	11.29	1,480 <sup>1</sup>
1974	January 11, 1974	11.20	1,480 <sup>1</sup>	1997	December 1, 1996	9.95	1,200 <sup>1</sup>
1975	May 18, 1975	19.44	3,460 <sup>1</sup>	1998	April 17, 1998	12.60	1,780 <sup>1</sup>
1976	March 29, 1976	8.70	980 <sup>1</sup>	1999	January 24, 1999	6.99	548 <sup>1</sup>
1977	April 4, 1977	17.87	3,070 <sup>1</sup>	2000	April 4, 2000	7.90	756 <sup>1</sup>
1978	January 26, 1978	10.63	1,360 <sup>1</sup>	2001	August 13, 2001	14.98	2,330 <sup>1</sup>
1979	December 9, 1978	9.19	1,060 <sup>1</sup>	2002	March 18, 2002	15.04	2,350 <sup>1</sup>
1980	July 11, 1980	8.12	835 <sup>1</sup>	2003	February 16, 2003	13.30	1,940 <sup>1</sup>
1981	April 20, 1981	8.22	856 <sup>1</sup>	2004	November 19, 2003	11.90	1,620 <sup>1</sup>
1982	September 14, 1982	18.83	3,310 <sup>1</sup>	2005	December 1, 2004	8.50	888 <sup>1</sup>
1983	May 16, 1983	7.32	667 <sup>1</sup>	2006	April 8, 2006	8.37	859 <sup>1</sup>
1984	May 7, 1984	15.13	2,370 <sup>1</sup>	2007	April 15, 2007	10.11	1,230 <sup>1</sup>

<sup>1</sup>Discharge is affected by regulation or diversion.

**Table 523. 03208850 Pound River below Bold Camp Creek, at Pound, Va.**

LOCATION.--Latitude 37°07'19", Longitude 082°35'55", NAD27, Wise County, Hydrologic Unit 05070202, at Pound, on left bank 1,000 ft upstream from bridge on State Highway 83, 0.3 mi downstream from Bold Camp Creek, and 0.5 mi downstream Indian Creek.

DRAINAGE AREA.--61.2 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 1,527.36 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 1,840 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--16 ft.

REGULATION.--High flow conditions at this site are considered regulated after 1965. Flow regulated since August 1966 by North Fork Pound River Lake 2.6 mi upstream, capacity 11,290 acre-ft.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1957	January 29, 1957	30.80		1983	May 16, 1983	10.30	929 <sup>1</sup>
1963	March 12, 1963	28.20		1984	May 7, 1984	20.05	3,980 <sup>1</sup>
1966	February 13, 1966	14.79	2,640 <sup>1</sup>	1985	February 1, 1985	11.18	1,150 <sup>1</sup>
1967	March 7, 1967	21.51	4,570 <sup>1</sup>	1986	February 17, 1986	12.26	1,450 <sup>1</sup>
1968	March 12, 1968	13.00	1,670 <sup>1</sup>	1987	April 8, 1987	12.63	1,550 <sup>1</sup>
1969	January 20, 1969	10.44	1,060 <sup>1</sup>	1988	December 25, 1987	9.60	759 <sup>1</sup>
1970	December 30, 1969	17.50	3,040 <sup>1</sup>	1989	June 17, 1989	13.56	1,820 <sup>1</sup>
1971	May 7, 1971	14.46	2,110 <sup>1</sup>	1990	October 17, 1989	17.79	3,160 <sup>1</sup>
1972	February 24, 1972	13.62	1,860 <sup>1</sup>	1991	March 23, 1991	15.66	2,450 <sup>1</sup>
1973	March 16, 1973	15.80	2,510 <sup>1</sup>	1992	December 2, 1991	17.27	2,980 <sup>1</sup>
1974	January 11, 1974	16.62	2,760 <sup>1</sup>	1993	March 23, 1993	12.98	1,650 <sup>1</sup>
1975	May 18, 1975	25.64	6,290 <sup>1</sup>	1994	February 11, 1994	17.59	3,090 <sup>1</sup>
1976	March 30, 1976	13.33	1,770 <sup>1</sup>	1995	May 19, 1995	14.77	2,170 <sup>1</sup>
1977	April 4, 1977	23.44	5,350 <sup>1</sup>	1996	January 19, 1996	14.21	2,000 <sup>1</sup>
1978	January 26, 1978	15.41	2,390 <sup>1</sup>	1997	March 3, 1997	13.93	1,920 <sup>1</sup>
1979	December 9, 1978	13.73	1,890 <sup>1</sup>	1998	April 17, 1998	17.40	3,020 <sup>1</sup>
1980	July 11, 1980	11.53	1,240 <sup>1</sup>	1999	January 24, 1999	9.96	850 <sup>1</sup>
1981	April 20, 1981	11.27	1,170 <sup>1</sup>	2000	April 4, 2000	10.31	932 <sup>1</sup>
1982	September 14, 1982	23.64	5,440 <sup>1</sup>	2001	August 13, 2001	17.42	3,030 <sup>1</sup>

<sup>1</sup>Discharge is affected by regulation or diversion.

**Table 524. 03208900 Pound River near Georges Fork, Va.**

LOCATION.--Latitude 37°09'51", Longitude 082°31'30", NAD27, Dickenson County, Hydrologic Unit 05070202, on right bank 50 ft upstream from bridge on State Highway 624, 150 ft upstream from Camp Creek, and 2.6 mi northwest of Georges Fork.

DRAINAGE AREA.--80.4 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 1,470.39 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 3,500 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--16 ft.

REGULATION.--High flow conditions at this site are considered regulated after 1965. Flow regulated since August 1966 by North Fork Pound River Lake 13 mi upstream, capacity 11,290 acre-ft.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1957	January 29, 1957	16.20		1985	February 1, 1985	6.42	1,270 <sup>1</sup>
1963	March 12, 1963	14.40		1986	February 17, 1986	7.28	1,770 <sup>1</sup>
1964	April 4, 1964	6.68	1,620	1987	April 8, 1987	7.62	2,000 <sup>1</sup>
1965	March 26, 1965	9.10	3,590	1988	December 25, 1987	6.03	1,070 <sup>1</sup>
1966	February 13, 1966	7.97	2,550	1989	September 16, 1989	7.48	1,900 <sup>1</sup>
1967	March 7, 1967	12.06	6,870 <sup>1</sup>	1990	October 17, 1989	10.55	4,560 <sup>1</sup>
1968	March 12, 1968	7.51	2,160 <sup>1</sup>	1991	March 23, 1991	8.77	2,860 <sup>1</sup>
1969	January 20, 1969	6.54	1,520 <sup>1</sup>	1992	December 2, 1991	9.70	3,690 <sup>1</sup>
1970	December 31, 1969	10.11	4,620 <sup>1</sup>	1993	March 23, 1993	7.34	1,810 <sup>1</sup>
1971	May 7, 1971	8.50	3,000 <sup>1</sup>	1994	February 11, 1994	9.68	3,670 <sup>1</sup>
1972	February 25, 1972	8.34	2,860 <sup>1</sup>	1995	May 19, 1995	7.74	2,080 <sup>1</sup>
1973	March 16, 1973	9.35	3,840 <sup>1</sup>	1996	January 19, 1996	7.82	2,140 <sup>1</sup>
1974	January 11, 1974	10.05	4,560 <sup>1</sup>	1997	March 3, 1997	8.11	2,350 <sup>1</sup>
1975	May 18, 1975	14.91	10,900 <sup>1</sup>	1998	April 17, 1998	9.54	3,540 <sup>1</sup>
1976	March 30, 1976	8.29	2,790 <sup>1</sup>	1999	January 24, 1999	5.67	901 <sup>1</sup>
1977	April 4, 1977	14.02	9,430 <sup>1</sup>	2000	April 4, 2000	6.46	1,290 <sup>1</sup>
1978	January 26, 1978	9.27	3,770 <sup>1</sup>	2001	August 13, 2001	9.29	3,310 <sup>1</sup>
1979	December 9, 1978	8.33 <sup>2</sup>	2,830 <sup>1</sup>	2002	March 18, 2002	10.63	4,650 <sup>1</sup>
1980	March 21, 1980	6.59 <sup>2</sup>	1,470 <sup>1</sup>	2003	February 16, 2003	9.39	3,400 <sup>1</sup>
1981	April 20, 1981	6.91 <sup>2</sup>	1,680 <sup>1</sup>	2004	November 19, 2003	8.52	2,660 <sup>1</sup>
1982	September 14, 1982	12.57 <sup>2</sup>	7,480 <sup>1</sup>	2005	December 1, 2004	6.17	1,140 <sup>1</sup>
1983	May 16, 1983	6.48	1,410 <sup>1</sup>	2006	April 8, 2006	6.98	1,590 <sup>1</sup>
1984	May 7, 1984	11.82	6,110 <sup>1</sup>	2007	April 15, 2007	8.31	2,500 <sup>1</sup>

<sup>1</sup>Discharge is affected by regulation or diversion.

<sup>2</sup>Gage datum changed during this year.

**Table 525. 03208950 Cranes Nest River near Clintwood, Va.**

LOCATION.--Latitude 37°07'26", Longitude 082°26'20", NAD27, Dickenson County, Hydrologic Unit 05070202, on left bank on State Highway 649, 500 ft downstream from Clinchfield Railway bridge, 1,000 ft downstream from Rush Creek, and 2.1 mi southeast of Clintwood.

DRAINAGE AREA.--66.5 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 1,440.30 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 3,100 ft<sup>3</sup>/s and extended above on basis of slope-area measurement at 18,000 ft<sup>3</sup>/s.

BANKFULL STAGE.--20 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1957	January 29, 1957	20.00		1985	February 1, 1985	7.88	1,360
1964	June 1, 1964	7.99	1,390	1986	February 18, 1986	8.06	1,420
1965	March 26, 1965	12.41	3,140	1987	April 8, 1987	9.35	1,870
1966	May 1, 1966	7.55	1,270	1988	December 25, 1987	6.26	866
1967	March 7, 1967	19.86	7,120	1989	May 5, 1989	9.87	2,060
1968	March 12, 1968	10.14	2,150	1990	October 17, 1989	11.99	2,950
1969	January 20, 1969	5.32	670	1991	March 23, 1991	11.54	2,730
1970	December 31, 1969	16.21	5,050	1992	December 2, 1991	9.82	2,040
1971	May 7, 1971	12.30	3,100	1994	February 11, 1994	14.13	4,100
1972	January 21, 1972	11.23	2,590	1995	May 19, 1995	9.36	1,870
1973	March 16, 1973	14.73	4,310	1996	January 19, 1996	9.69	1,990
1974	January 11, 1974	14.54	4,220	1997	March 3, 1997	11.97	2,940
1975	March 30, 1975	14.59	4,240	1998	April 17, 1998	12.90	3,410
1976	March 30, 1976	9.57	1,940	1999	January 24, 1999	6.55	909
1977	April 4, 1977	26.09	18,000	2000	April 9, 2000	6.61	928
1978	January 26, 1978	15.39	4,870	2001	August 13, 2001	13.76	3,870
1979	December 9, 1978	12.17	3,030	2002	March 18, 2002	18.71	7,720
1980	November 26, 1979	7.64	1,280	2003	February 16, 2003	16.82	5,970
1981	April 20, 1981	6.81	1,020	2004	May 31, 2004	12.66	4,190
1982	September 14, 1982	14.03	4,040	2005	December 1, 2004	7.63	1,450
1983	February 2, 1983	6.42	911	2006	April 8, 2006	8.88	2,000
1984	May 7, 1984	16.85	5,990	2007	April 15, 2007	13.27	4,610

**Table 526. 03209000 Pound River below Flannagan Dam near Haysi, Va.**

LOCATION.--Latitude 37°14'13", Longitude 082°20'36", NAD27, Dickenson County, Hydrologic Unit 05070202, on right bank 1,000 ft upstream from Blacklog Branch, 1,700 ft downstream from John W. Flannagan Dam, 1.4 mi upstream from mouth, and 3.4 mi northwest of Haysi.

DRAINAGE AREA.--221 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 1,200.00 ft NGVD of 1929 (U.S. Army Corps of Engineers bench mark). Prior to February 3, 1939, nonrecording gage at site 3.8 mi upstream at different datum. Dec. 20, 1939, to Sept. 30, 1963, water-stage recorder at site 4.6 mi upstream at datum of 1,279.91 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 1,750 ft<sup>3</sup>/s and extended above for 1927-39 site. Since 1939, defined by current-meter measurements below 10,000 ft<sup>3</sup>/s and extended above on basis of slope-area measurement at 27,600 ft<sup>3</sup>/s.

BANKFULL STAGE.--11 ft.

REGULATION.--High flow conditions at this site are considered regulated after 1964. Flow regulated since March 1965 by John W. Flannagan Reservoir 1,700 ft upstream and since August 1966 by North Fork Pound River Lake 33 mi upstream. Combined capacity 159,990 acre-ft.

REMARKS.--There is a possibility that some water will bypass station if reservoir fills completely and overflows across spillway; this water will go down Cane Branch and return to Pound River about 4,600 ft below gage.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1920		14.50 <sup>1</sup>	21,800 <sup>2,3</sup>	1967	March 14, 1967	7.41	3,970 <sup>5</sup>
1927	December 21, 1926	14.00 <sup>1</sup>	19,900	1968	March 14, 1968	6.66	3,090 <sup>5</sup>
1928	April 30, 1928	9.50 <sup>1</sup>	7,800	1969	January 20, 1969	6.83	3,280 <sup>5</sup>
1929	March 23, 1929	16.50 <sup>1</sup>	30,000	1970	May 2, 1970	7.45	4,020 <sup>5</sup>
1930	October 22, 1929	10.70 <sup>1</sup>	10,400	1971	May 9, 1971	7.62	3,840 <sup>5</sup>
1931	April 22, 1931	8.00 <sup>1</sup>	5,100	1972	February 27, 1972	7.51	3,710 <sup>5</sup>
1932	January 29, 1932	11.60 <sup>1</sup>	12,700	1973	December 12, 1972	7.51	3,710 <sup>5</sup>
1933	December 28, 1932	10.00 <sup>1</sup>	8,800	1974	November 29, 1973	7.76	4,010 <sup>5</sup>
1934	March 3, 1934	10.00 <sup>1</sup>	8,800	1975	May 19, 1975	7.83	4,100 <sup>5</sup>
1935	March 31, 1935	9.60 <sup>1</sup>	8,000	1976	December 31, 1975	6.29	2,490 <sup>5</sup>
1936	March 24, 1936	11.20 <sup>1</sup>	11,600	1977	April 8, 1977	8.20	4,540 <sup>5</sup>
1937	February 9, 1937	11.40 <sup>1</sup>	12,100	1978	November 9, 1977	7.73	3,980 <sup>5</sup>
1938	July 14, 1938	10.50 <sup>1</sup>	10,000	1979	January 22, 1979	7.76	4,010 <sup>5</sup>
1939	February 3, 1939	13.50 <sup>1</sup>	18,200	1980	March 21, 1980	6.54	2,740 <sup>5</sup>
1940	July 17, 1940	9.85 <sup>1</sup>	3,700	1981	June 7, 1981	5.49	1,740 <sup>5</sup>
1941	July 16, 1941	9.02 <sup>1</sup>	2,980	1982	September 15, 1982	7.13	3,300 <sup>5</sup>
1942	July 8, 1942	15.55 <sup>1</sup>	17,700	1983	May 17, 1983	6.04	2,240 <sup>5</sup>
1943	April 19, 1943	12.80 <sup>1</sup>	10,000	1984	May 12, 1984	7.79	4,040 <sup>5</sup>
1944	February 18, 1944	14.68 <sup>1</sup>	15,100	1985	February 4, 1985	6.18	2,360 <sup>5</sup>
1945	February 17, 1945	12.27 <sup>1</sup>	8,800	1986	February 19, 1986	7.28	3,460 <sup>5</sup>
1946	January 8, 1946	15.50 <sup>1</sup>	17,400	1987	April 18, 1987	7.75	3,990 <sup>5</sup>
1947	January 20, 1947	11.21 <sup>1</sup>	6,340	1988	April 8, 1988	5.50	1,750 <sup>5</sup>

1948	February 14, 1948	13.10 <sup>1</sup>	10,800	1989	May 8, 1989	7.85	4,110 <sup>5</sup>
1949	March 18, 1949	11.76 <sup>1</sup>	7,620	1990	October 20, 1989	7.84	4,100 <sup>5</sup>
1950	January 30, 1950	12.55 <sup>1</sup>	9,520	1991	August 9, 1991	6.70	2,860 <sup>5</sup>
1951	December 7, 1950	11.77 <sup>1</sup>	7,620	1992	December 4, 1991	7.10	3,260 <sup>5</sup>
1952	January 22, 1952	11.80 <sup>1</sup>	7,620	1993	February 22, 1993	6.90	3,060 <sup>5</sup>
1953	May 19, 1953	13.00 <sup>1</sup>	10,500	1994	April 14, 1994	7.96	4,240 <sup>5</sup>
1954	January 16, 1954	9.10 <sup>1</sup>	3,150	1995	February 16, 1995	6.82	2,980 <sup>5</sup>
1955	March 16, 1955	13.17 <sup>1</sup>	11,000	1996	January 29, 1996	6.81	2,960 <sup>5</sup>
1956	April 16, 1956	13.73 <sup>1</sup>	12,300	1997	March 6, 1997	7.73	3,960 <sup>5</sup>
1957	January 29, 1957	18.65 <sup>1</sup>	27,300	1998	April 22, 1998	7.78	4,020 <sup>5</sup>
1958	May 6, 1958	12.75 <sup>1</sup>	9,880	1999	March 15, 1999	5.89	2,100 <sup>5</sup>
1959	January 22, 1959	11.24 <sup>1</sup>	6,730	2000	April 4, 2000	6.10	2,290 <sup>5</sup>
1960	November 28, 1959	11.47 <sup>1</sup>	7,250	2001	July 27, 2001	7.53	3,730 <sup>5</sup>
1961	February 25, 1961	11.80 <sup>1</sup>	7,790	2002	January 25, 2002	6.80	2,950 <sup>5</sup>
1962	February 28, 1962	12.82 <sup>1</sup>	10,000	2003	February 17, 2003	7.81	4,060 <sup>5</sup>
1963	March 12, 1963		16,000 <sup>4</sup>	2004	November 20, 2003	7.63	3,850 <sup>5</sup>
1964	March 5, 1964	7.05	3,480	2005	December 3, 2004	6.84	3,020 <sup>5</sup>
1965	January 11, 1965	7.41	3,960	2006	June 27, 2006	6.01	2,210 <sup>5</sup>
1966	February 17, 1966	7.55	4,200 <sup>5</sup>	2007	April 19, 2007	7.81	4,090 <sup>5</sup>

<sup>1</sup>Gage height at different site and (or) datum.

<sup>2</sup>Discharge is a historic peak.

<sup>3</sup>Month or day of occurrence is unknown or not exact.

<sup>4</sup>Discharge is a maximum daily average.

<sup>5</sup>Discharge is affected by regulation or diversion.

**Table 527. 03209200 Russell Fork at Bartlick, Va.**

LOCATION.--Latitude 37°14'45", Longitude 082°19'25", NAD27, Dickenson County, Hydrologic Unit 05070202, on left bank at Bartlick just upstream from bridge on State Highway 611, 0.2 mi downstream Pound River, and 1.1 mi upstream from Fall Branch.

DRAINAGE AREA.--526 mi<sup>2</sup>.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,165.00 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 10,500 ft<sup>3</sup>/s and extended above on basis of flow-over-dam computations of 47,000 ft<sup>3</sup>/s and 50,000 ft<sup>3</sup>/s.

BANKFULL STAGE.--Not determined.

REGULATION.--High flow conditions at this site are considered regulated after 1964. Flow regulated since March 1965 by John W. Flannagan Reservoir 1.9 mi upstream and since August 1966 by North Fork Pound River Lake 35 mi upstream. Combined capacity 159,990 acre-ft.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1957	January 29, 1957	30.00		1985	February 1, 1985	13.65	6,530 <sup>1</sup>
1963	March 12, 1963	24.83	47,000	1986	February 19, 1986	12.99	5,550 <sup>1</sup>
1964	March 5, 1964	12.67	7,150	1987	July 11, 1987	15.64	10,100 <sup>1</sup>
1965	January 10, 1965	15.82	15,000	1988	December 25, 1987	11.08	3,070 <sup>1</sup>
1966	May 1, 1966	12.72	7,150 <sup>1</sup>	1989	May 6, 1989	15.37	9,570 <sup>1</sup>
1967	March 7, 1967	20.97	32,700 <sup>1</sup>	1990	October 19, 1989	14.91	8,690 <sup>1</sup>
1968	May 27, 1968	15.90	13,400 <sup>1</sup>	1991	March 23, 1991	14.13	7,310 <sup>1</sup>
1969	January 20, 1969	12.40	5,720 <sup>1</sup>	1992	December 4, 1991	13.79	6,750 <sup>1</sup>
1970	April 28, 1970	17.33	17,100 <sup>1</sup>	1993	February 22, 1993	13.40	6,150 <sup>1</sup>
1971	May 7, 1971	15.49	12,400 <sup>1</sup>	1994	March 28, 1994	18.05	15,800 <sup>1</sup>
1972	January 21, 1972	16.31	16,200 <sup>1</sup>	1995	May 19, 1995	13.78	6,850 <sup>1</sup>
1973	March 16, 1973	18.13	21,800 <sup>1</sup>	1996	January 27, 1996	13.40	6,380 <sup>1</sup>
1974	January 11, 1974	17.88	20,900 <sup>1</sup>	1997	March 3, 1997	15.94	10,700 <sup>1</sup>
1975	March 30, 1975	18.70	23,800 <sup>1</sup>	1998	April 17, 1998	18.59	17,300 <sup>1</sup>
1976	January 1, 1976	12.93	7,260 <sup>1</sup>	1999	January 24, 1999	11.22	3,740 <sup>1</sup>
1977	April 4, 1977	27.55	50,000 <sup>1</sup>	2000	April 4, 2000	12.84	5,680 <sup>1</sup>
1978	January 26, 1978	19.80	26,700 <sup>1</sup>	2001	July 29, 2001	16.70	12,400 <sup>1</sup>
1979	December 9, 1978	15.98	15,200 <sup>1</sup>	2002	March 18, 2002	19.15	18,900 <sup>1</sup>
1980	November 26, 1979	13.55	8,680 <sup>1</sup>	2003	February 16, 2003	19.74	20,700 <sup>1</sup>
1981	April 20, 1981	12.43	6,260 <sup>1</sup>	2004	November 19, 2003	17.16	13,500 <sup>1</sup>
1982	September 14, 1982	13.43	8,310 <sup>1</sup>	2005	December 1, 2004	12.73	5,550 <sup>1</sup>
1983	April 24, 1983	11.94	5,280 <sup>1</sup>	2006	April 8, 2006	13.78	6,850 <sup>1</sup>
1984	May 7, 1984	21.76	27,700 <sup>1</sup>	2007	April 15, 2007	17.28	13,800 <sup>1</sup>

<sup>1</sup>Discharge is affected by regulation or diversion.

**Table 528.** 03213577 Kershaw Branch near Hurley, Va.

LOCATION.--Latitude 37°27'01", Longitude 082°00'40", NAD27 Buchanan County, Hydrologic Unit 05070201, on right bank 0.5 mi upstream from Guess Fork and 2.1 mi north of Hurley.

DRAINAGE AREA.--0.50 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 1,140 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 4.2 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.—Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1981	June 6, 1981	2.95	97	1982	August 8, 1982	2.35	39

**Table 529. 03213590 Knox Creek at Kelsa, Va.**

LOCATION.--Latitude 37°27'02", Longitude 082°03'34", NAD27, Buchanan County, Hydrologic Unit 05070201, on downstream end of center bridge pier on State Highway 697, 0.3 mi downstream from Papaw Creek, 0.8 mi northeast of Kelsa, 10.0 mi upstream from mouth.

DRAINAGE AREA.--84.5 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 945 ft NGVD of 1929, from topographic map. Prior to 1982, water-stage recorder at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 300 ft<sup>3</sup>/s and extended above on basis of slope-area measurement at 11,600 ft<sup>3</sup>/s.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1981	June 6, 1981	16.86	9,350	1995	May 19, 1995	10.86	4,910
1982	February 3, 1982	7.24	1,720	1996	May 16, 1996	11.92	5,670
1983	December 16, 1982	8.96	2,690	1997	March 3, 1997	7.76	2,740
1984	May 7, 1984	20.20	13,000	1998	June 10, 1998	14.10	7,330
1985	February 1, 1985	7.86	2,040	1999	January 24, 1999	5.22	1,380
1986	February 18, 1986	8.08	2,160	2000	July 13, 2000	11.71	5,510
1987	June 2, 1987	11.18	4,220	2001	February 17, 2001	6.10	1,790
1988	December 25, 1987	5.04	720	2002	May 2, 2002	23.14	16,100
1989	May 6, 1989	8.52	2,410	2003	February 16, 2003	13.00	6,210
1990	October 17, 1989	16.40	9,230	2004	November 19, 2003	9.07	3,440
1991	March 23, 1991	7.44	2,440	2005	December 1, 2004	11.98	5,430
1992	December 2, 1991	10.67	4,520	2006	June 26, 2006	5.94	1,710
1993	March 4, 1993	6.78	2,080	2007	April 15, 2007	13.87	6,910
1994	April 13, 1994	13.80	7,090				

## Ohio River Basin: Tennessee River Basin

**Table 530.** 03470900 Slemp Creek tributary near Sugar Grove, Va.

LOCATION.--Latitude 36°48'30", Longitude 081°24'15", NAD27, Smyth County, Hydrologic Unit 06010102, at culvert on State Highway 16, 2.4 mi north of Sugar Grove.

DRAINAGE AREA.--0.62 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is not determined.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--5 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1966	February 13, 1966	4.30	18.0	1971		5.00 <sup>1</sup>	35.0 <sup>2,3</sup>
1967		5.00 <sup>1</sup>	35.0 <sup>2,3</sup>	1972		5.00 <sup>1</sup>	35.0 <sup>2,3</sup>
1968		5.00 <sup>1</sup>	35.0 <sup>2,3</sup>	1973		5.00 <sup>1</sup>	35.0 <sup>2,3</sup>
1969		5.00 <sup>1</sup>	35.0 <sup>2,3</sup>	1974		5.00 <sup>1</sup>	35.0 <sup>2,3</sup>
1970		5.00 <sup>1</sup>	35.0 <sup>2,3</sup>	1975		5.00 <sup>1</sup>	35.0 <sup>2,3</sup>

<sup>1</sup>Gage height below minimum recordable elevation.

<sup>2</sup>Discharge is less than indicated value, which is minimum recordable discharge at this site.

<sup>3</sup>Month or day of occurrence is unknown or not exact.

**Table 531.** 03471100 Dickey Creek at Sugar Grove, Va.

LOCATION.--Latitude 36°46'22", Longitude 081°25'10", NAD27, Smyth County, Hydrologic Unit 06010102, at bridge on State Highway 16, 0.4 mi southwest of Sugar Grove.

DRAINAGE AREA.--7.18 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 2,565 ft NGVD of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 162 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--18 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1967	November 2, 1966	15.92	264	1973	May 28, 1973	15.85	254
1968	March 12, 1968	15.66	227	1974	June 27, 1974	16.35	330
1969	February 2, 1969	14.62	107	1975	March 30, 1975	14.90	135
1970	April 28, 1970	16.01	276	1976	December 31, 1975	14.59	104
1971	August 11, 1971	15.82	250	1977	April 4, 1977	16.75	410
1972	June 21, 1972	17.05	475				

**Table 532. 03471200 South Fork Holston River at Teas, Va.**

LOCATION.--Latitude 36°46'21", Longitude 081°27'08", NAD27, Smyth County, Hydrologic Unit 06010102, at Teas, on right downstream pier of bridge on State Highway 601, and 0.1 mi downstream from Mullins Branch.

DRAINAGE AREA.--31.1 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 2,496.98 ft NGVD of 1929. Nonrecording gage moved to present site on new bridge on June 12, 1979, at present datum. From 1967 through 1977 nonrecording gage at datum of 2,496.96 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Prior to June 1979, defined by current-meter measurements below 32 ft<sup>3</sup>/s and extended above on basis of slope-area measurement at 5,400 ft<sup>3</sup>/s. After June 1979, stage-discharge relation not defined.

BANKFULL STAGE.--15 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1967	November 2, 1966	13.38 <sup>1</sup>	950	1982	January 4, 1982	11.49	
1968	March 13, 1968	13.41 <sup>1</sup>	1,000	1983	February 2, 1983	11.88	
1969	July 21, 1969	13.64 <sup>1</sup>	1,150	1984	May 7, 1984	12.64	
1970	December 31, 1969	13.85 <sup>1</sup>	1,450	1985		10.88 <sup>2</sup>	
1971	August 11, 1971	14.42 <sup>1</sup>	1,900	1986		10.88 <sup>2</sup>	
1972	June 21, 1972	14.35 <sup>1</sup>	1,800	1987	April 16, 1987	12.00	
1973	March 17, 1973	13.89 <sup>1</sup>	1,400	1988		10.88 <sup>2</sup>	60.0 <sup>3,4</sup>
1974	June 27, 1974	13.64 <sup>1</sup>	1,200	1989	September 22, 1989	15.27	3,780
1975		13.00 <sup>1,2</sup>	800 <sup>3,4</sup>	1990	January 1, 1990	11.75	500
1976		13.00 <sup>1,2</sup>	800 <sup>3,4</sup>	1991	May 28, 1991	12.32	874
1977	April 5, 1977	14.45 <sup>1</sup>	1,950	1992	June 5, 1992	13.25	1,600
1978	November 6, 1977	16.38 <sup>1</sup>	5,410	1993	March 23, 1993	14.01	2,420
1979	September 5, 1979	12.59		1994	February 11, 1994	17.61	7,660
1980	November 26, 1979	11.22		1995	January 15, 1995	15.07	3,570

<sup>1</sup>Gage height at different site and (or) datum.

<sup>2</sup>Gage height below minimum recordable elevation.

<sup>3</sup>Discharge is less than indicated value, which is minimum recordable discharge at this site.

<sup>4</sup>Month or day of occurrence is unknown or not exact.

**Table 533. 03471500 South Fork Holston River at Riverside near Chilhowie, Va.**

LOCATION.--Latitude 36°45'37", Longitude 081°37'53", NAD27, Smyth County, Hydrologic Unit 06010102, on right bank 400 ft upstream from highway bridge at Riverside, 900 ft upstream from Spring Branch, 3.2 mi downstream from Redstone Branch, 4.0 mi southeast of Chilhowie, and at mile 97.2.

DRAINAGE AREA.--76.6 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 2,106.77 ft NGVD of 1929. Nov. 1, 1920, to Nov. 14, 1931, nonrecording gage at site 400 ft downstream at present datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 3,600 ft<sup>3</sup>/s and extended above on basis of indirect measurement at 9,600 ft<sup>3</sup>/s.

BANKFULL STAGE.--8 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1908	January 12, 1908		4,400	1969	February 2, 1969	4.22	960
1909	February 10, 1909		2,100	1970	April 28, 1970	5.60	1,720
1921	February 10, 1921	4.40 <sup>1</sup>	1,420	1971	May 7, 1971	5.15	1,450
1922	January 21, 1922	5.00 <sup>1</sup>	1,880	1972	June 21, 1972	6.26	2,140
1923	June 12, 1923	9.00 <sup>1</sup>	6,000	1973	March 17, 1973	5.65	1,750
1924	September 30, 1924	5.00 <sup>1</sup>	1,880	1974	June 28, 1974	7.54	3,100
1925	December 9, 1924	3.70 <sup>1</sup>	960	1975	March 14, 1975	5.76	1,820
1926	February 14, 1926	4.50 <sup>1</sup>	1,450	1976	January 1, 1976	5.08	1,410
1927	February 23, 1927	5.70 <sup>1</sup>	2,430	1977	April 5, 1977	8.89	5,240
1928	September 2, 1928	4.00 <sup>1</sup>	1,100	1978	November 6, 1977	10.20	9,600
1929	March 5, 1929	5.00 <sup>1</sup>	1,820	1979	January 21, 1979	5.57	2,040
1930	October 2, 1929	4.60 <sup>1</sup>	1,520	1980	March 21, 1980	4.67	1,360
1931	April 4, 1931	5.00 <sup>1</sup>	1,820	1981	May 27, 1981	4.49	1,250
1942	August 9, 1942	4.58	1,200	1982	January 4, 1982	5.56	2,040
1943	December 30, 1942	5.80	1,870	1983	February 2, 1983	5.17	1,730
1944	February 18, 1944	6.62	2,380	1984	May 7, 1984	6.49	2,900
1945	May 18, 1945	6.58	2,380	1985	July 27, 1985	3.77	842
1946	January 8, 1946	5.84	1,870	1986	March 15, 1986	4.09	1,020
1947	August 4, 1947	6.99	2,660	1987	April 16, 1987	6.35	2,760
1948	February 14, 1948	5.87	1,930	1988	February 4, 1988	4.38	1,190
1949	April 13, 1949	5.04	1,410	1989	September 22, 1989	8.19	4,980
1950	February 2, 1950	4.97	1,270	1990	January 1, 1990	5.19	1,740
1951	December 7, 1950	7.84	3,270	1991	March 29, 1991	5.15	1,590
1952	January 28, 1952	3.25	541	1992	June 5, 1992	5.74	2,080
1953	February 21, 1953	5.25	1,450	1993	March 24, 1993	7.06	3,450
1954	January 22, 1954	6.53	2,280	1994	March 28, 1994	6.22	2,530
1955	March 18, 1955	6.88	2,580	1995	January 15, 1995	8.68	5,820

1956	April 16, 1956	6.20	2,070	1996	January 19, 1996	7.45	3,940
1957	January 29, 1957	8.32	3,800	1997	March 3, 1997	4.76	1,120
1958	August 1, 1958	8.18	3,670	1998	February 17, 1998	6.09	2,190
1959	January 22, 1959	5.10	1,420	1999	May 14, 1999	3.65	540
1960	March 30, 1960	6.20	2,100	2000	July 29, 2000	3.71	565
1961	May 12, 1961	6.71	2,450	2001	July 29, 2001	6.88	3,120
1962	December 18, 1961	8.27	3,780	2002	March 18, 2002	6.60	2,760
1963	March 12, 1963	6.82	2,520	2003	February 22, 2003	7.03	3,320
1964	March 5, 1964	7.16	2,830	2004	November 19, 2003	8.08	4,950
1965	March 26, 1965	7.46	3,070	2005	June 9, 2005	5.24	1,440
1966	February 13, 1966	6.50	2,310	2006	June 26, 2006	4.62 <sup>2</sup>	1,030 <sup>3</sup>
1967	November 2, 1966	5.10	1,420	2007	March 2, 2007	4.64	1,040
1968	March 13, 1968	4.93	1,320				

---

<sup>1</sup>Gage height at different site and (or) datum.

<sup>2</sup>Gage height is an estimate.

<sup>3</sup>Discharge is an estimate.

**Table 534.** 03472000 South Fork Holston River near Chilhowie, Va.

LOCATION.--Latitude 36°44'35", Longitude 081°41'20", NAD27, Smyth County, Hydrologic Unit 06010102, 100 ft below Cole suspension footbridge, just upstream from mouth of Grosses Creek, and 4.5 mi south of Chilhowie.

DRAINAGE AREA.--98.1 mi<sup>2</sup>.

GAGE.--Nonrecording gage (staff gage). Datum of gage is 2,030 ft NGVD of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 400 ft<sup>3</sup>/s.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1907	June 11, 1907	5.00	6,500	1909	February 10, 1909	3.00	2,100
1908	January 12, 1908	4.20	4,400				

**Table 535. 03472500 Beaverdam Creek at Damascus, Va.**

LOCATION.--Latitude 36°37'40", Longitude 081°47'28", NAD27, Washington County, Hydrologic Unit 06010102, at Damascus, on right bank 350 ft west of State Highway 716, in old plant area of Mobay Chemical Corporation, and 0.6 mi upstream from mouth.

DRAINAGE AREA.--55.6 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 1,946.66 ft NGVD of 1929. Prior to Oct. 1, 1959, water-stage recorder at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 2,600 ft<sup>3</sup>/s and extended above on the basis of two indirect measurements at 4,200 ft<sup>3</sup>/s.

BANKFULL STAGE.--3 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1901	May 1901	6.90 <sup>1</sup>		1971	May 7, 1971	3.62	1,390
1940	August 14, 1940	6.50 <sup>1</sup>		1972	February 26, 1972	4.24	2,160
1948	February 14, 1948	3.50	1,270	1973	December 10, 1972	4.64	2,680
1949	December 4, 1948	3.57	1,360	1974	April 4, 1974	5.07	3,240
1950	January 30, 1950	4.04	1,870	1975	March 30, 1975	5.38	3,670
1951	December 7, 1950	2.65	690	1976	January 1, 1976	3.84	1,640
1952	December 21, 1951	3.17	995	1977	April 5, 1977	6.04	4,660
1953	February 21, 1953	3.80	1,590	1978	October 2, 1977	8.45	6,000
1954	January 22, 1954	4.60	2,880	1979	January 21, 1979	3.83	1,510
1955	March 18, 1955	5.75	4,200	1980	March 21, 1980	4.04	1,680
1956	April 16, 1956	5.14	3,350	1981	April 20, 1981	4.85	2,360
1957	January 29, 1957	5.75	4,200	1982	February 3, 1982	4.80	2,320
1958	December 8, 1957	3.24	1,060	1983	December 16, 1982	3.38	1,170
1959	January 22, 1959	4.06	1,920	1984	May 7, 1984	6.55	4,050
1960	March 30, 1960	4.15	2,040	1985	February 1, 1985	3.60	1,300
1961	June 15, 1961	5.30	3,560	1986	March 15, 1986	3.36	1,150
1962	December 18, 1961	4.05	1,920	1987	April 23, 1987	5.33	2,830
1963	March 12, 1963	5.24	3,490	1988	February 4, 1988	4.90	2,410
1964	March 5, 1964	3.82	1,590	1989	February 21, 1989	3.57	1,310
1965	March 26, 1965	5.27	3,490	1990	March 17, 1990	4.33	1,910
1966	February 13, 1966	4.52	2,500	1991	March 29, 1991	4.54	2,090
1967	October 19, 1966	3.31	1,110	1992	February 26, 1992	3.64	1,360
1968	March 12, 1968	4.60	2,630	1993	December 23, 1992	4.60	2,140
1969	February 2, 1969	3.90	1,720	1994	March 28, 1994	6.24	3,740
1970	December 31, 1969	4.47	2,460	1995	January 15, 1995	4.67	2,200

<sup>1</sup>From Tennessee Valley Authority report number 0-5755, and other reports of the Tennessee Valley Authority.

**Table 536. 03473000 South Fork Holston River near Damascus, Va.**

(Formerly published as South Fork Holston River at Vestal.)

LOCATION.--Latitude 36°39'06", Longitude 081°50'39", NAD27, Washington County, Hydrologic Unit 06010102, on right bank 500 ft upstream from bridge on U.S. Highway 58, 0.7 mi downstream from Laurel Creek, 3.2 mi northwest of Damascus, 4.9 mi upstream from Middle Fork, and at mile 77.2.

DRAINAGE AREA.--303 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 1,792.30 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 10,000 ft<sup>3</sup>/s and extended above on the basis of contracted-opening measurement at 15,100 ft<sup>3</sup>/s and slope-area measurement at 22,000 ft<sup>3</sup>/s.

BANKFULL STAGE.--9 ft.

REGULATION.--High flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1867	March 1867	20.00 <sup>1</sup>	26,500 <sup>23</sup>	1970	April 28, 1970	11.54	8,460
1932	February 3, 1932	10.58	6,760	1971	May 7, 1971	9.30	5,220
1933	May 10, 1933	9.63	5,470	1972	February 26, 1972	9.85	5,990
1934	March 5, 1934	7.65	3,040	1973	March 17, 1973	10.94	7,520
1935	March 26, 1935	13.26	10,700	1974	April 4, 1974	11.68	8,720
1936	March 24, 1936	10.30	6,370	1975	March 30, 1975	12.40	9,840
1937	February 10, 1937	7.61	3,210	1976	January 1, 1976	9.11	5,140
1938	July 21, 1938	10.60	6,760	1977	April 5, 1977	17.11	22,000
1939	March 6, 1939	9.48	5,470	1978	October 2, 1977	15.82	17,900
1940	August 14, 1940	13.25	10,600	1979	January 21, 1979	9.83	6,080
1941	July 16, 1941	7.55	3,210	1980	March 21, 1980	9.42	5,550
1942	August 9, 1942	10.37	6,500	1981	May 21, 1981	9.03	5,040
1943	December 30, 1942	11.15	7,600	1982	February 3, 1982	9.77	5,990
1944	February 18, 1944	11.58	8,160	1983	December 16, 1982	8.01	3,860
1945	February 17, 1945	9.58	5,470	1984	May 7, 1984	15.67	17,700
1946	January 8, 1946	11.10	7,460	1985	February 2, 1985	8.13	3,970
1947	January 20, 1947	12.10	8,900	1986	March 15, 1986	7.67	3,480
1948	February 14, 1948	10.00	5,980	1987	April 16, 1987	11.67	8,840
1949	December 4, 1948	9.28	5,110	1988	February 4, 1988	9.72	5,910
1950	February 2, 1950	10.18	6,240	1989	September 22, 1989	10.75	7,380
1951	December 7, 1950	10.08	6,110	1990	March 17, 1990	9.64	5,810
1952	December 21, 1951	8.40	4,060	1991	March 29, 1991	9.85	6,090
1953	February 21, 1953	9.62	5,470	1992	February 26, 1992	7.56	3,360
1954	January 22, 1954	12.40	9,350	1993	March 24, 1993	10.69	7,280
1955	March 18, 1955	13.73	11,400	1994	February 11, 1994	13.63	12,500
1956	April 16, 1956	12.50	9,500	1995	January 15, 1995	12.63	10,800
1957	January 29, 1957	15.35	15,100	1996	January 19, 1996	12.02	9,830
1958	August 2, 1958	9.85	5,990	1997	March 3, 1997	8.94	5,520

1959	January 22, 1959	9.37	5,360	1998	April 17, 1998	9.91	6,780
1960	March 30, 1960	10.20	6,480	1999	May 8, 1999	6.89	3,190
1961	June 15, 1961	11.30	8,080	2000	February 14, 2000	6.20	2,490
1962	December 18, 1961	10.40	6,760	2001	July 29, 2001	11.47	9,020
1963	March 12, 1963	13.12	11,000	2002	March 18, 2002	11.74	9,410
1964	March 5, 1964	11.12	7,760	2003	February 22, 2003	11.39	8,900
1965	March 26, 1965	13.14	11,000	2004	November 19, 2003	14.55	14,700
1966	April 13, 1966	11.09	7,760	2005	March 29, 2005	6.56	2,700
1967	October 19, 1966	8.09	3,750	2006	April 27, 2006	8.03	4,310
1968	March 13, 1968	9.31	5,230	2007	March 2, 2007	6.41	2,550
1969	February 2, 1969	8.89	4,670				

---

<sup>1</sup>From reports of the Tennessee Valley Authority.

<sup>2</sup>Discharge is a historic peak.

<sup>3</sup>Month or day of occurrence is unknown or not exact.

**Table 537. 03473500 Middle Fork Holston River at Groseclose, Va.**

LOCATION.--Latitude 36°53'19", Longitude 081°20'51", NAD27, Smyth County, Hydrologic Unit 06010102, 10 ft downstream from culverts on State Highway 679 at Groseclose, 0.2 mi upstream from Rocky Spring Branch, and 10 mi northeast of Marion.

DRAINAGE AREA.--7.40 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 2,442.86 ft NGVD of 1929. Prior to Sept. 30, 1957, water-stage recorder at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 300 ft<sup>3</sup>/s and extended above on basis of slope-area measurement at 820 ft<sup>3</sup>/s.

BANKFULL STAGE.--9 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1948	February 13, 1948	4.34	217	1976	June 30, 1976	3.75	140
1949	July 13, 1949	4.07	171	1977	April 4, 1977	5.03	314
1950	July 26, 1950	6.18	520	1978	November 6, 1977	4.28	203
1951	December 7, 1950	4.30	210	1979	February 24, 1979	3.93	159
1952	July 5, 1952	4.08	181	1980	March 21, 1980	3.06	72.0
1953	July 6, 1953	7.42	813	1981	June 4, 1981	2.96	64.0
1954	July 21, 1954	4.06	178	1982	February 3, 1982	3.61	124
1955	March 18, 1955	4.50	234	1983	June 4, 1983	3.13	77.0
1956	April 16, 1956	3.99	167	1984	May 7, 1984	3.79	144
1957	January 29, 1957	5.00	309	1985	February 1, 1985	2.51	34.0
1958	May 6, 1958	4.66	256	1986	November 30, 1985	3.16	80.0
1960	March 30, 1960	4.71	264	1987	April 16, 1987	4.27	216
1961	May 12, 1961	6.70	631	1988	February 4, 1988	2.69	46.0
1962	December 18, 1961	4.48	234	1989	September 22, 1989	5.41	398
1963	March 12, 1963	5.17	332	1990	January 1, 1990	3.43	112
1964	March 5, 1964	5.50	387	1991	June 23, 1991	3.08	78.0
1965	March 26, 1965	4.80	279	1992	June 5, 1992	3.60	130
1966	February 13, 1966	4.55	242	1993	March 23, 1993	4.30	220
1967	March 7, 1967	3.34	96.0	1994	February 11, 1994	3.91	167
1968	March 13, 1968	3.40	102	1995	January 15, 1995	4.66	273
1969	February 2, 1969	3.30	92.0	2001	July 29, 2001	5.00	326
1970	January 29, 1970	3.24	87.0	2002	March 18, 2002	4.59	262
1971	May 7, 1971	3.90	156	2003	February 22, 2003	5.29	376
1972	June 21, 1972	5.20	339	2004	November 19, 2003	4.58	261
1973	December 10, 1972	4.11	180	2005	January 14, 2005	3.10	79.6
1974	June 27, 1974	3.51	113	2006	June 27, 2006	3.53	122
1975	March 30, 1975	4.17	188	2007	January 8, 2007	2.73	51.1

**Table 538.** 03473600 Middle Fork Holston River near Groseclose, Va.

LOCATION.--Latitude 36°53'10", Longitude 081°22'25", NAD27, Smyth County, Hydrologic Unit 06010102, at bridge on U.S. Highway 11, 1.5 mi west of Groseclose.

DRAINAGE AREA.--13.2 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 2,379.26 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Not developed.

BANKFULL STAGE.--12 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1967		11.53 <sup>1</sup>		1973	March 16, 1973	12.39	
1968		11.53 <sup>1</sup>		1974		11.53 <sup>1</sup>	
1969		11.53 <sup>1</sup>		1975		11.53 <sup>1</sup>	
1970	December 30, 1969	11.58		1976		11.53 <sup>1</sup>	
1971		11.53 <sup>1</sup>		1977	April 4, 1977	13.34	
1972	September 30, 1972	11.87		1978	November 6, 1977	14.84	

<sup>1</sup>Gage height below minimum recordable elevation.

**Table 539. 03473800 Staley Creek near Marion, Va.**

LOCATION.--Latitude 36°49'25", Longitude 081°28'25", NAD27, Smyth County, Hydrologic Unit 06010102, at bridge on State Highway 688, 2 mi southeast of Marion.

DRAINAGE AREA.--8.27 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 2,326.33 ft NGVD of 1929 (levels by Tennessee Valley Authority). July 13, 1965 to Feb. 21, 1974, flood-hydrograph recorder at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 480 ft<sup>3</sup>/s and contracted-opening measurements at 150 ft<sup>3</sup>/s and 360 ft<sup>3</sup>/s.

BANKFULL STAGE.--3 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1951	December 7, 1950	4.30	460	1965	October 16, 1964	3.65	295
1952			150 <sup>1,2</sup>	1966	February 13, 1966	2.83	170
1953	July 6, 1953	2.95	190	1967	November 2, 1966	2.77	170
1954			150 <sup>1,2</sup>	1968	March 13, 1968	2.72	160
1955	March 18, 1955	3.78	320	1969		2.30 <sup>3</sup>	120 <sup>2,4</sup>
1956	April 16, 1956	3.23	230	1970	December 31, 1969	3.27	231
1957	January 29, 1957	4.04	400	1971	May 7, 1971	3.05	202
1958	May 6, 1958	3.38	250	1972	February 26, 1972	3.47	260
1959	January 22, 1959	2.71	160	1973	December 10, 1972	3.27	231
1960	February 5, 1960	2.66	155	1974	June 27, 1974	3.07	204
1961	May 12, 1961	3.09	210	1975	March 30, 1975	3.11	209
1962	May 27, 1962	2.95	191	1976	December 31, 1975	2.61	110
1963	March 12, 1963	3.51	272	1977	April 4, 1977	4.52	515
1964	March 5, 1964	3.39	250				

<sup>1</sup>Discharge is an estimate.

<sup>2</sup>Month or day of occurrence is unknown or not exact.

<sup>3</sup>Gage height below minimum recordable elevation.

<sup>4</sup>Discharge is less than indicated value, which is minimum recordable discharge at this site.

**Table 540. 03474000 Middle Fork Holston River at Seven Mile Ford, Va.**

LOCATION.--Latitude 36°48'26", Longitude 081°37'20", NAD27, Smyth County, Hydrologic Unit 06010102, on right bank at downstream side of bridge on U.S. Highway 11 at Seven Mile Ford, 0.3 mi upstream from Meade Creek, 3.3 mi downstream from Walker Creek, and 21.1 mi upstream from mouth.

DRAINAGE AREA.--132 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 1,960.00 ft NGVD of 1929. Prior to Oct. 1, 1981, water-stage recorder at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 14,000 ft<sup>3</sup>/s.

BANKFULL STAGE.--7 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1942	August 9, 1942	8.30	4,290	1975	March 30, 1975	6.15	6,240
1943	December 30, 1942	7.77	3,840	1976	January 1, 1976	3.47	1,860
1944	February 18, 1944	8.98	4,980	1977	April 5, 1977	8.54	10,900
1945	February 17, 1945	7.74	3,750	1978	November 6, 1977	10.33	14,500
1946	January 7, 1946	8.30	4,290	1979	January 21, 1979	3.72	2,280
1947	August 4, 1947	9.86	6,570	1980	March 21, 1980	3.46	1,840
1948	February 14, 1948	7.33	3,390	1981	June 5, 1981	3.67	2,200
1949	December 3, 1948	6.38	2,610	1982	June 13, 1982	4.06	2,960
1950	February 2, 1950	7.28	3,190	1983	December 16, 1982	3.26	1,580
1951	December 7, 1950	7.44	3,280	1984	May 7, 1984	7.07	8,030
1952	January 28, 1952	5.14	1,540	1985	February 1, 1985	3.61	2,100
1953	July 7, 1953	6.54	2,540	1986	May 17, 1986	3.14	1,440
1954	January 22, 1954	8.08	3,910	1987	April 16, 1987	4.20	3,260
1955	March 18, 1955	8.28	4,600	1988	February 4, 1988	3.20	1,510
1956	April 16, 1956	8.62	5,020	1989	September 22, 1989	5.14	4,860
1957	January 29, 1957	10.75	7,680	1990	January 1, 1990	4.65	4,070
1958	May 6, 1958	5.67	1,820	1991	June 23, 1991	4.73	4,210
1959	April 12, 1959	6.65	2,540	1992	June 5, 1992	3.58	2,050
1960	March 30, 1960	6.30	2,290	1993	March 24, 1993	4.48	3,780
1961	May 12, 1961	10.35	7,220	1994	March 28, 1994	5.80	5,880
1962	December 18, 1961	5.53	4,880	1995	January 15, 1995	4.88	4,470
1963	March 12, 1963	6.08	5,800	1996	January 9, 1996	5.29	5,080
1964	March 5, 1964	3.68	2,200	1997	March 3, 1997	4.61	4,000
1965	March 26, 1965	4.90	4,590	1998	April 17, 1998	3.63	2,130
1966	February 13, 1966	3.71	2,260	1999	May 14, 1999	2.83	1,110
1967	March 7, 1967	3.92	2,680	2000	July 4, 2000	2.73	1,010
1968	March 13, 1968	3.71	2,260	2001	July 29, 2001	8.05	9,900
1969	February 2, 1969	3.17	1,480	2002	March 18, 2002	8.09	9,980

1970	December 31, 1969	4.19	3,280	2003	February 22, 2003	6.40	6,870
1971	May 7, 1971	4.29	3,500	2004	November 19, 2003	8.31	10,400
1972	September 30, 1972	5.71	5,720	2005	January 14, 2005	2.66	936
1973	December 10, 1972	6.15	6,240	2006	June 27, 2006	3.00	1,290
1974	January 1, 1974	3.80	2,440	2007	March 16, 2007	2.96	1,240

---

**Table 541. 03474500 Middle Fork Holston River at Chilhowie, Va.**

LOCATION.--Latitude 36°47'45", Longitude 081°40'50", NAD27, Smyth County, Hydrologic Unit 06010102, at highway bridge at Chilhowie.

DRAINAGE AREA.--153 mi<sup>2</sup>.

GAGE.--Nonrecording gage (chain gage). Datum of gage is 1,930 ft NGVD of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 4,700 ft<sup>3</sup>/s and extended above by logarithmic plotting.

BANKFULL STAGE.--8 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1907	June 13, 1907	11.00	9,300	1925	December 9, 1924	4.30	1,720
1908	April 1, 1908	6.20	3,000	1926	February 15, 1926	5.00	2,140
1909	April 30, 1909	7.40	4,100	1927	December 25, 1926	11.00	9,300
1921	February 10, 1921	6.00	2,620	1928	December 16, 1927	5.20	2,280
1922	January 21, 1922	7.50	4,200	1929	June 26, 1929	7.50	4,200
1923	June 21, 1923	11.40	10,000	1930	October 2, 1929	7.00	3,700
1924	September 30, 1924	7.50	3,930	1931	April 4, 1931	7.50	4,200

**Table 542. 03474700 Hutton Creek near Chilhowie, Va.**

LOCATION.--Latitude 36°47'00", Longitude 081°44'05", NAD27, Washington County, Hydrologic Unit 06010102, on left downstream wingwall of bridge on U.S. Highway 11, 3.3 mi southwest of Chilhowie, and 1.4 mi upstream from mouth.

DRAINAGE AREA.--8.20 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is not determined.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 120 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--12 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1967		10.48 <sup>1</sup>	186 <sup>2,3</sup>	1981	June 4, 1981	10.72	234
1968		10.48 <sup>1</sup>	186 <sup>2,3</sup>	1982	February 3, 1982	10.89	268
1969	February 2, 1969	9.74	81.0	1983		10.50 <sup>1</sup>	190 <sup>2,3</sup>
1970		10.48 <sup>1</sup>	186 <sup>2,3</sup>	1984	May 7, 1984	11.89	562
1971		10.48 <sup>1</sup>	186 <sup>2,3</sup>	1985	February 1, 1985	10.86	262
1972	September 30, 1972	12.07	624	1986		10.50 <sup>1</sup>	190 <sup>2,3</sup>
1973	December 10, 1972	12.14	649	1987	April 16, 1987	11.24	362
1974	December 26, 1973	10.70	230	1988		10.50 <sup>1</sup>	190 <sup>2,3</sup>
1975	March 14, 1975	11.53	449	1989	September 22, 1989	10.77	244
1976	June 20, 1976	10.68	226	1990	March 17, 1990	10.92	274
1977	April 4, 1977	12.15	652	1991		10.50 <sup>1</sup>	190 <sup>2,3</sup>
1978	November 7, 1977	11.27	371	1993	March 23, 1993	10.61	212
1979	June 23, 1979	13.92	1,740	1994	February 11, 1994	11.64	480
1980		10.50 <sup>1</sup>	190 <sup>2,3</sup>	1995		10.48 <sup>1</sup>	185 <sup>2,3</sup>

<sup>1</sup>Gage height below minimum recordable elevation.

<sup>2</sup>Discharge is less than indicated value, which is minimum recordable discharge at this site.

<sup>3</sup>Month or day of occurrence is unknown or not exact.

**Table 543. 03474800 Hall Creek near Glade Spring, Va.**

LOCATION.--Latitude 36°45'47", Longitude 081°48'15", NAD27, Washington County, Hydrologic Unit 06010102, on right downstream wingwall of bridge on U.S. Highway 11, 2.0 mi upstream from Tattle Branch, and 2.5 mi southwest of Glade Spring.

DRAINAGE AREA.--7.83 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is not determined.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 50 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--13 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1967		9.60 <sup>1</sup>	200 <sup>2,3</sup>	1981	June 4, 1981	10.17	408
1968		9.60 <sup>1</sup>	200 <sup>2,3</sup>	1982	February 3, 1982	10.17	408
1969		9.60 <sup>1</sup>	200 <sup>2,3</sup>	1983		9.60 <sup>1</sup>	200 <sup>2,3</sup>
1970	April 28, 1970	10.07	200 <sup>2</sup>	1984	May 7, 1984	11.19	1,050
1971		9.60 <sup>1</sup>	200 <sup>2,3</sup>	1985		9.60 <sup>1</sup>	200 <sup>2,3</sup>
1972	September 30, 1972	11.38	1,200	1986		9.60 <sup>1</sup>	200 <sup>2,3</sup>
1973	December 10, 1972	10.64	644	1987	April 16, 1987	10.74	704
1974		9.60 <sup>1</sup>	200 <sup>2,3</sup>	1988		9.60 <sup>1</sup>	200 <sup>2,3</sup>
1975	March 30, 1975	10.53	578	1989	September 22, 1989	11.51	1,310
1976		9.60 <sup>1</sup>	200 <sup>2,3</sup>	1990	March 17, 1990	9.81	264
1977	April 4, 1977	10.87	796	1991	May 28, 1991	10.09	376
1978	November 7, 1977	11.37	1,220	1994	February 11, 1994	10.59	614
1979	January 21, 1979	10.84	772	1995	June 26, 1995	9.82	267
1980	September 25, 1980	10.48	548				

<sup>1</sup>Gage height below minimum recordable elevation.

<sup>2</sup>Discharge is less than indicated value, which is minimum recordable discharge at this site.

<sup>3</sup>Month or day of occurrence is unknown or not exact.

**Table 544. 03475000 Middle Fork Holston River near Meadowview, Va.**

LOCATION.--Latitude 36°42'47", Longitude 081°49'08", NAD27, Washington County, Hydrologic Unit 06010102, on left bank 48 ft downstream from bridge on State Highway 803, 0.9 mi upstream from Cedar Creek, 4.1 mi southeast of Meadowview, and at mile 13.2.

DRAINAGE AREA.--206 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 1,820.22 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 11,000 ft<sup>3</sup>/s and extended above by logarithmic plotting.

BANKFULL STAGE.--6 ft.

REGULATION.--High-flow conditions at this site are considered unregulated. Flow regulated prior to 1954 by powerplant 0.9 mi upstream.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1932	February 3, 1932	8.40	5,010 <sup>1</sup>	1980	March 21, 1980	6.97	3,040
1933	December 28, 1932	7.00	3,500 <sup>1</sup>	1981	June 5, 1981	6.53	2,680
1934	August 24, 1934	6.55	3,100 <sup>1</sup>	1982	February 3, 1982	8.01	4,100
1935	January 23, 1935	8.59	5,360 <sup>1</sup>	1983	December 16, 1982	6.30	2,500
1936	April 6, 1936	7.53	4,060 <sup>1</sup>	1984	May 7, 1984	10.30	7,260
1937	February 10, 1937	6.29	2,780 <sup>1</sup>	1985	February 1, 1985	7.66	3,690
1938	October 28, 1937	6.47	2,980 <sup>1</sup>	1986	March 15, 1986	5.63	1,990
1939	March 6, 1939	5.40	1,910 <sup>1</sup>	1987	April 17, 1987	8.72	4,990
1940	August 14, 1940	8.00	4,570 <sup>1</sup>	1988	February 4, 1988	6.46	2,630
1941	July 6, 1941	4.83	1,520 <sup>1</sup>	1989	September 23, 1989	8.40	4,580
1942	August 9, 1942	8.82	5,450 <sup>1</sup>	1990	January 1, 1990	8.74	5,010
1943	December 30, 1942	8.29	4,900 <sup>1</sup>	1991	March 30, 1991	7.76	3,800
1944	February 18, 1944	9.80	6,650 <sup>1</sup>	1992	June 5, 1992	6.51	2,660
1945	February 18, 1945	8.13	4,680 <sup>1</sup>	1993	March 24, 1993	8.54	4,740
1946	January 8, 1946	8.90	5,570 <sup>1</sup>	1994	March 28, 1994	10.08	6,920
1947	August 4, 1947	9.28	6,050 <sup>1</sup>	1995	January 15, 1995	8.20	4,320
1948	February 14, 1948	7.70	4,240 <sup>1</sup>	1996	January 19, 1996	9.14	5,540
1949	December 4, 1948	6.80	3,300 <sup>1</sup>	1997	March 4, 1997	8.51	4,710
1950	February 2, 1950	8.22	4,790 <sup>1</sup>	1998	April 17, 1998	7.35	3,380
1951	December 8, 1950	7.23	3,700 <sup>1</sup>	1999	January 15, 1999	4.84	1,380
1952	January 28, 1952	5.42	1,960 <sup>1</sup>	2000	June 29, 2000	4.93	1,450
1953	March 4, 1953	6.47	3,000 <sup>1</sup>	2001	July 30, 2001	10.80	8,040
1957	January 29, 1957	11.80	10,000 <sup>2</sup>	2002	March 18, 2002	12.19	10,300
1973	December 10, 1972	11.00	8,540 <sup>2</sup>	2003	February 23, 2003	10.24	7,170
1975	March 30, 1975	10.37	7,410 <sup>2</sup>	2004	November 19, 2003	11.71	9,500
1977	April 5, 1977	12.57	11,000	2005	January 14, 2005	4.59	1,210
1978	November 7, 1977	13.41	12,500	2006	April 8, 2006	5.25	1,690
1979	January 21, 1979	7.93	3,930	2007	March 17, 2007	5.42	1,830

<sup>1</sup>Discharge affected to unknown degree by regulation or diversion.

<sup>2</sup>Discharge is a historic peak.

**Table 545. 03475600 Cedar Creek near Meadowview, Va.**

LOCATION.--Latitude 36°44'50", Longitude 081°51'20", NAD27, Washington County, Hydrologic Unit 06010102, on left downstream wingwall of culvert on U.S. Highway 11, 1.2 mi south of Meadowview, and 2.5 mi upstream from mouth.

DRAINAGE AREA.--3.42 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 2,025.19 ft NGVD of 1929. Prior to June 3, 1974, nonrecording gage at datum of 2,025.19 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1967	March 7, 1967	6.08 <sup>1</sup>	37.0	1987	April 16, 1987	6.49	50.0
1968	May 27, 1968	6.94 <sup>1</sup>	68.0	1988		5.30 <sup>2</sup>	15.0 <sup>3,4</sup>
1969		5.90 <sup>1,2</sup>	32.0 <sup>3,4</sup>	1989	September 22, 1989	5.89	32.0
1970	April 28, 1970	6.42 <sup>1</sup>	48.0	1990	March 17, 1990	6.17	40.0
1971	July 10, 1971	7.54 <sup>1</sup>	92.0	1991	May 28, 1991	5.77	28.0
1972	September 30, 1972	6.83 <sup>1</sup>	63.0	1992	June 5, 1992	5.84	30.0
1973	December 10, 1972	6.51 <sup>1</sup>	50.0	1993	March 23, 1993	5.89	32.0
1974	July 10, 1974	6.67	57.0	1994	February 11, 1994	6.69	57.0
1975	March 14, 1975	6.24	42.0	1995	August 10, 1995	5.95	33.0
1976	December 31, 1975	6.48	49.0	1996	January 27, 1996	6.21	41.0
1977	April 4, 1977	7.51	90.0	1997	March 3, 1997	6.23	42
1978	April 26, 1978	6.25	42.0	1999		5.29 <sup>2</sup>	13.7 <sup>3,4</sup>
1979	January 21, 1979	6.19	41.0	2000	June 29, 2000	5.67	24.8
1980	September 25, 1980	6.14	39.0	2001	July 29, 2001	6.20	40.8
1981	June 4, 1981	6.02	36.0	2002	March 18, 2002	6.49	49.7
1982	August 9, 1982	6.40	47.0	2003	August 4, 2003	11.80	
1983	December 16, 1982	5.74	27.0	2004	June 26, 2004	11.96	
1984	May 7, 1984	7.06	72.0	2005		5.35 <sup>2</sup>	15 <sup>3,4</sup>
1985	February 1, 1985	5.56	22.0	2006	June 27, 2006	6.32	44.5
1986	March 15, 1986	5.62	24.0				

<sup>1</sup>Gage height at different site and (or) datum.

<sup>2</sup>Gage height below minimum recordable elevation.

<sup>3</sup>Discharge is less than indicated value, which is minimum recordable discharge at this site.

<sup>4</sup>Month or day of occurrence is unknown or not exact.

**Table 546. 03475700 Spring Creek near Abingdon, Va.**

LOCATION.--Latitude 36°40'43", Longitude 082°02'29", NAD27, Washington County, Hydrologic Unit 06010102, on right upstream and left downstream wingwall of culvert on U.S. Highway 11, 1.5 mi upstream from Sinking Creek, and 3.8 mi southwest of Abingdon.

DRAINAGE AREA.--2.78 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 1,977.54 ft NGVD of 1929. Aug. 12, 1970 to Nov. 3, 1978, flood-hydrograph recorder at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1971	July 10, 1971	3.43	74.0	1984	May 7, 1984	4.27	157
1972	September 30, 1972	6.05	402	1985	July 28, 1985	3.07	46.0
1973	December 10, 1972	5.10	260	1986	November 30, 1985	3.68	98.0
1974	January 11, 1974	3.75	105	1987	April 23, 1987	4.15	145
1975	March 14, 1975	4.57	187	1988	April 24, 1988	4.41	171
1976	June 20, 1976	3.77	107	1989	September 22, 1989	4.65	195
1977	April 4, 1977	5.30	290	1990	January 1, 1990	3.84	114
1978	January 26, 1978	3.77	107	1991	May 28, 1991	4.78	212
1979	January 21, 1979	3.20	56.0	1992	September 4, 1992	4.75	208
1980	March 21, 1980	3.00	40.0	1993	March 23, 1993	4.35	165
1981	June 5, 1981	3.71	101	1994	February 11, 1994	5.09	224
1982	August 9, 1982	5.34	296	1995	June 26, 1995	3.73	37.0
1983	June 4, 1983	4.15	145				

**Table 547. 03477500 Beaver Creek near Wallace, Va.**

LOCATION.--Latitude 36°38'25", Longitude 082°06'42", NAD27, Washington County, Hydrologic Unit 06010102, on left bank 0.4 mi upstream from Clear Creek, 1.3 mi southeast of Wallace, and 3.8 mi northeast of Bristol.

DRAINAGE AREA.--13.7 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 1,808.93 ft NGVD of 1929. Prior to October 1957, water-stage recorder and concrete control at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 250 ft<sup>3</sup>/s and extended above by logarithmic plotting on basis of velocity-area studies.

BANKFULL STAGE.--4 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1946	February 10, 1946	4.50	206	1956	April 15, 1956	4.27	186
1947	January 20, 1947	4.85	246	1957	April 8, 1957	4.55	286
1948	July 15, 1948	5.94	383	1958	May 6, 1958		274
1949	August 13, 1949	5.02	264	1959	March 27, 1959	2.83	104
1950	May 26, 1950	4.81	241	1960	July 1, 1960		120 <sup>1</sup>
1951	August 9, 1951	4.93	258	1961	February 25, 1961	4.34	262
1952	March 11, 1952	2.73	79.0	1962	February 28, 1962	4.10	232
1953	March 4, 1953	4.04	170	1963	March 12, 1963	4.63	298
1954	January 22, 1954	3.16	103	1964	April 7, 1964	1.99	38.0
1955	March 18, 1955	4.58	220	1965	March 26, 1965	3.36	153

<sup>1</sup>Discharge is an estimate.

**Table 548. 03478400 Beaver Creek at Bristol, Va.**

LOCATION.--Latitude 36°37'54", Longitude 082°08'02", NAD27, Bristol City, Hydrologic Unit 06010102, on right bank 50 ft upstream from bridge on State Highway 1405, 75 ft upstream from Goose Creek, 0.9 mi downstream from Clear Creek, 3.7 mi northeast of Bristol, Va. post office, and at mile 20.6.

DRAINAGE AREA.--26.9 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 1,780.98 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 380 ft<sup>3</sup>/s and extended above on basis of slope-area measurement at 1,600 ft<sup>3</sup>/s.

BANKFULL STAGE.--8 ft.

REGULATION.--High-flow conditions at this site are considered regulated after 1965. Flow regulated since September 1965 by flood-control reservoirs, capacity 7,600 acre-ft.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1936		12.00		1981	June 6, 1981	6.88	509 <sup>1</sup>
1940	August 1940	11.50		1982	August 9, 1982	6.12	376 <sup>1</sup>
1953	March 1953	10.00		1983	November 28, 1982	4.85	212 <sup>1</sup>
1957	January 1957	7.10		1984	May 7, 1984	6.97	524 <sup>1</sup>
1958	May 6, 1958	6.98	795	1985	February 1, 1985	4.89	216 <sup>1</sup>
1959	March 27, 1959	4.76	310	1986	November 30, 1985	4.74	199 <sup>1</sup>
1960	July 1, 1960	4.62	280	1987	April 15, 1987	6.09	372 <sup>1</sup>
1961	February 25, 1961	5.82	520	1988	February 4, 1988	4.41	162 <sup>1</sup>
1962	February 28, 1962	5.41	440	1989	September 26, 1989	4.90	216 <sup>1</sup>
1963	March 12, 1963	7.25	850	1990	March 17, 1990	4.94	221 <sup>1</sup>
1964	April 7, 1964	4.41	241	1991	May 27, 1991	7.39	625 <sup>1</sup>
1965	April 9, 1965	5.76	510	1992	September 4, 1992	5.72	321 <sup>1</sup>
1966	April 13, 1966	5.07	370 <sup>1</sup>	1993	March 23, 1993	5.70	318 <sup>1</sup>
1967	October 18, 1966	3.91	166 <sup>1</sup>	1994	February 11, 1994	7.36	618 <sup>1</sup>
1968	December 22, 1967	4.06	184 <sup>1</sup>	1995	June 26, 1995	3.97	115 <sup>1</sup>
1969	July 18, 1969	4.31	224 <sup>1</sup>	1996	January 27, 1996	6.58	447 <sup>1</sup>
1970	April 28, 1970	8.11	1,090 <sup>1</sup>	1997	March 3, 1997	6.31	404 <sup>1</sup>
1971	May 7, 1971	5.51	462 <sup>1</sup>	1998	April 17, 1998	8.80	1,080 <sup>1</sup>
1972	September 30, 1972	8.03	1,070 <sup>1</sup>	1999	August 1, 1999	5.42	281 <sup>1</sup>
1973	December 10, 1972	7.43	569 <sup>1</sup>	2000	November 26, 1999	4.39	160 <sup>1</sup>
1974	January 11, 1974	6.63	442 <sup>1</sup>	2001	July 29, 2001	7.61	683 <sup>1</sup>
1975	March 30, 1975	7.83	639 <sup>1</sup>	2002	March 18, 2002	7.45	641 <sup>1</sup>
1976	February 13, 1976	4.85	208 <sup>1</sup>	2003	April 10, 2003	6.38	415 <sup>1</sup>
1977	April 5, 1977	7.61	683 <sup>1</sup>	2004	November 19, 2003	6.08	377 <sup>1</sup>
1978	October 2, 1977	9.94	1,600 <sup>1</sup>	2005	May 20, 2005	5.06	233 <sup>1</sup>
1979	January 21, 1979	5.37	278 <sup>1</sup>	2006	July 13, 2006	5.45	285 <sup>1</sup>
1980	March 21, 1980	4.99	233 <sup>1</sup>	2007	July 20, 2007	5.02	228 <sup>1</sup>

<sup>1</sup>Discharge is affected to unknown degree by regulation or diversion.

**Table 549. 03487800 Lick Creek near Chatham Hill, Va.**

LOCATION.--Latitude 36°57'44", Longitude 081°28'21", NAD27, Smyth County, Hydrologic Unit 06010101, on left bank 270 ft upstream from bridge on State Highway 42, 2.9 mi northeast of Chatham Hill, and 1.6 mi upstream from mouth.

DRAINAGE AREA.--25.8 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 2,076.97 ft NGVD of 1929. Prior to Oct. 1, 1968, water-stage recorder at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 600 ft<sup>3</sup>/s and extended above on basis of contracted-opening measurement at 2,600 ft<sup>3</sup>/s.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1966	February 13, 1966	5.40	1,110	1987	April 25, 1987	5.15	985
1967	March 7, 1967	6.30	1,590	1988	January 20, 1988	4.40	615
1968	May 27, 1968	5.42	1,120	1989	September 22, 1989	6.09	1,460
1969	February 2, 1969	4.28	570	1990	January 1, 1990	6.30	1,590
1970	December 30, 1969	6.66	1,810	1991	January 12, 1991	5.05	935
1971	May 7, 1971	5.25	1,040	1992	February 26, 1992	5.56	1,190
1972	September 30, 1972	6.65	1,800	1993	March 23, 1993	6.44	1,670
1973	December 10, 1972	7.85	2,520	1994	March 28, 1994	6.04	1,420
1974	April 4, 1974	4.93	875	1995	January 15, 1995	6.69	1,820
1975	March 14, 1975	6.53	1,730	1996	May 16, 1996	6.71	1,840
1976	December 31, 1975	5.65	1,240	1997	March 3, 1997	5.73	1,250
1977	April 4, 1977	6.50	1,710	1998	April 17, 1998	5.08	903
1978	November 7, 1977	8.09	2,660	1999	January 15, 1999	3.93	482
1979	January 21, 1979	6.31	1,600	2000	July 6, 2000	3.31	319
1980	July 11, 1980	5.98	1,400	2001	May 23, 2001	7.55	2,340
1981	May 28, 1981	4.45	638	2002	March 18, 2002	7.19	2,120
1982	January 4, 1982	5.52	1,170	2003	February 22, 2003	6.60	1,760
1983	March 21, 1983	4.44	633	2004	November 19, 2003	8.08	2,660
1984	May 7, 1984	6.58	1,760	2005		4.52 <sup>1</sup>	666 <sup>2,3</sup>
1985	February 1, 1985	5.64	1,230	2006	June 27, 2006	5.68	1,220
1986	March 15, 1986	5.51	1,160	2007	March 2, 2007	5.85	1,310

<sup>1</sup>Gage height below minimum recordable elevation.

<sup>2</sup>Discharge is less than indicated value, which is minimum recordable discharge at this site.

<sup>3</sup>Month or day of occurrence is unknown or not exact.

**Table 550. 03487850 Possum Jaw Creek near Chatham Hill, Va.**

LOCATION.--Latitude 36°57'41", Longitude 081°27'52", NAD27, Smyth County, Hydrologic Unit 06010101, at bridge on State Highway 42, 3.3 mi east of Chatham Hill.

DRAINAGE AREA.--4.31 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 2,084.80 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurement at 8 ft<sup>3</sup>/s and contracted-opening measurement at 750 ft<sup>3</sup>/s.

BANKFULL STAGE.--11 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1967	March 7, 1967	9.67	392	1973	December 10, 1972	10.24	547
1968	March 12, 1968	9.45	340	1974	March 20, 1974	8.96	242
1969	February 2, 1969	8.57	164	1975	March 14, 1975	10.03	484
1970	December 30, 1969	9.78	416	1976	October 31, 1975	9.34	318
1971	May 7, 1971	9.28	306	1977	April 4, 1977	10.46	613
1972	August 18, 1972	10.54	639	1978	November 6, 1977	10.94	779

**Table 551. 03487900 Sprouts Creek near Chatham Hill, Va.**

LOCATION.--Latitude 36°58'10", Longitude 081°30'32", NAD27, Smyth County, Hydrologic Unit 06010101, at culvert on State Highway 42, 1.2 mi northeast of Chatham Hill.

DRAINAGE AREA.--7.60 mi<sup>2</sup>.

GAGE.--Water-stage recorder (flood-hydrograph recorder). Datum of gage is 2,110 ft NGVD of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--4 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1967	March 7, 1967	3.90	210	1973	December 10, 1972	5.50	420
1968	August 14, 1968	3.95	215	1974	December 26, 1973	3.75	190
1969	September 8, 1969	3.25	125	1975	March 14, 1975	5.67	440
1970	December 30, 1969	5.20	375	1976	December 31, 1975	3.53	175
1971	May 7, 1971	3.55	175	1977	April 4, 1977	6.80	630
1972	August 18, 1972	6.20	530				

**Table 552. 03488000 North Fork Holston River near Saltville, Va.**

LOCATION.--Latitude 36°53'48", Longitude 081°44'47", NAD27, Smyth County, Hydrologic Unit 06010101, on right bank 0.5 mi upstream from Cedar Branch bridge, 1.5 mi northeast of Saltville, 7.8 mi downstream from Laurel Creek, and at mile 85.0.

DRAINAGE AREA.--221 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 1,703.53 ft NGVD of 1929. From November 1920 through May 1934 water-stage recorder at datum of 1,695.79 ft NGVD of 1929. June 11, 1907 to Nov. 12, 1908, nonrecording gage on highway bridge 2.1 mi downstream at different datum. Nov. 2, 1920, to May 23, 1934, nonrecording gage on highway bridge 0.5 mi downstream at datum of 1,695.79 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 13,000 ft<sup>3</sup>/s and extended above on basis of slope-area measurement at 16,500 ft<sup>3</sup>/s.

BANKFULL STAGE.--7 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1862	February 1862	15.00 <sup>1</sup>	22,000 <sup>2-3</sup>	1963	March 12, 1963	12.15	14,500
1907	June 14, 1907	13.00 <sup>4</sup>	8,400	1964	March 5, 1964	4.96	3,340
1908	April 2, 1908	12.10 <sup>4</sup>	7,400	1965	March 26, 1965	7.70	6,880
1921	December 15, 1920	9.27 <sup>4</sup>	4,480	1966	February 14, 1966	6.00	4,500
1922	March 15, 1922	8.90 <sup>4</sup>	4,160	1967	March 7, 1967	7.26	6,260
1923	February 3, 1923	13.97 <sup>4</sup>	8,220	1968	May 27, 1968	5.58	3,910
1924	September 30, 1924	11.00 <sup>4</sup>	5,840	1969	February 2, 1969	4.95	3,090
1925	January 11, 1925	9.00 <sup>4</sup>	4,310	1970	December 31, 1969	10.37	11,000
1926	January 18, 1926	9.20 <sup>4</sup>	4,490	1971	May 7, 1971	7.40	6,460
1927	December 21, 1926	12.00 <sup>4</sup>	6,700	1972	September 30, 1972	8.25	7,550
1928	December 16, 1927	7.00 <sup>4</sup>	2,640	1973	December 10, 1972	11.98	13,200
1929	February 27, 1929	8.10 <sup>4</sup>	3,520	1974	December 26, 1973	6.52	5,130
1930	November 18, 1929	7.90 <sup>4</sup>	3,360	1975	March 14, 1975	10.68	11,100
1931	April 4, 1931	10.10 <sup>4</sup>	5,440	1976	January 1, 1976	7.56	6,580
1932	January 30, 1932	9.40 <sup>4</sup>	4,750	1977	April 5, 1977	12.98	14,900
1933	December 28, 1932	9.90	5,240	1978	November 6, 1977	13.57	15,900
1934	March 3, 1934	8.70	4,120	1979	January 21, 1979	10.04	10,100
1935	January 23, 1935	7.49	7,990	1980	March 21, 1980	6.44	4,820
1936	April 6, 1936	6.50	6,290	1981	May 28, 1981	7.66	5,540
1937	January 20, 1937	5.46	4,650	1982	February 3, 1982	8.34	6,470
1938	October 28, 1937	6.08	5,660	1983	November 29, 1982	5.44	3,070
1939	February 3, 1939	4.12	2,530	1984	May 7, 1984	10.51	10,100
1940	August 14, 1940	6.23	5,840	1985	February 1, 1985	7.25	5,150
1941	July 6, 1941	5.58	4,790	1986	May 14, 1986	5.93	3,590
1942	June 20, 1942	6.73	6,740	1987	April 17, 1987	7.74	5,790
1943	December 30, 1942	6.46	6,380	1988	January 20, 1988	4.61	2,280
1944	February 18, 1944	10.15	13,100	1989	September 23, 1989	7.00	4,830

1945	February 17, 1945	6.83	5,840	1990	January 1, 1990	9.80	8,860
1946	January 8, 1946	8.26	8,370	1991	March 30, 1991	6.56	4,300
1947	January 20, 1947	7.91	7,690	1992	February 26, 1992	6.88	4,690
1948	February 14, 1948	8.00	7,860	1993	March 24, 1993	9.74	8,770
1949	December 4, 1948	6.76	5,840	1994	March 28, 1994	9.83	8,910
1950	February 2, 1950	7.13	6,330	1995	January 15, 1995	9.47	8,330
1951	December 8, 1950	6.24	4,920	1996	January 19, 1996	9.77	8,820
1952	January 23, 1952	4.91	3,210	1997	March 3, 1997	8.63	7,050
1953	May 19, 1953	6.68	5,680	1998	April 17, 1998	8.30	6,570
1954	January 22, 1954	7.19	6,500	1999	January 15, 1999	4.71	2,370
1955	March 16, 1955	9.42	10,300	2000	February 14, 2000	4.52	2,200
1956	April 16, 1956	9.05	9,560	2001	July 29, 2001	11.80	12,400
1957	January 29, 1957	13.20	16,500	2002	March 18, 2002	14.83	16,000
1958	March 31, 1958	6.28	5,000	2003	February 22, 2003	11.11	9,970
1959	April 13, 1959	6.04	4,640	2004	November 19, 2003	15.46	17,100
1960	March 31, 1960	5.74	4,250	2005	December 10, 2004	4.25	2,070
1961	February 25, 1961	11.15	12,500	2006	January 18, 2006	5.17	2,850
1962	December 18, 1961	8.88	8,650	2007	March 2, 2007	4.79	2,520

<sup>1</sup>Reported by the Tennessee Valley Authority.

<sup>2</sup>Discharge is a historic peak.

<sup>3</sup>Month or day of occurrence is unknown or not exact.

<sup>4</sup>Gage height at different site and (or) datum.

**Table 553.** 03488445 Brumley Creek near Hansonville, Va.

LOCATION.--Latitude 36°51'21", Longitude 082°02'43", NAD27, Washington County, Hydrologic Unit 06010101, on left bank 1.0 mi upstream from Little Brumley Creek, 1.1 mi downstream from Shovel Hollow Branch, 6.1 mi northeast of Hansonville, and at mile 8.7.

DRAINAGE AREA.--4.14 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 3,371.95 ft NGVD of 1929 (Appalachian Power Company bench mark).

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 23 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--2.5 ft.

REGULATION.--High-flow conditions at this site are considered regulated. Flow regulated by Hidden Valley Lake 1.7 mi upstream, usable capacity approximately 828 acre-ft.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1980	March 21, 1980	2.31	107 <sup>1</sup>	1981	May 20, 1981	2.15	73.0 <sup>1</sup>

<sup>1</sup>Discharge affected by regulation or diversion.

**Table 554. 03488450 Brumley Creek at Brumley Gap, Va.**

LOCATION.--Latitude 36°47'30", Longitude 082°01'10", NAD27, Washington County, Hydrologic Unit 06010101, on left downstream wingwall of bridge on State Highway 611, 0.2 mi upstream from mouth, 0.8 mi southeast of Brumley Gap, and 2.7 mi downstream from Lee Creek.

DRAINAGE AREA.--21.4 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 1,489.16 ft NGVD of 1929. Prior to Oct. 1, 1981, water-stage recorder at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 120 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--6 ft.

REGULATION.--High flow conditions at this site are considered unregulated. Flow regulated by Hidden Valley Lake 10.1 mi upstream, usable capacity approximately 828 acre-ft.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1980	March 21, 1980	5.10	760	1993	March 23, 1993	4.92	685
1981	May 20, 1981	3.94	374	1994	March 28, 1994	5.38	875
1982	June 13, 1982	4.94	693	1995	January 15, 1995	3.86	353
1983	November 29, 1982	4.16	433	1996	January 19, 1996	5.16	784
1984	May 7, 1984	6.60	1,500	1997	March 3, 1997	4.58	560
1985	February 2, 1985	5.12	768	1998	April 17, 1998	5.48	919
1986	November 29, 1985	5.06	743	2000	February 14, 2000	3.78	333
1987	April 16, 1987	4.92	685	2001	July 29, 2001	5.39	879
1988	February 4, 1988	5.16	784	2002	March 18, 2002	6.72	1,570
1989	May 6, 1989	4.86	661	2003	February 22, 2003	5.51	932
1990	January 1, 1990	4.76	622	2004	November 19, 2003	6.42	1,400
1991	December 24, 1990	4.57	557	2005	December 10, 2004	4.03	398
1992	December 2, 1991	5.26	825	2006	January 18, 2006	4.32	479

**Table 555. 03488500 North Fork Holston River at Holston, Va.**

LOCATION.--Latitude 36°46'29", Longitude 082°04'22", NAD27, Washington County, Hydrologic Unit 06010101, at bridge on U.S. Highway 11, 0.5 mi east of Holston.

DRAINAGE AREA.--401 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 1,437.11 ft NGVD of 1929. Prior to Oct. 1, 1959, water-stage recorder at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 12,000 ft<sup>3</sup>/s and extended above on basis of slope-area measurement at 24,500 ft<sup>3</sup>/s and 27,000 ft<sup>3</sup>/s.

BANKFULL STAGE.--9 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1952	January 23, 1952	7.90	4,680	1965	March 26, 1965	10.86	10,000
1953	May 19, 1953	10.61	8,090	1966	July 30, 1966	9.25	7,080
1954	January 23, 1954	10.24	7,570	1967	June 2, 1967	9.81	8,040
1955	March 17, 1955	12.15	11,400	1968	May 27, 1968	7.47	4,850
1956	April 16, 1956	12.93	12,800	1969	February 2, 1969	7.90	5,370
1957	January 29, 1957	16.50	24,300	1970	December 31, 1969	14.00	17,000
1958	May 6, 1958	10.56	9,410	1971	May 7, 1971	11.89	12,000
1959	April 13, 1959	9.11	6,940	1972	September 30, 1972	10.37	9,070
1960	May 30, 1960	8.54	6,150	1973	December 10, 1972	14.89	19,500
1961	February 26, 1961	13.71	16,200	1974	December 26, 1973	10.58	9,440
1962	December 18, 1961	11.44	10,700	1975	March 30, 1975	14.20	17,600
1963	March 12, 1963	15.28	20,700	1976	January 1, 1976	9.90	8,220
1964	March 5, 1964	9.66	7,860	1977	April 5, 1977	18.60	27,000

**Table 556.** 03489500 North Fork Holston River at Mendota, Va.

LOCATION.--Latitude 36°42'05", Longitude 082°18'26", NAD27, Washington County, Hydrologic Unit 06010101, on right bank at bridge on Route 615, 0.3 mi south of Mendota.

DRAINAGE AREA.--493 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 1,329.67 ft NGVD of 1929 (levels by National Weather Service).

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 15,000 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--8 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1921	December 14, 1920	9.95	9,640	1927	December 22, 1926	13.60	17,800
1922	January 21, 1922	11.20	12,300	1928	December 16, 1927	7.20	5,000
1923	February 3, 1923	14.40	19,600	1929	February 28, 1929	9.20	8,120
1924	January 1, 1924	10.00	9,740	1930	February 5, 1930	7.20	4,770
1925	January 12, 1925	9.40	8,580	1931	April 5, 1931	11.40	12,700
1926	February 16, 1926	8.60	7,170				

**Table 557. 03489700 Fleenor Branch near Bristol, Va.**

LOCATION.--Latitude 36°38'10", Longitude 082° 15'20", NAD27, Washington County, Hydrologic Unit 06010101, at culvert on U.S. Highway 58 and 421, 5.0 mi northwest of Bristol.

DRAINAGE AREA.--0.60 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is not determined.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--5 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1966	July 30, 1966	5.15	67.0	1971		4.31 <sup>1</sup>	30.0 <sup>2,3</sup>
1967		5.00 <sup>1</sup>	60.0 <sup>2,3</sup>	1972	June 21, 1972	4.53	37.0
1968		5.00 <sup>1</sup>	60.0 <sup>2,3</sup>	1973	July 14, 1973	5.56	89.0
1969		5.00 <sup>1</sup>	60.0 <sup>2,3</sup>	1974		4.31 <sup>1</sup>	30.0 <sup>2,3</sup>
1970		5.00 <sup>1</sup>	60.0 <sup>2,3</sup>	1975	March 30, 1975	4.50	36.0

<sup>1</sup>Gage height below minimum recordable elevation.

<sup>2</sup>Discharge is less than indicated value, which is minimum recordable discharge at this site.

<sup>3</sup>Month or day of occurrence is unknown or not exact.

**Table 558. 03489800 Cove Creek near Shelleys, Va.**

LOCATION.--Latitude 36°39'13", Longitude 082°21'16", NAD27, Scott County, Hydrologic Unit 06010101, on right downstream wingwall of bridge on U.S. Highway 58 and 421, 1.5 mi northwest of Shelleys.

DRAINAGE AREA.--17.2 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 1,381.53 ft NGVD of 1929. Sept. 15, 1965 to Nov. 2, 1978, flood-hydrograph recorder at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 800 ft<sup>3</sup>/s and extended above on basis of contracted-opening measurement at 1,260 ft<sup>3</sup>/s.

BANKFULL STAGE.--5 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1951	December 7, 1950	3.13	190	1980	March 21, 1980	5.91	875
1952	March 23, 1952	5.25	600	1981	June 6, 1981	6.94	1,430
1953	May 19, 1953	6.03	940	1982	February 3, 1982	5.58	722
1954	January 22, 1954	5.25	600	1983	November 29, 1982	4.99	517
1955	March 18, 1955	6.15	1,000	1984	May 7, 1984	6.81	1,360
1956	April 16, 1956	6.65	1,260	1985	February 1, 1985	6.04	940
1957	January 29, 1957	5.78	810	1986	November 30, 1985	6.02	930
1958	May 5, 1958	5.85 <sup>1</sup>	440	1987	January 19, 1987	6.17	1,000
1959	March 27, 1959	5.58	710	1988	February 4, 1988	5.43	662
1960	November 28, 1959	5.25	600	1989	June 17, 1989	5.79	815
1961	February 25, 1961	5.90	870	1990	January 1, 1990	5.20	580
1962	December 18, 1961	5.94	890	1991	March 30, 1991	5.63	742
1963	March 12, 1963	8.40	2,500	1992	December 2, 1991	5.03	529
1964	March 5, 1964	5.70	770	1993	March 23, 1993	5.81	825
1965	April 9, 1965	5.95	900	1994	February 11, 1994	6.18	996
1966	April 13, 1966	5.73	780	1995	January 15, 1995	4.21	358
1967	October 19, 1966	5.23	590	1996	January 27, 1996	6.52	1,180
1968	December 22, 1967	5.54	710	1997	March 3, 1997	6.06	936
1969	July 21, 1969	5.00	520	1998	April 17, 1998	6.81	1,350
1970	April 28, 1970	6.33	1,080	1999	March 4, 1999	3.83	291
1971	May 7, 1971	6.20	1,020	2000	April 4, 2000	3.57	249
1972	April 12, 1972	6.55	1,200	2001	July 29, 2001	5.27	601
1973	December 10, 1972	7.00	1,470	2002	March 18, 2002	6.41	1,120
1974	April 4, 1974	6.20	1,020	2003	April 10, 2003	6.17	991
1975	March 14, 1975	6.40	1,120	2004	November 19, 2003	6.08	946
1976	June 2, 1976	5.93	885	2005	July 7, 2005	5.57	715
1977	April 5, 1977	6.41	1,120	2006	January 18, 2006	5.48	679
1978	October 2, 1977	7.28	1,670	2007	March 2, 2007	3.28	207
1979	January 21, 1979	5.87	855				

<sup>1</sup>Gage height affected by backwater.

**Table 559.** 03489850 Cove Creek near Hilton, Va.

LOCATION.--Latitude 36°39'08", Longitude 082°21'53", NAD27, Scott County, Hydrologic Unit 06010101, at bridge on State Highway 308, 7.2 mi east of Hilton.

DRAINAGE AREA.--18.1 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 1,354.40 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 300 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1967	October 19, 1966	3.87	628	1973	December 10, 1972	5.76	1,500
1968	December 22, 1967	4.06	704	1974	January 11, 1974	4.68	966
1969	July 21, 1969	3.82	608	1975	March 14, 1975	5.26	1,240
1970	December 31, 1969	5.70	1,480	1976	December 31, 1975	4.32	808
1971	May 7, 1971	5.19	1,200	1977	April 5, 1977	5.27	1,240
1972	April 12, 1972	5.42	1,320	1978	October 2, 1977	6.16	1,740

**Table 560. 03489870 Big Moccasin Creek at Collinwood near Hansonville, Va.**

LOCATION.--Latitude 36°44'16", Longitude 082°19'25", NAD27, Russell County, Hydrologic Unit 06010101, at Collinwood, on left downstream wingwall of bridge on U.S. Highway 612, and 50 ft downstream from Meade Branch.

DRAINAGE AREA.--42.1 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 1,796.34 ft NGVD of 1929. Prior to Oct. 1, 1968, water-stage recorder at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 400 ft<sup>3</sup>/s and extended above on basis of contracted-opening measurement at 2,600 ft<sup>3</sup>/s.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1966	July 30, 1966	4.57	1,760	1981	June 6, 1981	2.70	550
1967	March 7, 1967	4.59	1,770	1982	February 3, 1982	4.94	2,050
1968	December 22, 1967	4.24	1,520	1983	November 29, 1982	2.62	510
1969	February 2, 1969	3.47	982	1984	May 7, 1984	6.19	3,070
1970	April 28, 1970	5.95	2,860	1985	February 1, 1985	5.04	2,130
1971	May 7, 1971	5.77	2,720	1986	March 15, 1986	2.57	485
1972	June 21, 1972	4.47	1,680	1987	April 16, 1987	4.34	1,590
1973	December 10, 1972	5.84	2,770	1988	February 4, 1988	3.28	868
1974	December 26, 1973	5.35	2,380	1989	June 17, 1989	4.16	1,460
1975	March 30, 1975	6.85	3,660	1990	January 1, 1990	3.81	1,220
1976	December 31, 1975	3.88	1,270	1991	March 30, 1991	3.75	1,180
1977	April 5, 1977	6.83	3,650	1992	December 2, 1991	4.22	1,500
1978	January 26, 1978	6.41	3,270	1993	March 24, 1993	4.16	1,460
1979	January 21, 1979	5.08	2,160	1994	February 11, 1994	5.91	2,830
1980	March 21, 1980	4.36	1,600	1995	January 15, 1995	3.46	975

**Table 561. 03489900 Big Moccasin Creek near Gate City, Va.**

LOCATION.--Latitude 36°38'47", Longitude 082°33'12", NAD27, Scott County, Hydrologic Unit 06010101, at bridge on State Highway 71, 1.6 mi east of Gate City.

DRAINAGE AREA.--79.6 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 1,267.64 ft NGVD of 1929. Oct. 1, 1959, to Mar. 1, 1966, nonrecording gage at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 3,000 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--7 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1953	May 19, 1953	7.67	2,550	1966	April 13, 1966	6.28	1,710
1954	January 22, 1954	5.98	1,700	1967	March 7, 1967		2,700 <sup>1</sup>
1955	March 16, 1955	6.72	2,220	1968	December 23, 1967	6.27	1,690
1956	April 16, 1956	7.95	3,110	1969	February 2, 1969	5.35	1,280
1957	January 29, 1957	8.36	3,340	1970	April 28, 1970	9.47	4,170
1958	May 6, 1958	8.84	3,570	1971	May 7, 1971	8.04	2,930
1959	January 22, 1959	6.48	1,830	1972	June 21, 1972	6.24	1,670
1960	November 28, 1959	5.66	1,420	1973	March 17, 1973	8.62	3,400
1961	February 25, 1961	7.58	2,600	1974	January 1, 1974	7.62	2,610
1962	December 18, 1961	6.98	2,180	1975	March 30, 1975	9.57	4,270
1963	March 12, 1963	10.15	4,900	1976	December 31, 1975	5.70	1,420
1964	March 5, 1964	5.60	1,370	1977	April 5, 1977	9.88	4,580
1965	March 26, 1965	7.14	2,250				

<sup>1</sup>Discharge is a maximum daily average.

**Table 562. 03490000 North Fork Holston River near Gate City, Va.**

LOCATION.--Latitude 36°36'31", Longitude 082°34'05", NAD27, Scott County, Hydrologic Unit 06010101, on left bank 75 ft upstream from bridge on U.S. Highway 23, 1.6 mi downstream from Big Moccasin Creek, 2.1 mi southeast of Gate City, and 8.8 mi upstream from mouth.

DRAINAGE AREA.--671 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 1,197.56 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 31,000 ft<sup>3</sup>/s and extended above on basis of slope-area measurement at 41,000 ft<sup>3</sup>/s.

BANKFULL STAGE.--6 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1862	February 1862	22.50 <sup>1</sup>	54,000 <sup>23</sup>	1969	February 2, 1969	8.66	9,030
1932	January 30, 1932	10.64	13,400	1970	April 28, 1970	14.32	23,400
1933	December 29, 1932	10.24	12,600	1971	May 7, 1971	13.59	21,200
1934	March 4, 1934	8.98	10,000	1972	January 29, 1972	9.71	11,300
1935	March 26, 1935	10.65	13,400	1973	December 11, 1972	15.62	27,400
1936	January 20, 1936	10.29	13,200	1974	January 1, 1974	11.48	15,400
1937	February 10, 1937	9.28	10,900	1975	March 30, 1975	15.83	28,100
1938	July 21, 1938	9.04	10,100	1976	January 1, 1976	9.51	10,800
1939	February 4, 1939	8.46	8,960	1977	April 5, 1977	19.79	41,000
1940	August 14, 1940	14.75	23,700	1978	January 26, 1978	14.42	23,600
1941	March 12, 1941	7.20	6,440	1979	January 22, 1979	13.75	21,700
1942	August 9, 1942	9.22	10,400	1980	March 21, 1980	10.66	13,400
1943	December 30, 1942	11.60	15,800	1981	May 29, 1981	8.68	9,050
1944	February 18, 1944	14.44	22,700	1982	February 4, 1982	11.01	14,300
1945	February 18, 1945	10.16	12,600	1983	November 29, 1982	7.97	7,600
1946	January 8, 1946	13.70	21,000	1984	May 8, 1984	15.27	26,100
1947	January 16, 1947	12.10	17,000	1985	February 2, 1985	11.45	15,400
1948	February 14, 1948	12.10	17,000	1986	November 30, 1985	10.23	12,400
1949	December 4, 1948	9.84	11,700	1987	April 17, 1987	12.28	17,600
1950	February 2, 1950	12.75	18,700	1988	February 4, 1988	7.68	7,040
1951	December 8, 1950	8.85	9,540	1989	June 17, 1989	8.58	8,840
1952	December 21, 1951	8.22	8,220	1990	January 1, 1990	11.35	15,100
1953	May 20, 1953	11.64	15,800	1991	March 30, 1991	9.58	11,000
1954	January 23, 1954	9.77	11,900	1992	December 3, 1991	10.20	12,400
1955	March 17, 1955	11.66	16,100	1993	March 25, 1993	11.18	14,700
1956	April 16, 1956	14.10	22,000	1994	February 11, 1994	15.00	25,300
1957	January 30, 1957	16.73	28,700	1995	January 16, 1995	11.26	14,900
1958	May 7, 1958	13.95	21,600	1996	January 27, 1996	13.96	22,200

1959	April 13, 1959	9.05	10,200	1997	March 4, 1997	12.17	17,300
1960	November 25, 1959	8.14	8,320	1998	April 17, 1998	14.11	22,700
1961	February 26, 1961	12.96	19,200	1999	March 4, 1999	6.92	5,670
1962	December 18, 1961	11.29	15,100	2000	February 15, 2000	6.40	4,820
1963	March 12, 1963	16.42	30,000	2001	July 30, 2001	12.15	17,200
1964	March 5, 1964	9.34	10,400	2002	March 18, 2002	19.36	39,400
1965	March 27, 1965	11.42	15,200	2003	February 16, 2003	13.47	20,800
1966	April 13, 1966	9.56	11,000	2004	November 20, 2003	15.07	25,500
1967	March 7, 1967	9.99	11,900	2005	December 10, 2004	8.95	9,630
1968	December 23, 1967	8.48	8,650				

---

<sup>1</sup>Reported by the Tennessee Valley Authority.

<sup>2</sup>Discharge is a historic peak.

<sup>3</sup>Month or day of occurrence is unknown or not exact.

**Table 563.** 03521000 Clinch River at Cedar Bluff, Va.

LOCATION.--Latitude 37°05'20", Longitude 081°46'00", NAD27, Tazewell County, Hydrologic Unit 06010205, at highway bridge at mouth of Indian Creek in town of Cedar Bluff, 400 ft upstream from Middle Creek, and 1.1 mi east of Richlands.

DRAINAGE AREA.--124 mi<sup>2</sup>.

GAGE.--Nonrecording gage (staff gage). Datum of gage is 1,940 ft NGVD of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 750 ft<sup>3</sup>/s and extended above. Unknown effects from backwater from Indian Creek.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1901	June 1901	16		1946	January 8, 1946	7.4	4,800
1944	June 6, 1944	2.62	615	1957	April 16, 1957	14.41	
1945	February 17, 1945	7.3	4,700				

**Table 564. 03521500 Clinch River at Richlands, Va.**

LOCATION.--Latitude 37°05'10", Longitude 081°46'52", NAD27, Tazewell County, Hydrologic Unit 06010205, on right bank 1.0 mi southeast of Richlands, 1.6 mi downstream from Middle Creek, 2.2 mi upstream from Big Creek, and at mile 321.0.

DRAINAGE AREA.--137 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 1,924.08 ft NGVD of 1929. Prior to Aug. 6, 1950, nonrecording gage at bridge 1.1 mi downstream at datum of 1,917.55 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements at site in use 1945-50. Subsequent to 1950, defined by current-meter measurements below 4,800 ft<sup>3</sup>/s and extended above by contracted-opening measurement at 9,600 ft<sup>3</sup>/s.

BANKFULL STAGE.--11 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Tennessee Valley Authority Report No. 0-5923 contains accounts of other floods prior to 1944 in addition to the outstanding floods published herein.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1901	June 22, 1901	21.30 <sup>1</sup>	11,500 <sup>2</sup>	1976	January 1, 1976	7.68	2,490
1944	February 18, 1944	13.70 <sup>1</sup>	5,500 <sup>2</sup>	1977	April 5, 1977	16.06	7,340
1946	January 8, 1946	10.10	3,860	1978	January 26, 1978	16.10	7,370
1947	January 15, 1947	10.60	4,130	1979	January 21, 1979	11.15	4,290
1948	February 14, 1948	10.10	3,860	1980	January 23, 1980	7.23	2,260
1949	December 4, 1948	10.50	4,080	1981	June 1, 1981	8.38	2,810
1950	February 2, 1950	11.30	4,520	1982	February 3, 1982	9.05	3,150
1951	December 8, 1950	7.84	2,500	1983	December 16, 1982	6.84	2,070
1952	January 22, 1952	8.35	2,630	1984	May 7, 1984	14.70	6,450
1953	May 19, 1953	13.23	5,080	1985	February 1, 1985	10.38	3,680
1954	January 22, 1954	7.42	2,180	1986	November 29, 1985	6.70	2,000
1955	March 1, 1955	12.51	4,700	1987	April 25, 1987	9.94	3,620
1956	April 16, 1956	10.54	3,650	1988	February 4, 1988	4.11	802
1957	January 29, 1957	19.30	9,640	1989	May 6, 1989	10.23	3,770
1958	May 6, 1958	10.70	3,750	1990	February 10, 1990	8.86	3,050
1959	January 22, 1959	7.75	2,360	1991	March 30, 1991	8.03	2,620
1960	November 24, 1959	6.68	1,860	1992	December 2, 1991	8.98	3,110
1961	February 25, 1961	11.79	4,340	1994	February 11, 1994	12.48	5,060
1962	December 18, 1961	9.22	3,250	1995	January 16, 1995	9.88	3,580
1963	March 12, 1963	16.09	7,370	1996	January 27, 1996	12.38	5,000 <sup>3</sup>
1964	April 8, 1964	5.64	1,450	1997	March 3, 1997	9.05	3,150
1965	March 26, 1965	10.36	3,870	1998	March 21, 1998	12.63	5,150
1966	May 1, 1966	6.91	2,100	1999	January 24, 1999	6.27	1,640
1967	March 7, 1967	10.82	4,100	2000	July 6, 2000	4.88	1,020
1968	May 27, 1968	9.65	3,480	2001	July 29, 2001	9.79	3,540
1969	July 11, 1969	5.34	1,330	2002	March 18, 2002	11.69	4,600
1970	December 31, 1969	10.34	3,840	2003	February 16, 2003	11.62	4,560

1971	May 7, 1971	11.27	4,360	2004	May 31, 2004	10.32	3,820
1972	April 14, 1972	14.65	6,420	2005	December 10, 2004	7.18	2,120
1973	March 16, 1973	11.65	4,590	2006	April 8, 2006	7.47	2,280
1974	March 21, 1974	9.20	3,250	2007	April 15, 2007	16.01	7,310
1975	March 14, 1975	12.44	5,060				

---

<sup>1</sup>Reported by the Tennessee Valley Authority.

<sup>2</sup>Discharge is a historic peak.

<sup>3</sup>Discharge is a maximum daily average.

**Table 565.** 03522000 Little River at Wardell, Va.

LOCATION.--Latitude 37°02'16", Longitude 081°47'52", NAD27, Tazewell County, Hydrologic Unit 06010205, on right bank 50 ft upstream from Katie Branch, 0.6 mi downstream from Indian Creek, 0.5 mi northwest of Wardell, and 16.0 mi upstream from mouth.

DRAINAGE AREA.--102 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 2,033.01 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 1,000 ft<sup>3</sup>/s and extended above on basis of slope-area measurement at 1,800 ft<sup>3</sup>/s.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1950	February 2, 1950	8.05	1,830	1952	March 11, 1952	7.00	1,580
1951	December 7, 1950	6.21	1,370	1957	January 29, 1957	14.34	

**Table 566. 03523000 Big Cedar Creek near Lebanon, Va.**

(Formerly published as Cedar Creek near Lebanon.)

LOCATION.--Latitude 36°54'29", Longitude 082°02'20", NAD27, Russell County, Hydrologic Unit 06010205, 200 ft upstream from bridge on U.S. Highway 19, 2.3 mi east of Lebanon.

DRAINAGE AREA.--51.6 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 1,895.76 ft NGVD of 1929. Prior to Oct. 1, 1959, water-stage recorder at present site and datum. A datum of 1,928.96 ft NGVD of 1929, determined in 1954 and previously published, has been determined to be in error.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 2,300 ft<sup>3</sup>/s and extended above on basis of contracted-opening measurement at 2,700 ft<sup>3</sup>/s.

BANKFULL STAGE.--4 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1953	May 19, 1953	4.20	2,600	1971	May 7, 1971	3.80	2,390
1954	January 22, 1954	3.47	1,980	1972	September 30, 1972	3.95	2,480
1955	March 16, 1955	4.27	2,650	1973	March 17, 1973	4.56	2,780
1956	April 16, 1956	4.02	2,510	1974	December 26, 1973	3.80	2,390
1957	January 29, 1957	4.48	2,740	1975	March 30, 1975	4.35	2,680
1958	May 6, 1958	3.81	2,400	1976	June 2, 1976	4.42	2,710
1959	January 22, 1959	3.65	2,250	1977	April 5, 1977	5.83	4,000 <sup>1</sup>
1960	November 24, 1959	2.80	750	1991	March 30, 1991	3.05	1,160
1961	February 25, 1961	4.43	2,700	1992	December 2, 1991	3.57	2,160
1962	December 18, 1961	3.42	1,870	1993	March 24, 1993	4.07	2,530
1963	March 12, 1963	5.26	3,320	1994	February 11, 1994	4.50	2,500
1964	March 5, 1964	2.82	782	2001	July 29, 2001	3.54	1,340
1965	March 26, 1965	3.74	2,300	2002	March 18, 2002	6.93	6,570 <sup>1</sup>
1966	July 30, 1966	3.65	2,250	2003	February 16, 2003	4.26	2,130
1967	March 7, 1967	3.85	2,390	2004	November 19, 2003	5.28	3,540
1968	December 22, 1967	3.34	1,710	2005	December 10, 2004	3.32	1,140
1969	September 3, 1969	3.25	1,530	2006	January 18, 2006	3.31	1,130
1970	December 30, 1969	4.12	2,560	2007	March 2, 2007	2.99	849

<sup>1</sup>Discharge is an estimate.

**Table 567.** 03523500 Thompson Creek near Coulwood, Va.

LOCATION.--Latitude 36°59'21", Longitude 082°03'44", NAD27, Russell County, Hydrologic Unit 06010205, 0.6 mi southwest of Coulwood, 4,500 ft upstream from Breezers Branch, and 3.3 mi upstream from mouth.

DRAINAGE AREA.--14.1 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 1,573.22 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 300 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--4 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1942	August 9, 1942	4.15	376	1946	January 8, 1946	3.46	276
1943	December 29, 1942	4.18	384	1947	August 19, 1947	4.13	376
1944	February 17, 1944	5.37	628	1948	April 7, 1948	3.37	262
1945	February 17, 1945	3.75	315	1949	December 3, 1948	4.06	359

**Table 568. 03524000 Clinch River at Cleveland, Va.**

LOCATION.--Latitude 36°56'41", Longitude 082°09'18", NAD27, Russell County, Hydrologic Unit 06010205, on right bank 500 ft upstream from highway bridge at Cleveland, 0.5 mi downstream from Muddy Hollow, 2.3 mi downstream from Weaver Creek, 4.4 mi downstream from Thompson Creek, and at mile 271.6.

DRAINAGE AREA.--533 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 1,500.24 ft NGVD of 1929. Prior to Nov. 1, 1931, nonrecording gage on highway bridge 500 ft downstream at datum of 1,499.24 ft NGVD 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 26,000 ft<sup>3</sup>/s and extended above on basis of contracted-opening measurement at 31,000 ft<sup>3</sup>/s.

BANKFULL STAGE.--16 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

REMARKS.--Floods of 1862 approximately 5 ft lower than flood of Jan. 30, 1957, at site 1 mi downstream, information and high-water mark from local resident.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1862	February 1862	22.80 <sup>1</sup>	27,500 <sup>23</sup>	1963	March 12, 1963	22.70	27,200
1902	March 1, 1902	20.30 <sup>1</sup>	22,300 <sup>2</sup>	1964	March 5, 1964	10.03	6,900
1907	June 14, 1907	20.30 <sup>1</sup>	22,300 <sup>2</sup>	1965	March 27, 1965	14.00	11,700
1918	January 29, 1918	19.90 <sup>1,4</sup>	21,500 <sup>2</sup>	1966	May 2, 1966	10.27	7,260
1921	January 15, 1921	9.80 <sup>4</sup>	6,860	1967	March 7, 1967	16.75	13,700
1922	March 10, 1922	12.00 <sup>4</sup>	9,640	1968	December 22, 1967	10.57	6,570
1923	June 13, 1923	17.20 <sup>4</sup>	16,400	1969	February 2, 1969	8.55	4,600
1924	January 1, 1924	13.00 <sup>4</sup>	11,400	1970	December 31, 1969	18.63	16,100
1925	December 9, 1924	10.70 <sup>4</sup>	8,480	1971	May 7, 1971	18.82	16,400
1926	February 15, 1926	11.00 <sup>4</sup>	8,340	1972	April 15, 1972	16.77	13,700
1927	December 22, 1926	20.10 <sup>4</sup>	20,400	1973	March 17, 1973	19.94	20,500
1928	April 30, 1928	8.43 <sup>4</sup>	5,200	1974	December 26, 1973	15.25	12,200
1929	March 6, 1929	11.40 <sup>4</sup>	8,860	1975	March 30, 1975	18.88	18,400
1930	February 3, 1930	8.70 <sup>4</sup>	5,540	1976	January 1, 1976	9.68	5,680
1931	April 4, 1931	11.00 <sup>4</sup>	8,340	1977	April 5, 1977	26.40	34,500
1932	January 30, 1932	14.38	11,700	1978	January 26, 1978	20.87	21,200
1933	December 28, 1932	11.82	8,830	1979	January 21, 1979	17.85	16,200
1934	March 3, 1934	11.62	8,610	1980	January 23, 1980	10.19	6,190
1935	April 1, 1935	14.12	11,400	1981	May 29, 1981	8.66	4,700
1936	January 19, 1936	12.48	10,400	1982	February 4, 1982	11.90	8,100
1937	February 9, 1937	11.24	8,750	1983	December 16, 1982	8.64	5,060
1938	October 28, 1937	13.38	11,500	1984	May 7, 1984	19.46	18,700
1939	February 3, 1939	12.58	10,500	1985	February 2, 1985	13.66	10,000
1940	August 14, 1940	20.60	22,500	1986	November 29, 1985	9.22	5,500
1941	March 12, 1941	8.92	6,000	1987	April 17, 1987	16.10	13,300
1942	August 9, 1942	9.92	7,190	1988	February 5, 1988	5.61	2,430

1943	December 30, 1942	12.01	9,710	1989	May 6, 1989	13.01	9,290
1944	February 18, 1944	17.95	18,200	1990	February 10, 1990	11.40	7,590
1945	February 18, 1945	12.43	9,920	1991	March 30, 1991	10.56	6,770
1946	January 8, 1946	16.30	15,400	1992	December 2, 1991	13.66	10,000
1947	January 16, 1947	16.10	15,200	1993	March 24, 1993	14.04	10,400
1948	February 14, 1948	15.10	13,600	1994	February 11, 1994	18.54	17,100
1949	December 4, 1948	12.26	9,360	1995	January 16, 1995	12.97	9,240
1950	February 2, 1950	16.53	15,600	1996	January 27, 1996	15.21	12,100
1951	December 8, 1950	9.74	6,050	1997	March 3, 1997	13.43	9,750
1952	March 11, 1952	10.30	6,740	1998	April 17, 1998	16.19	13,800
1953	May 20, 1953	16.66	16,000	1999	January 24, 1999	8.24	5,010
1954	January 23, 1954	10.47	6,980	2000	July 6, 2000	6.61	3,580
1955	March 7, 1955	16.35	15,500	2001	July 30, 2001	17.28	15,500
1956	April 16, 1956	15.38	14,000	2002	March 18, 2002	21.81	24,300
1957	January 30, 1957	24.40	31,000	2003	February 16, 2003	16.07	13,600
1958	May 6, 1958	15.58	13,900	2004	November 20, 2003	17.85	16,500
1959	January 22, 1959	11.20	7,840	2005	December 10, 2004	10.76	7,490
1960	November 25, 1959	9.71	6,170	2006	April 8, 2006	10.46	7,180
1961	February 26, 1961	15.82	14,300	2007	April 15, 2007	7.58	4,410
1962	December 18, 1961	13.45	11,000				

<sup>1</sup>Reported by the Tennessee Valley Authority.

<sup>2</sup>Discharge is a historic peak.

<sup>3</sup>Month or day of occurrence is unknown or not exact.

<sup>4</sup>Gage height at different site and (or) datum.

**Table 569. 03524500 Guest River at Coeburn, Va.**

LOCATION.--Latitude 36°55'45", Longitude 082°27'23", NAD27, Wise County, Hydrologic Unit 06010205, on right bank 30 ft downstream from bridge on State Highway 72, 1.0 mi southeast of Coeburn, 1.4 mi upstream from Jaybird Branch, 1.8 mi downstream from Pine Camp Creek, and 6.3 mi upstream from mouth.

DRAINAGE AREA.--87.2 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 1,925.80 ft NGVD of 1929. October 1949 to September 1959 water-stage recorder at present site and datum. October 1979 to September 1981 water-stage recorder at present site and datum. October 1960 to September 1978, nonrecording gage (crest-stage gage) at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 3,500 ft<sup>3</sup>/s and extended above on basis of slope-area measurements at 5,900 ft<sup>3</sup>/s and 18,000 ft<sup>3</sup>/s.

BANKFULL STAGE.--6 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1950	January 31, 1950	9.93	3,300	1979	January 21, 1979	10.00	3,300
1951	December 8, 1950	9.18	2,500	1980	March 21, 1980	7.10	1,740
1952	March 23, 1952	9.02	2,400	1981	February 11, 1981	6.85	1,670
1953	February 21, 1953	9.30	2,550	1982	September 14, 1982	9.48	2,980
1954	January 16, 1954	6.83	1,510	1983	December 16, 1982	6.32	1,450
1955	March 16, 1955	10.26	3,620	1984	May 7, 1984	12.25	4,900
1956	April 16, 1956	10.83	4,020	1985	February 1, 1985	6.65	1,590
1957	January 29, 1957	14.20	6,360	1986	February 18, 1986	7.61	2,020
1958	May 7, 1958	8.05	2,080	1987	January 19, 1987	7.16	1,810
1959	January 22, 1959	8.89	2,560	1988	February 4, 1988	6.70	1,610
1960	March 30, 1960	6.61	1,440	1989	May 6, 1989	9.71	3,120
1961	February 25, 1961	9.96	3,300	1990	February 10, 1990	8.93	2,680
1962	February 28, 1962	9.44	2,880	1991	March 30, 1991	8.46	2,430
1963	March 12, 1963	15.87	7,720	1992	December 2, 1991	9.55	3,030
1964	March 5, 1964	8.96	2,620	1993	March 23, 1993	8.42	2,410
1965	March 26, 1965	10.53	3,650	1994	March 28, 1994	12.88	5,400
1966	February 13, 1966	8.15	2,160	1995	May 14, 1995	8.30	2,120
1967	March 7, 1967	15.01	7,000	1996	January 17, 1996	4.80	746
1968	March 12, 1968	8.13	2,110	1997	December 1, 1996	9.61	2,890
1969	February 2, 1969	5.43	965	1998	April 17, 1998	10.52	3,530
1970	December 31, 1969	15.27	7,220	1999	January 24, 1999	6.29	1,240
1971	May 7, 1971	9.88	3,220	2000			1,710 <sup>12</sup>
1972	January 5, 1972	8.54	2,340	2001	February 17, 2001	8.42	2,190
1973	March 17, 1973	13.21	5,570	2002	March 18, 2002	16.40	9,250
1974	January 11, 1974	10.96	3,970	2003	February 16, 2003	13.93	6,340
1975	March 30, 1975	11.17	4,120	2004	November 19, 2003	8.62	2,290
1976	March 30, 1976	8.29	2,200	2005	December 1, 2004	8.17	2,060

1977	April 5, 1977	20.95	18,000	2006	April 8, 2006	8.09	1,990
1978	January 26, 1978	11.11	4,080	2007	April 15, 2007	10.98	3,880

---

<sup>1</sup>Discharge is less than indicated value, which is minimum recordable discharge at this site.

<sup>2</sup>Month or day of occurrence is unknown or not exact.

**Table 570. 03524550 Guest River near Miller Yard, Va.**

LOCATION.--Latitude 36°52'43", Longitude 082°24'22", NAD27, Wise County, Hydrologic Unit 06010205, on left bank, 850 ft upstream from footbridge on Guest River Gorge Trail, 210 ft downstream from Lick Branch, and 1,200 ft upstream from mouth.

DRAINAGE AREA.--100 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 1,400 ft NGVD of 1929, from topographic map.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

<b>Water year</b>	<b>Date</b>	<b>Gage height (ft)</b>	<b>Discharge (ft<sup>3</sup>/s)</b>	<b>Water year</b>	<b>Date</b>	<b>Gage height (ft)</b>	<b>Discharge (ft<sup>3</sup>/s)</b>
Annual maximum stages and discharges							
1997	December 1, 1996	7.20	3,970	1998	April 17, 1998	7.65	4,660

**Table 571. 03524900 Stony Creek at Ka, Va.**

LOCATION.--Latitude 36°48'57", Longitude 082°37'02", NAD27, Scott County, Hydrologic Unit 06010205, at Ka, on left bank 300 ft upstream from bridge on State Highway 619, 600 ft downstream from Straight Fork, and 4.2 mi upstream from mouth.

DRAINAGE AREA.--30.8 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 1,510 ft NGVD of 1929, from topographic map. Prior to Oct. 1, 1981, water-stage recorder at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 300 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1981	June 6, 1981	4.39	771	1994	March 28, 1994	7.81	10,800
1982	September 14, 1982	7.23	7,620	1995	May 14, 1995	5.71	2,570
1983	December 16, 1982	5.33	1,890	1996	January 27, 1996	6.56	4,860
1984	May 7, 1984	7.31	8,010	1997	December 1, 1996	6.65	5,180
1985		5.03 <sup>1</sup>	1,450 <sup>2,3</sup>	1998	March 19, 1998	6.00	3,200
1986	November 29, 1985	6.17	3,650	1999		5.03 <sup>4</sup>	1,440 <sup>2,3</sup>
1987	January 19, 1987	5.94	3,060	2000		5.03 <sup>4</sup>	1,440 <sup>2,3</sup>
1988	February 4, 1988	5.73	2,610	2002	March 18, 2002	9.41	4,950
1989	May 6, 1989	5.90	2,970	2003	February 16, 2003	7.51	2,800
1990	February 10, 1990	6.00	3,200	2004	May 31, 2004	6.56	1,990
1991	December 24, 1990	5.43	2,050	2005	December 1, 2004	5.69	1,380
1992	December 2, 1991	6.32	4,090	2006	April 8, 2006	5.55	1,290
1993	February 21, 1993	6.33	4,120	2007	October 28, 2006	5.59	1,320

<sup>1</sup>Gage height is an estimate.

<sup>2</sup>Discharge is less than indicated value, which is minimum recordable discharge at this site.

<sup>3</sup>Month or day of occurrence is unknown or not exact.

<sup>4</sup>Gage height below minimum recordable elevation.

**Table 572. 03525000 Stony Creek at Fort Blackmore, Va.**

LOCATION.--Latitude 36°46'30", Longitude 082°34'50", NAD27, Scott County, Hydrologic Unit 06010205, 1,000 ft upstream from bridge on State Highway 66, at Fort Blackmore.

DRAINAGE AREA.--41.5 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 1,269.78 ft NGVD of 1929. Prior to Oct. 1, 1952, water-stage recorder at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 1,200 ft<sup>3</sup>/s and extended above on basis of slope-area measurements at 4,700 ft<sup>3</sup>/s.

BANKFULL STAGE.--9 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1918	January 28, 1918	9.00 <sup>1</sup>	12,000 <sup>2</sup>	1964	March 5, 1964	6.19	3,880
1950	January 30, 1950	5.85	2,030	1965	March 26, 1965	6.64	4,780
1951	December 7, 1950	5.30	2,450	1966	February 13, 1966	5.41	2,620
1952	March 23, 1952	5.57	2,850	1967	March 7, 1967	7.83	7,990
1953	February 1953	6.08	3,660 <sup>3</sup>	1968	March 12, 1968	4.44	1,440
1954			1,000 <sup>3,4</sup>	1969	February 2, 1969	3.91	928
1955			1,500 <sup>3,4</sup>	1970	December 30, 1969	8.04	8,640
1956	April 16, 1956	6.55	4,600	1971	May 7, 1971	4.85	1,850
1957	January 29, 1957	6.12	3,740	1972	January 20, 1972	3.63	728
1958	May 6, 1958	6.40	4,300	1973	March 17, 1973	6.60	4,700
1959	March 27, 1959	4.64	1,640	1974	January 11, 1974	5.37	2,560
1960	November 28, 1959	5.60	2,900	1975	March 30, 1975	5.88	2,080
1961	February 25, 1961	6.25	4,000	1976	March 30, 1976	5.47	1,830
1962	February 28, 1962	5.81	3,220	1977	April 5, 1977	8.29	9,520
1963	March 12, 1963	8.46	10,100				

<sup>1</sup>Reported by the Tennessee Valley Authority.

<sup>2</sup>Discharge is a historic peak.

<sup>3</sup>Month or day of occurrence is unknown or not exact.

<sup>4</sup>Discharge is an estimate.

**Table 573.** 03525500 Clinch River at Clinchport, Va.

LOCATION.--Latitude 36°40'25", Longitude 082°44'50", NAD27, Scott County, Hydrologic Unit 06010205, at Clinchport, 500 ft upstream from Virginia and Southwestern Railroad (Southern Railway) bridge and 0.2 mi downstream from Stock Creek.

DRAINAGE AREA.--987 mi<sup>2</sup>.

GAGE.--Nonrecording gage (staff gage). Datum of gage is 1,210 ft NGVD of 1929, approximated on basis of unadjusted levels.

STAGE-DISCHARGE RELATION.--Determined from current-meter measurements below 1,500 ft<sup>3</sup>/s.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1907	June 14, 1907	19.50	33,000	1909	May 1, 1909	10.50	15,000
1908	April 2, 1908	12.50	19,000				

**Table 574.** 03525800 Copper Creek tributary 1 near Dickensonville, Va.

LOCATION.--Latitude 36°49'50", Longitude 082°12'40", NAD27, Russell County, Hydrologic Unit 06010205, at culvert on U.S. Highway Alternate 58, 1.1 mi southeast of Dickensonville.

DRAINAGE AREA.--0.68 mi<sup>2</sup>.

GAGE.--Water-stage recorder (flood hydrograph recorder). Datum of gage is 1,950 ft NGVD of 1929 from topographic map.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--3 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1967		4.00 <sup>1</sup>	60.0 <sup>2,3</sup>	1972	April 12, 1972	4.90	96.0
1968		4.00 <sup>1</sup>	60.0 <sup>2,3</sup>	1973	March 16, 1973	5.50	125
1969		4.00 <sup>1</sup>	60.0 <sup>2,3</sup>	1974	December 26, 1973	5.05	102
1970		4.00 <sup>1</sup>	60.0 <sup>2,3</sup>	1975	March 30, 1975	6.45	177
1971	July 29, 1971	5.49	124				

<sup>1</sup>Gage height below minimum recordable elevation.

<sup>2</sup>Discharge is less than indicated value, which is minimum recordable discharge at this site.

<sup>3</sup>Month or day of occurrence is unknown or not exact.

**Table 575. 03526000 Copper Creek near Gate City, Va.**

LOCATION.--Latitude 36°40'26", Longitude 082°33'57", NAD27, Scott County, Hydrologic Unit 06010205, on right bank 50 ft upstream from bridge on State Highway 619, 0.9 mi upstream from Plank Camp Creek, 1.1 mi downstream from Obeyes Creek, and 2.6 mi northeast of Gate City.

DRAINAGE AREA.--106 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 1,301.95 ft NGVD of 1929 (Virginia Department of Transportation bench mark). Prior to Aug. 30, 1953, nonrecording gage on highway bridge at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 3,500 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--7 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1948	February 14, 1948	10.10	3,310	1978	January 26, 1978	12.36	5,900
1949	December 3, 1948	10.30	3,490	1979	January 21, 1979	9.93	3,160
1950	January 30, 1950	13.00	6,800	1980	March 21, 1980	9.02	2,450
1951	December 8, 1950	8.00	1,590	1981	June 6, 1981	6.63	1,080
1952	January 28, 1952	8.46	1,980	1982	February 3, 1982	9.17	2,560
1953	May 19, 1953	9.76	3,040	1983	April 25, 1983	7.77	1,670
1954	January 16, 1954	7.59	1,340	1984	May 7, 1984	12.00	5,400
1955	March 16, 1955	9.50	2,780	1985	February 2, 1985	9.65	2,910
1956	April 16, 1956	10.35	3,580	1986	November 29, 1985	7.62	1,590
1957	January 30, 1957	9.98	3,200	1987	April 16, 1987	8.61	2,170
1958	May 6, 1958	10.98	4,100	1988	February 4, 1988	7.48	1,510
1959	January 22, 1959	9.40	2,720	1989	June 17, 1989	10.03	3,250
1960	November 28, 1959	8.33	2,060	1990	March 17, 1990	8.68	2,220
1961	February 25, 1961	9.61	2,870	1991	March 30, 1991	8.53	2,110
1962	February 28, 1962	8.77	2,360	1992	December 2, 1991	9.38	2,710
1963	March 12, 1963	13.14	6,940	1993	March 24, 1993	8.79	2,290
1964	March 15, 1964	7.55	1,640	1994	February 11, 1994	11.02	4,140
1965	March 26, 1965	9.67	2,950	1995	January 16, 1995	7.35	1,310
1966	July 30, 1966	8.78	2,360	1996	January 27, 1996	10.33	3,620
1967	March 7, 1967	9.93	3,160	1997	March 3, 1997	9.12	2,550
1968	December 22, 1967	8.49	2,170	1998	April 17, 1998	11.51	4,880
1969	June 15, 1969	7.88	1,810	1999		7.32 <sup>1</sup>	1,360 <sup>2,3</sup>
1970	April 28, 1970	12.59	6,230	2000		7.32 <sup>1</sup>	1,360 <sup>2,3</sup>
1971	May 7, 1971	10.82	3,960	2001	July 29, 2001	8.85	2,350
1972	April 12, 1972	8.94	2,400	2002	March 18, 2002	13.48	7,520
1973	March 17, 1973	11.67	4,940	2003	February 16, 2003	10.01	3,320
1974	January 1, 1974	10.76	3,890	2004	November 19, 2003	9.64	2,980
1975	March 30, 1975	13.17	7,040	2005	December 10, 2004	8.58	2,150
1976	December 31, 1975	8.39	2,020	2006	April 8, 2006	8.00	1,760

---

1977	April 5, 1977	13.57	7,660	2007	7.43 <sup>1</sup>	1,420 <sup>2,3</sup>
------	---------------	-------	-------	------	-------------------	----------------------

---

<sup>1</sup>Gage height below minimum recordable elevation.

<sup>2</sup>Discharge is less than indicated value, which is minimum recordable discharge at this site.

<sup>3</sup>Month or day of occurrence is unknown or not exact.

**Table 576. 03527000 Clinch River at Speers Ferry, Va.**

LOCATION.--Latitude 36°38'55", Longitude 082°45'02", NAD27, Scott County, Hydrologic Unit 06010205, on right bank 200 ft downstream from bridge on U.S. Highway 58, 0.5 mi downstream from Copper Creek, 0.8 mi northwest of Speers Ferry, 1.8 mi south of Clinchport, and 211.0 mi upstream from mouth.

DRAINAGE AREA.--1,123 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 1,196.52 ft NGVD of 1929. Prior to Nov. 23, 1926, nonrecording gage at site 400 ft upstream at datum of 1,198.02 ft NGVD of 1929. Nov. 23, 1926, to Nov. 6, 1931 nonrecording gage at present site and datum. Nov. 7, 1931, to Sept. 30, 1976 water-stage recorder at present site and datum. Oct. 1, 1978, to Sept. 30, 1981 water-stage recorder at present site and datum. Oct. 1, 1976, to Sept. 30, 1978 crest-stage gage at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 44,000 ft<sup>3</sup>/s and extended above on basis of slope-area measurements at 49,000 ft<sup>3</sup>/s and 89,000 ft<sup>3</sup>/s.

BANKFULL STAGE.--20 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1862	February 1862	33.00 <sup>1</sup>		1961	February 26, 1961	19.81	23,700
1902	February 28, 1902	26.60 <sup>2</sup>		1962	March 1, 1962	19.32	22,600
1921	December 14, 1920	9.35	10,500	1963	March 12, 1963	29.93	46,800
1922	March 10, 1922	14.70	19,200	1964	March 5, 1964	14.55	13,300
1923	February 3, 1923	24.35	37,200	1965	March 26, 1965	21.00	25,300
1924	January 1, 1924	15.20	20,400	1966	May 2, 1966	14.94	13,700
1925	December 9, 1924	18.00	25,400	1967	March 7, 1967	24.43	33,500
1926	February 15, 1926	11.75	14,700	1968	December 23, 1967	14.37	13,000
1927	December 22, 1926	24.70	35,000	1969	February 3, 1969	12.58	10,700
1928	May 1, 1928	10.60	9,560	1970	December 31, 1969	27.43	40,700
1929	March 24, 1929	20.60	25,400	1971	May 8, 1971	23.61	31,600
1930	November 18, 1929	14.00	13,600	1972	January 22, 1972	18.56	19,600
1931	April 5, 1931	12.30	11,500	1973	March 17, 1973	28.19	42,600
1932	January 30, 1932	23.10	30,500	1974	January 11, 1974	22.50	28,900
1933	December 29, 1932	17.30	18,000	1975	March 30, 1975	25.19	35,400
1934	March 4, 1934	16.50	17,000	1976	March 30, 1976	15.38	14,300
1935	April 2, 1935	17.80	20,500	1977	April 5, 1977	36.69	89,000
1936	April 7, 1936	17.51	20,700	1978	January 26, 1978	27.23	40,300
1937	January 19, 1937	18.42	22,700	1979	January 21, 1979	22.77	29,500
1938	October 29, 1937	13.78	13,900	1980	March 21, 1980	15.38	14,300
1939	February 4, 1939	19.54	23,900	1981	June 7, 1981	10.38	8,230
1940	August 15, 1940	20.98	25,100	1982	February 18, 1982	16.10	15,300
1941	March 12, 1941	10.29	8,240	1983	April 25, 1983	11.14	9,110
1942	August 9, 1942	17.50	18,600	1984	May 7, 1984	26.54	37,900
1943	December 30, 1942	17.89	20,700	1985	February 2, 1985	18.11	18,700
1944	February 18, 1944	23.15	30,700	1986	November 29, 1985	14.64	13,400

1945	February 18, 1945	15.86	16,600	1987	April 17, 1987	20.55	23,700
1946	January 8, 1946	23.50	31,000	1988	February 5, 1988	10.85	8,770
1947	January 16, 1947	22.40	29,400	1989	May 6, 1989	20.42	23,400
1948	February 14, 1948	22.70	30,000	1990	February 10, 1990	17.65	17,900
1949	December 4, 1948	14.60	13,900	1991	March 30, 1991	14.80	13,600
1950	February 2, 1950	23.10	31,100	1992	December 3, 1991	22.41	27,800
1951	December 8, 1950	14.58	13,900	1993	March 25, 1993	17.36	17,300
1952	March 23, 1952	15.43	15,300	1994	February 11, 1994	27.00	39,100
1953	May 20, 1953	19.76	23,700	1995	January 16, 1995	17.13	16,900
1954	January 23, 1954	12.95	11,600	2002	March 18, 2002	32.45	61,600
1955	March 17, 1955	20.67	25,600	2003	February 16, 2003	24.50	29,100
1956	April 16, 1956	21.90	28,400	2004	November 20, 2003	18.72	19,500
1957	January 30, 1957	28.92	45,300	2005	December 10, 2004	15.37	14,700
1958	May 7, 1958	23.95	33,100	2006	April 9, 2006	15.62	15,000
1959	January 22, 1959	15.70	15,800	2007	April 16, 2007	16.34	15,700
1960	November 28, 1959	15.04	14,600				

---

<sup>1</sup>Reported by the Tennessee Valley Authority.

<sup>2</sup>Reported by the National Weather Service.

**Table 577.** 03527500 North Fork Clinch River at Duffield, Va.

LOCATION.--Latitude 36°42'40", Longitude 082°47'45", NAD27, Scott County, Hydrologic Unit 06010205, on right bank at upstream side of bridge on U.S. Highways 58 and 421, 0.2 mi downstream from Spurlock Branch, 0.5 mi south of Duffield, and 1.6 mi upstream from Harris Branch.

DRAINAGE AREA.--23.1 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 1,314.14 ft NGVD of 1929. Nov. 16, 1950, to Sept. 30, 1952, crest-stage gage at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 700 ft<sup>3</sup>/s.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1953	February 21, 1953	7.32	782	1957	January 28, 1957	7.34	789
1954	January 16, 1954	6.82	702	1958	May 6, 1958	7.46	811
1955	March 16, 1955	7.24	766	1959	January 21, 1959	6.85	705
1956	April 15, 1956	7.40	800				

**Table 578. 03529500 Powell River at Big Stone Gap, Va.**

LOCATION.--Latitude 36°52'08", Longitude 082°46'32", NAD27, Wise County, Hydrologic Unit 06010206, on right bank 10 ft upstream from bridge on U.S. Highway 23 at Big Stone Gap, 1 mi upstream from South Fork Powell River, 2.5 mi downstream from Pigeon Creek, and at mile 179.2.

DRAINAGE AREA.--112 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 1,459.07 ft NGVD of 1929. Prior to Apr. 27, 1948, nonrecording gage at present site and datum. Apr. 27, 1948, to Sept. 30, 1959 water-stage recorder at present site and datum. Oct. 1, 1979 to Sept. 30, 1981 water-stage recorder at present site and datum. Oct. 1, 1959, to Sept. 30, 1977 crest-stage gage at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 2,800 ft<sup>3</sup>/s and extended above on basis of slope-area measurements at 10,000 ft<sup>3</sup>/s and 24,000 ft<sup>3</sup>/s.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1945	February 13, 1945	6.00	4,900	1973	March 16, 1973	7.83	6,340
1946	January 7, 1946	9.80	9,200	1974	November 27, 1973	7.86	6,420
1947	January 15, 1947	7.00	5,300	1975	March 30, 1975	6.83	5,100
1948	February 13, 1948	9.34	8,510	1976	March 30, 1976	5.53	3,740
1949	March 18, 1949	6.25	4,800	1977	April 5, 1977	16.50	24,000
1950	January 30, 1950	6.36	4,960	1979	December 9, 1978	7.10	4,940
1951	December 7, 1950	6.27	4,800	1980	March 21, 1980	5.71	3,310
1952	December 15, 1951	6.97	5,260	1981	June 6, 1981	4.50	2,040
1953	February 21, 1953	7.04	5,350	1982	September 14, 1982	7.83	5,950
1954	January 16, 1954	4.89	2,880	1983	May 23, 1983	4.69	2,220
1955	March 16, 1955	6.62	5,360	1984	May 7, 1984	10.93	11,300
1956	April 15, 1956	7.95	6,540	1985	February 1, 1985	4.71	2,240
1957	January 29, 1957	9.67	9,000	1986	February 18, 1986	6.08	3,700
1958	May 6, 1958	5.70	3,770	1987	November 9, 1986	5.93	3,530
1959	January 21, 1959	6.71	4,950	1988	December 25, 1987	4.98	2,500
1960	March 30, 1960	5.98	4,080	1989	June 16, 1989	7.92	6,080
1961	February 25, 1961	6.27	4,420	1990	February 10, 1990	6.87	4,640
1962	February 28, 1962	6.88	5,160	1991	March 23, 1991	7.20	5,070
1963	March 12, 1963	13.72	16,800	1992	December 2, 1991	8.49	6,960
1964	March 15, 1964	5.67	3,740	1993	February 21, 1993	6.81	4,560
1965	March 26, 1965	6.94	5,230	1994	February 11, 1994	10.32	10,200
1966	February 13, 1966	8.92	7,890	2002	March 18, 2002	12.07	13,000
1967	March 7, 1967	10.82	10,700	2003	February 16, 2003	10.54	9,930
1968	March 12, 1968	5.18	3,200	2004	May 31, 2004	8.98	7,150
1969	January 20, 1969	3.68	1,680	2005	December 1, 2004	6.36	3,410
1970	December 30, 1969	10.39	10,100	2006	April 8, 2006	6.02	3,020

1971	May 7, 1971	6.24	4,390	2007	April 15, 2007	7.34	4,670
1972	January 20, 1972	5.74	3,810				

---

**Table 579. 03530000 South Fork Powell River at Big Stone Gap, Va.**

LOCATION.--Latitude 36°51'54", Longitude 082°46'16", NAD27, Wise County, Hydrologic Unit 06010206, at bridge on U.S. Highway 23, at Big Stone Gap.

DRAINAGE AREA.--39.7 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 1,470 ft NGVD of 1929, from topographic map. Prior to September 1947, nonrecording gage at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 2,500 ft<sup>3</sup>/s and extended above on basis of slope-area measurements at 4,500 ft<sup>3</sup>/s and 8,000 ft<sup>3</sup>/s.

BANKFULL STAGE.--6 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1945	February 13, 1945	7.80	2,960	1963	March 12, 1963	9.94	4,800
1946	January 7, 1946	8.00	3,100	1964	March 15, 1964	6.05	1,780
1947	January 15, 1947	7.25	2,540	1965	March 26, 1965	7.90	3,030
1951	December 7, 1950	6.90	2,330	1966	February 13, 1966	5.50	1,480
1952	December 15, 1951	6.40	2,020	1967	March 7, 1967	9.20	4,100
1953	February 21, 1953	6.65	2,140	1968	March 12, 1968	5.50	1,480
1954			1,000 <sup>1,2</sup>	1969	January 20, 1969	3.60	550
1955			2,000 <sup>1,2</sup>	1970	December 30, 1969	9.72	4,620
1956	April 16, 1956	7.05	2,400	1971	July 20, 1971	8.18	3,230
1957	January 29, 1957	8.62	3,550	1972	January 21, 1972	5.30	1,380
1958	May 6, 1958	6.10	1,840	1973	March 16, 1973	7.85	3,000
1959	March 27, 1959	4.84	1,130	1974	June 22, 1974	8.27	3,290
1960	November 28, 1959	6.08	1,840	1975	March 30, 1975	7.10	2,470
1961	February 25, 1961	6.80	2,260	1977	April 5, 1977	12.43	8,000 <sup>3</sup>
1962	February 28, 1962	6.60	2,140				

<sup>1</sup>Discharge is an estimate.

<sup>2</sup>Month or day of occurrence is unknown or not exact.

<sup>3</sup>Discharge is a historic peak.

**Table 580. 03530500 North Fork Powell River at Pennington Gap, Va.**

LOCATION.--Latitude 36°46'26", Longitude 083°01'59", NAD27, Lee County, Hydrologic Unit 06010206, near right bank on downstream side of bridge on U.S. Highway 621, 0.8 mi north of Pennington Gap, 1.3 mi downstream from Straight Creek, and 4.7 mi upstream from mouth.

DRAINAGE AREA.--71.2 mi<sup>2</sup>.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 1,363.02 ft NGVD of 1929. Prior to Dec. 7, 1949, staff gage at present site and datum. Dec. 7, 1949, to Sept. 30, 1951, wire-weight gage at present site and datum. Oct. 1, 1951, to Sept. 30, 1977, crest-stage gage at present site and datum. Oct. 1, 1978, to Sept. 30, 1981, water-stage recorder at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 2,300 ft<sup>3</sup>/s and extended above on basis of slope-area measurements at 4,500 ft<sup>3</sup>/s, 9,700 ft<sup>3</sup>/s, and 17,000 ft<sup>3</sup>/s.

BANKFULL STAGE.--8 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1945	February 13, 1945	7.60	3,760	1973	March 16, 1973	10.82	7,410
1946	January 7, 1946	12.10	9,700	1974	November 27, 1973	10.20	6,420
1947	January 15, 1947	7.90	3,940	1975	March 30, 1975	8.84	4,640
1948	February 14, 1948	9.50	5,400	1976	March 30, 1976	4.80	1,940
1949	January 5, 1949	7.70	3,820	1977	April 5, 1977	16.14	17,000
1950	December 13, 1949	10.00	6,100	1979	December 4, 1978	7.66	3,460
1951	February 1, 1951	7.10	3,460	1980	March 21, 1980	7.17	3,040
1952	December 15, 1951	8.45	4,250	1981	June 6, 1981	7.45	3,290
1953	January 22, 1953	8.20	4,150	1982	January 14, 1982	6.42	2,440
1954	January 16, 1954	6.00	3,000	1983	May 23, 1983	5.07	1,530
1955	March 16, 1955	7.45	3,800	1984	May 7, 1984	10.64	7,020
1956	April 16, 1956	8.12	4,100	1985	February 1, 1985	5.35	1,700
1957	January 29, 1957	8.70	4,430	1986	February 18, 1986	6.31	2,360
1958	May 6, 1958	8.00	4,050	1987	November 9, 1986	7.53	3,360
1959	January 22, 1959	8.60	4,420	1988	December 25, 1987	6.71	2,660
1960	November 28, 1959	6.82	3,280	1989	June 16, 1989	7.97	3,770
1961	February 25, 1961	7.65	3,760	1990	February 10, 1990	6.56	2,550
1962	February 28, 1962	8.10	4,070	1991	December 23, 1990	8.09	3,890
1963	March 12, 1963	13.65	13,100	1992	December 2, 1991	9.17	5,100
1964	March 15, 1964	6.15	2,850	1993	February 21, 1993	6.83	2,760
1965	March 26, 1965	8.55	4,420	1994	February 11, 1994	10.99	7,520
1966	March 13, 1966	11.60	8,780	1995	May 14, 1995	6.62	2,800
1967	March 7, 1967	11.08	7,880	2001	February 17, 2001	6.12	2,220
1968	December 22, 1967	5.69	2,620	2002	March 18, 2002	15.04	14,700
1969	January 20, 1969	4.50	1,700	2003	February 16, 2003	12.17	9,380
1970	December 30, 1969	12.60	8,300	2004	March 6, 2004	7.55	3,520

1971	May 7, 1971	7.85	3,910	2005	December 1, 2004	7.66	3,610
1972	July 30, 1972	7.33	3,600	2006	April 8, 2006	8.88	4,760

---

**Table 581. 03531000 Powell River near Pennington Gap, Va.**

LOCATION.--Latitude 36°44'04", Longitude 082°59'56", NAD27, Lee County, Hydrologic Unit 06010206, at highway bridge 1,000 ft downstream from North Fork and 3 mi southeast of Pennington Gap.

DRAINAGE AREA.--289 mi<sup>2</sup>.

GAGE.--Nonrecording gage (chain gage). Datum of gage is 1,320 ft NGVD of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 4,300 ft<sup>3</sup>/s and extended above.

BANKFULL STAGE.--Not determined.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1921	December 14, 1920	13.00	9,900	1927	December 21, 1926	22.60	22,000
1922	March 10, 1922	13.40	11,600	1928	June 29, 1928	17.38	15,200
1923	February 3, 1923	19.50	18,000	1929	March 23, 1929	27.66	28,900
1924	February 20, 1924	10.74	8,310	1930	May 19, 1930	12.98	9,900
1925	February 15, 1925	17.00	14,700	1931	April 22, 1931	11.20	7,740
1926	October 25, 1925	16.00	13,500				

**Table 582. 03531500 Powell River near Jonesville, Va.**

LOCATION.--Latitude 36°39'43", Longitude 083°05'42", NAD27, Lee County, Hydrologic Unit 06010206, on right bank 175 ft downstream from highway bridge, 2 mi southeast of Jonesville, 10 mi upstream from Wallen Creek, and at mile 143.1.

DRAINAGE AREA.--319 mi<sup>2</sup>.

GAGE.--Water-stage recorder. Datum of gage is 1,259.08 ft NGVD of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 20,300 ft<sup>3</sup>/s and extended above on basis of slope-area measurement at 57,000 ft<sup>3</sup>/s.

BANKFULL STAGE.--15 ft.

REGULATION.--High-flow conditions at this site are considered unregulated.

Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Water year	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
Annual maximum stages and discharges							
1918	January 1918	33.00		1970	December 31, 1969	32.16	28,400
1932	January 30, 1932	25.64	22,900	1971	May 7, 1971	19.94	11,900
1933	December 28, 1932	16.43	9,230	1972	January 21, 1972	16.81	9,440
1934	March 3, 1934	17.93	10,500	1973	March 17, 1973	26.75	19,700
1935	March 12, 1935	18.37	11,000	1974	November 28, 1973	24.95	17,500
1936	April 6, 1936	22.07	16,200	1975	March 30, 1975	20.10	12,100
1937	February 9, 1937	22.59	17,000	1976	March 30, 1976	18.52	10,600
1938	March 3, 1938	11.32	5,660	1977	April 5, 1977	44.32	57,000
1939	February 3, 1939	24.28	20,200	1978	October 2, 1977	22.21	14,400
1940	April 20, 1940	14.02	7,470	1979	January 21, 1979	18.70	10,800
1941	July 13, 1941	8.72	4,010	1980	March 21, 1980	15.98	8,860
1942	August 9, 1942	14.09	7,540	1981	June 7, 1981	13.02	6,910
1943	April 19, 1943	18.58	11,300	1982	September 14, 1982	14.30	7,720
1944	February 18, 1944	25.64	22,900	1983	May 23, 1983	11.20	5,680
1945	February 13, 1945	16.48	9,310	1984	May 7, 1984	25.59	18,400
1946	January 8, 1946	30.80	30,000	1985	February 1, 1985	11.14	5,640
1947	January 16, 1947	20.65	13,800	1986	February 18, 1986	15.34	8,430
1948	February 14, 1948	25.85	20,600	1987	November 9, 1986	15.10	8,270
1949	January 6, 1949	17.07	9,800	1988	December 25, 1987	11.78	6,050
1950	January 31, 1950	22.53	16,500	1989	June 16, 1989	17.62	10,000
1951	December 8, 1950	16.20	9,010	1990	February 10, 1990	16.28	9,090
1952	December 15, 1951	20.74	14,000	1991	March 23, 1991	16.20	9,030
1953	February 21, 1953	19.45	11,400	1992	December 3, 1991	20.89	13,000
1954	January 16, 1954	14.27	7,680	1993	February 22, 1993	15.40	8,470
1955	March 16, 1955	19.38	11,400	1994	February 11, 1994	26.59	19,700
1956	April 16, 1956	23.53	15,800	1995	May 14, 1995	16.02	8,900
1957	January 30, 1957	26.87	19,800	1996	January 19, 1996	16.70	9,380
1958	December 8, 1957	18.64	10,700	1997	December 1, 1996	19.26	11,400
1959	January 22, 1959	18.86	10,900	1998	April 17, 1998	21.55	13,700

1960	November 28, 1959	16.47	9,220	1999	January 9, 1999	8.80	4,230
1961	February 25, 1961	17.79	10,100	2000	April 4, 2000	12.20	6,320
1962	February 28, 1962	19.16	11,200	2001	July 29, 2001	14.51	7,870
1963	March 12, 1963	33.36	31,100	2002	March 18, 2002	32.40	28,700
1964	March 15, 1964	14.73	8,000	2003	February 16, 2003	30.34	25,100
1965	March 26, 1965	21.60	13,800	2004	May 31, 2004	17.97	10,300
1966	February 13, 1966	21.70	13,900	2005	December 1, 2004	14.65	7,960
1967	March 7, 1967	29.03	22,800	2006	April 8, 2006	17.02	9,600
1968	December 22, 1967	12.44	6,540	2007	April 15, 2007	18.70	10,900
1969	January 20, 1969	8.95	4,270				

---

## Glossary<sup>3</sup>

**Bankfull stage** is the elevation at which the active channel meets the actively forming floodplain in the current climatic regime. It is the stage at which the stream first overflows its natural banks formed by floods with 1- to 3-year recurrence intervals.

**Cubic foot per second (ft<sup>3</sup>/s)** is a measure of the rate of water discharge representing a volume of 1 cubic foot of water passing a given point in 1 second.

**Discharge** is the volume of water that passes a given point within a given period of time.

**Drainage area** is the area measured in a horizontal plane and enclosed by a topographic divide from which direct surface runoff from precipitation normally drains by gravity into a stream, upstream from a specified location.

**Gage** a water-level measuring device at a streamflow-gaging station.

**Gage height** is the water-surface elevation referred to an arbitrary gage datum. Gage height is often used interchangeably with the more general term stage although gage height is more appropriate when used with a reading on a gage.

**Historic peak** a peak-flow measurement collected outside the systematic period of record of data collection. Generally, a high-magnitude peak of a noteworthy flood.

**Hydrologic unit** a geographic area representing part or all of a surface-water drainage basin or distinct hydrologic feature as delineated on a State Hydrologic Unit Map prepared by the U.S. Geological Survey.

**Location** a description of the placement of a streamflow-gaging station. Location may include the latitude, longitude, datum, county and hydrologic unit code of the station.

**Regulation** the artificial manipulation of the flow of a stream.

**Remarks** additional information enriching the characterization of a streamflow-gaging station.

**Stage-discharge relation** the relation between gage height and the rate at which water flows in a stream. It is defined by measurements of stage and discharge, by theoretical assumptions based on hydraulic properties of the stream channel or manmade flow-confining structures, or by a combination of both.

---

<sup>3</sup> Based on definitions in Langbein and Iseri (1960) and U.S. Geological Survey (2007).

**Streamflow-gaging station** a particular site on a stream, canal, lake, or reservoir where systematic observations of water heights and water discharges are made.

**Water year** the 12-month period from October 1 through September 30. The date of the water year is designated by the calendar year in which the period ends and includes 9 of the 12 months. A water year beginning October 1, 2005, and ending September 30, 2006, is called the “2006 water year.”

# Index

## A

Abingdon, 674  
Abrams Creek at Winchester, Va., 14  
Abrams Creek near Winchester, Va., 15  
Accotink, 142, 150  
Accotink Creek at Fairfax, Va., 143  
Accotink Creek near Accotink Station, Va., 149  
Accotink Creek near Annandale, Va., 146  
Accotink Station, 149  
Aden, 161, 162  
Afton, 364  
Alexandria, 125, 132, 133, 135, 136, 137, 139, 140  
Allen Creek near Boydton, Va., 583  
Allisonia, 604, 607  
Altavista, 517, 524  
Amelia, 427, 428  
Amherst, 342  
Anderson Branch at Sussex, Va., 463  
Andersonville, 418  
Anglin Branch near Stuart, Va., 546  
Annandale, 128, 146, 148  
Appomattox, 414, 527, 537  
Appomattox River at Farmville, Va., 423  
Appomattox River at Matoaca, Va., 432  
Appomattox River at Mattoax, Va., 425  
Appomattox River near Appomattox, Va., 414  
Appomattox River near Petersburg, Va., 431  
Aquia Creek near Garrisonville, Va., 190  
Arcola, 99  
Ark, 236  
Arlington, 118, 119, 121, 122, 123, 124  
Arvonias, 362  
Ashland, 249, 250  
Assamoosick Swamp near Sebrell, Va., 468  
Atlee, 255, 437  
Augusta Springs, 29  
Aylett, 265  
Aylett Creek at Aylett, Va., 265

## B

Back Creek at Lyndhurst, Va., 39  
Back Creek at Sunrise, Va., 270  
Back Creek near Dundee, Va., 504  
Back Creek near Mountain Grove, Va., 273  
Back Creek near Sunrise, Va., 269  
Back Creek on Route 600 near Mountain Grove, Va., 271  
Backlick Run at Alexandria, Va., 136  
Backlick Run at Springfield, Va., 134  
Bacova, 268  
Bailey Branch tributary at Spring Grove, Va., 436  
Ballinger Creek at Esmont, Va., 349

Bane, 625  
Banister River at Halifax, Va., 575  
Bartlick, 651  
Barton Fork near Council, Va., 639  
Bassett, 554  
Battle Run near Laurel Mills, Va., 199  
Baywood, 589  
Bealeton, 206  
Bear Branch near Vienna, Va., 144  
Bearskin Creek near Chatham, Va., 571  
Beaver Creek at Bristol, Va., 676  
Beaver Creek near Wallace, Va., 675  
Beaverdam Creek at Damascus, Va., 660  
Beaverdam Creek at Route 1009 at Hillsville, Va., 606  
Beaverdam Creek at Route 734 near Mountville, Va., 94  
Beaverdam Creek at State Farm, Va., 398  
Beaverdam Creek tributary at Ellerson, Va., 442  
Beaverdam Run near Garrisonville, Va., 191  
Beaverdam Swamp near Ark, Va., 236  
Bedford, 519, 521  
Bell Creek at Franks Mill near Staunton, Va., 33  
Bell Creek at St. Pauls Chapel near Staunton, Va., 31  
Bell Creek near Staunton, Va., 32  
Bent Creek, 335  
Berryville, 12, 16  
Beulahville, 263  
Big Cedar Creek near Lebanon, Va., 698  
Big Lickinghole Creek near Goochland, Va., 397  
Big Lickinghole Creek tributary near Ferncliff, Va., 395  
Big Moccasin Creek at Collinwood near Hansonville, Va., 690  
Big Moccasin Creek near Gate City, Va., 691  
Big Otter River near Altavista, Va., 524  
Big Otter River near Bedford, Va., 519  
Big Otter River near Evington, Va., 522  
Big Prater Creek at Vansant, Va., 635  
Big Reed Island Creek near Allisonia, Va., 604  
Big Rock, 637  
Big Stone Gap, 714, 716  
Birchleaf, 641  
Blacks Creek near Mount Airy, Va., 574  
Blacks Run at Harrisonburg, Va., 23  
Blacks Run at Route 704 near Mount Crawford, Va., 25  
Blacks Run tributary number 1 near Harrisonburg, Va., 24  
Blackstone, 454  
Blackwater River at Zuni, Va., 471  
Blackwater River near Burdette, Va., 474, 475  
Blackwater River near Dendron, Va., 469  
Blackwater River near Franklin, Va., 475  
Blackwater River near Rocky Mount, Va., 505  
Blackwater River near Union Hall, Va., 506  
Blackwater River tributary 1 near Holland, Va., 478  
Bluefield, 628, 633  
Bluestone River at Bluefield, Va., 633  
Bluestone River at Falls Mills, Va., 634

Bolar, 267  
 Boswells Tavern, 245  
 Bowling Green, 259  
 Boydton, 583, 584  
 Brattons Run tributary near Goshen, Va., 316  
 Briery, 479  
 Briery Branch tributary near Spring Creek, Va., 19  
 Brink, 491  
 Bristol, 676, 686  
 Bristow, 166  
 Broad Run at Buckland, Va., 164  
 Broad Run near Bristow, Va., 166  
 Broad Run near Leesburg, Va., 100  
 Broad Run near Warrenton, Va., 163  
 Broad Run tributary at Buckland, Va., 165  
 Broadway, 62, 63  
 Brookneal, 525, 534, 535  
 Browns Run near Bealeton, Va., 206  
 Brumley Creek at Brumley Gap, Va., 683  
 Brumley Creek near Hansonville, Va., 682  
 Brumley Gap, 683  
 Brush Creek at Terrys Fork, Va., 613  
 Buchanan, 308, 309, 311  
 Buck Mountain Creek near Free Union, Va., 372  
 Buckingham, 361  
 Buckland, 164, 165  
 Buckton, 78  
 Buena Vista, 325, 330  
 Buffalo Branch tributary number 1 near Augusta Springs, Va., 29  
 Buffalo Branch tributary number 2 near Christians, Va., 30  
 Buffalo Creek near Glasgow, Va., 327  
 Buffalo Creek near Hampden Sydney, Va., 421  
 Buffalo River near Tye River, Va., 343  
 Buffalo River tributary near Amherst, Va., 342  
 Buggs Island, 581  
 Bull Run, 172  
 Bull Run near Catharpin, Va., 168  
 Bull Run near Clifton, Va., 176  
 Bull Run near Manassas Park, Va., 174  
 Bull Run near Manassas, Va., 173  
 Bullpasture River at Williamsville, Va., 289  
 Bunch Creek near Boswells Tavern, Va., 245  
 Burdette, 474, 475, 477  
 Burke, 151, 153  
 Burkettown, 26  
 Burkeville, 451  
 Burr Hill, 222  
 Burton Creek tributary at Lynchburg, Va., 334  
 Bush Mill Stream near Heathsville, Va., 193  
 Button Creek near Rustburg, Va., 529  
 Button Creek tributary near Rustburg, Va., 530

## C

Cain Branch near Chantilly, Va., 170  
 Caldwell's Creek near Appomattox, Va., 527  
 Calfpasture River above Mill Creek at Goshen, Va., 313

Calfpasture River at Goshen, Va., 315  
 Calfpasture River near West Augusta, Va., 312  
 Cameron Run at Alexandria, Va., 137  
 Campbell Branch near Fincastle, Va., 305  
 Carson, 462  
 Carter Run near Marshall, Va., 194  
 Cartersville, 393  
 Cat Point Creek near Montross, Va., 227  
 Catawba, 303  
 Catawba Creek near Catawba, Va., 303  
 Catawba Creek near Fincastle, Va., 307  
 Catharpin, 168  
 Catlett, 159  
 Catoctin Creek at Taylorstown, Va., 90  
 Cattail Run near Bolar, Va., 267  
 Cedar Bluff, 694  
 Cedar Creek above Highway 11 near Middletown, Va., 76  
 Cedar Creek near Meadowview, Va., 673  
 Cedar Creek near Winchester, Va., 74  
 Cedar Grove Branch near Rockbridge Baths, Va., 319  
 Cedar Run at Route 646 near Aden, Va., 162  
 Cedar Run near Aden, Va., 161  
 Cedar Run near Catlett, Va., 159  
 Cedar Run near Warrenton, Va., 158  
 Cedar Run tributary near Culpeper, Va., 221  
 Cedar Springs, 597  
 Cedon, 261  
 Center Cross, 232  
 Centerville, 401, 402, 403  
 Centreville, 171  
 Champlain, 226  
 Chantilly, 169, 170  
 Charles City, 435  
 Charlottesville, 355, 374, 381, 382, 383  
 Chatham, 571  
 Chatham Hill, 677, 678, 679  
 Chester, 433  
 Chesterfield, 413  
 Chesterfield, 411  
 Chestnut Branch near Forest, Va., 520  
 Chestnut Creek at Galax, Va., 592  
 Chickahominy River near Atlee, Va., 437  
 Chickahominy River near Providence Forge, Va., 443  
 Chickahominy River tributary to tributary at Ellerson, Va., 438  
 Chilhowie, 657, 659, 668, 669  
 Chopawamsic Creek at Russell Road near Joplin, Va., 189  
 Christians, 30  
 Christians Creek near Fishersville, Va., 35  
 Christiansburg, 619  
 Chub Run near Stanley, Va., 56  
 Church View, 233  
 Clarksville, 580  
 Clarkton, 536  
 Cleveland, 700  
 Clifton, 176  
 Clifton Forge, 286, 290, 291  
 Clinch River at Cedar Bluff, Va., 694  
 Clinch River at Cleveland, Va., 700

Clinch River at Clinchport, Va., 707  
 Clinch River at Richlands, Va., 695  
 Clinch River at Speers Ferry, Va., 711  
 Clinchport, 707  
 Clintwood, 648  
 Clover, 544  
 Cochran, 486  
 Coeburn, 702  
 Cohoke Mill Creek near Lester Manor, Va., 257  
 Collins Run near Providence Forge, Va., 445  
 Collins Run tributary near Providence Forge, Va., 446  
 Columbia Furnace, 69, 71  
 Colvin Run at Reston, Va., 110  
 Conicville, 65  
 Contrary Creek near Mineral, Va., 239  
 Conway River near Stanardsville, Va., 212  
 Cootes Store, 60  
 Copper Creek near Gate City, Va., 709  
 Copper Creek tributary 1 near Dickensonville, Va., 708  
 Copper Valley, 614  
 Coulwood, 699  
 Council, 638, 639, 640  
 Cove Creek at Faber, Va., 348  
 Cove Creek near Covesville, Va., 347  
 Cove Creek near Hilton, Va., 689  
 Cove Creek near Shelleys, Va., 687  
 Covesville, 347  
 Covington, 281, 283, 284  
 Cowpasture River near Clifton Forge, Va., 291  
 Cowpasture River near Head Waters, Va., 287  
 Cox Branch above Tazewell Reservoir near Gratton, Va., 627  
 Crab Creek tributary near Christiansburg, Va., 619  
 Craig Creek at New Castle, Va., 296  
 Craig Creek at Parr, Va., 301  
 Craig Creek tributary near New Castle, Va., 300  
 Cranes Nest River near Clintwood, Va., 648  
 Cripple Creek at Cedar Springs, Va., 597  
 Cripple Creek near Ivanhoe, Va., 599  
 Crooked Run below highway 340 at Riverton, Va., 84  
 Crooked Run near Mount Jackson, Va., 66  
 Crooked Run tributary near Conicville, Va., 65  
 Crozet, 365  
 Cub Creek at Phenix, Va., 538  
 Cub Run near Bull Run, Va., 172  
 Cub Run near Centreville, Va., 171  
 Cub Run near Chantilly, Va., 169  
 Cub Run tributary at Montevideo, Va., 52  
 Culpeper, 208, 209, 219, 221  
 Curdsville, 388, 390  
 Cypress Chapel, 448, 449  
 Cypress Swamp at Cypress Chapel, Va., 448  
 Cypress Swamp near Burdette, Va., 477

## D

Daleville, 501  
 Damascus, 660, 661  
 Dan River at Danville, Va., 561

Dan River at Paces, Va., 566  
 Dan River at sewage treatment plant near Danville, Va., 563  
 Dan River at South Boston, Va., 569  
 Danville, 559, 561, 563  
 Dawn, 262  
 Dead Run near McLean, Va., 116  
 Deep Creek near Mannboro, Va., 429  
 Deep Run near Grottoes, Va., 49  
 Dendron, 469  
 Denniston, 577  
 Dickensonville, 708  
 Dickey Creek at Sugar Grove, Va., 655  
 Difficult Run near Fairfax, Va., 106  
 Difficult Run near Great Falls, Va., 113  
 Dinwiddie, 459  
 Doctors Run at Arlington, Va., 123  
 Dodd Creek tributary near Floyd, Va., 612  
 Dogue Creek near Accotink, Va., 142  
 Dolphin, 487  
 Dooms, 43  
 Doswell, 241, 243, 244  
 Doyles River near White Hall, Va., 369  
 Dragon Swamp at Mascot, Va., 234  
 Dragon Swamp near Church View, Va., 233  
 Dranesville, 105  
 Drewrys Bluff, 412  
 Drewryville, 464, 465  
 Dry Creek near Farmville, Va., 420  
 Dry Marsh Run near Berryville, Va., 16  
 Dry River at Rawley Springs, Va., 20  
 Dublin, 611  
 Duffield, 713  
 Dugspur, 603  
 Dumfries, 181, 185  
 Dundee, 504  
 Dunlap Creek near Covington, Va., 281

## E

Earlysville, 373, 379  
 Eggleston, 620  
 Ellerson, 442  
 Ellerson, 438  
 Emporia, 489, 492  
 Esmont, 349  
 Evington, 522

## F

Faber, 348  
 Fairfax, 106, 107, 143, 175  
 Fairfax Station, 152, 178  
 Falling Creek near Chesterfield, Va., 411  
 Falling Creek near Drewrys Bluff, Va., 412  
 Falling Creek near Midlothian, Va., 409  
 Falling River at Spring Mills, Va., 528  
 Falling River near Brookneal, Va., 534  
 Falling River near Naruna, Va., 531

Falling Spring, 277, 278  
Falling Spring Creek near Falling Spring, Va., 277  
Falls Church, 117, 129, 130, 131  
Falls Creek tributary near Victoria, Va., 453  
Falls Mills, 634  
Farmers Hall Creek near Champlain, Va., 226  
Farmville, 420, 423  
Ferncliff, 246, 395  
Ferrum, 551  
Fincastle, 305, 306, 307  
Fine Creek at Fine Creek Mills, Va., 399  
Fine Creek Mills, 399  
Fishersville, 35  
Fishpond Creek near Hixburg, Va., 415  
Flat Creek near Amelia, Va., 427  
Fleenor Branch near Bristol, Va., 686  
Floyd, 612  
Fontaine Creek near Emporia, Va., 492  
Forest, 520  
Fort Blackmore, 706  
Fosters Creek near Ferncliff, Va., 246  
Fountains Creek near Brink, Va., 491  
Fourmile Run at Alexandria, Va., 125  
Franklin, 475  
Fredericksburg, 223  
Free Union, 370, 372  
Frisby Branch near Buckingham, Va., 361  
Front Royal, 83, 85

## G

Galax, 590, 592, 594  
Garrisonville, 187, 188, 190, 191  
Gate City, 691, 692, 709  
Georges Creek near Gretna, Va., 573  
Georges Fork, 647  
Giles Run near Woodbridge, Va., 180  
Gingoteague Run near Port Royal, Va., 225  
Glade Creek at Grahams Forge, Va., 600  
Glade Spring, 670  
Glasgow, 327  
Glebe Creek tributary near Charles City, Va., 435  
Glen Echo, 57  
Glen Lyn, 631  
Glenvar, 498  
Goldvein, 210  
Goochland, 397  
Gooney Run near Glen Echo, Va., 57  
Goose Creek at Huddleston, Va., 516  
Goose Creek near Huddleston, Va., 514  
Goose Creek near Leesburg, Va., 95  
Goose Creek near Middleburg, Va., 92  
Gordonsville, 237  
Goshen, 313, 315, 316  
Grahams Forge, 600, 601  
Gratton, 627  
Graysontown, 615  
Great Creek near Cochran, Va., 486

Great Dismal Swamp, 450  
Great Falls, 112, 113  
Great Wicomico River near Horse Head, Va., 192  
Greenfield, 345  
Gretna, 512, 572, 573  
Grissom Creek near Council, Va., 638  
Groseclose, 663, 664  
Grottoes, 36, 48, 49  
Grundy, 636  
Guest River at Coeburn, Va., 702  
Guest River near Miller Yard, Va., 704  
Gum Spring, 396  
Gum Springs, 141  
Guy Creek near Nassawadox, Va., xviii, 9

## H

Halifax, 575  
Hall Creek near Glade Spring, Va., 670  
Hampden Sydney, 421  
Haneytown Creek near Stanardsville, Va., 376  
Hanover, 252, 253  
Hansonville, 682, 690  
Happy Creek at Front Royal, Va., 83  
Hardware River below Briery Run near Scottsville, Va., 359  
Hardware River near Scottsville, Va., 358  
Harpers Run near Morrisville, Va., 207  
Harris Creek near Keene, Va., 356  
Harris Creek near Trevilians, Va., 248  
Harrisonburg, 23, 24  
Harriston, 44, 45  
Hat Creek, 533  
Hayfield, 10  
Haysi, 642, 649  
Hazel River at Rixeyville, Va., 201  
Head Waters, 287  
Heathsville, 193  
Helveys Mill Creek tributary at Point Pleasant, Va., 623  
Henderson Creek near Shadwell, Va., 384  
Herndon, 104  
Hillsville, 606  
Hilton, 689  
Hinton, 22  
Hixburg, 415, 419  
Hogue Creek near Hayfield, Va., 10  
Holcomb Rock, 332  
Holiday Creek near Andersonville, Va., 418  
Holiday Creek near Toga, Va., 416  
Holland, 478  
Holmes Run at Alexandria, Va., 133  
Holmes Run at Merrifield, Va., 127  
Holmes Run below Lake Barcroft near Alexandria, Va., 132  
Holmes Run near Annandale, Va., 128  
Holston, 684  
Hooes Run near Occoquan, Va., 179  
Horse Head, 192  
Horsepen Branch at Richmond, Va., 439  
Hoskins Creek near Tappahannock, Va., 229

Hot Springs, 275, 276  
Huddleston, 514, 516  
Hunters Branch near Palmyra, Va., 387  
Hurley, 652  
Hurricane Branch at Blackstone, Va., 454  
Hutton Creek near Chilhowie, Va., 669  
Hyco River near Denniston, Va., 577  
Hyco River near Omega, Va., 579

## I

Independence, 588  
Independent Hill, 182, 186  
Ivanhoe, 595, 599  
Ivor, 472

## J

Jackson River at Falling Spring, Va., 278  
Jackson River below Dunlap Creek at Covington, Va., 283  
Jackson River below Gathright Dam near Hot Springs, Va., 275  
Jackson River near Bacova, Va., 268  
James River and Kanawha Canal near Richmond, Va., 405  
James River at Bedford Dam near Major, Va., 329  
James River at Bent Creek, Va., 335  
James River at Buchanan, Va., 309  
James River at Cartersville, Va., 393  
James River at Holcomb Rock, Va., 332  
James River at Lick Run, Va., 293  
James River at Scottsville, Va., 351  
James River near Richmond, Va., 407  
Jerry Branch near Clifton Forge, Va., 290  
Johns Creek at New Castle, Va., 298  
Johns Creek tributary near New Castle, Va., 297  
Johnson Spring near Hot Springs, Va., 276  
Jolly Hollow Branch at Boydton, Va., 584  
Jones Hole Swamp tributary near Carson, Va., 462  
Jonesville, 720  
Joplin, 184, 189  
Jordans Branch at Richmond, Va., 440

## K

Ka, 705  
Keene, 356, 357  
Kellys Ford, 205  
Kelsa, 653  
Kerrs Creek near Lexington, Va., 320  
Kershaw Branch near Hurley, Va., 652  
Keysville, 480  
Knox Creek at Kelsa, Va., 653

## L

Lafayette, 495  
Lahore, 238  
Lake Drummond in Great Dismal Swamp, Va., 450

Lakeside Village, 391  
Laurel Mills, 199, 200  
Lawrenceville, 483, 484, 488  
Lawsons Creek at Turbeville, Va., 568  
Leatherwood Creek near Old Liberty, Va., 558  
Lebanon, 698  
Leesburg, 91, 95, 97, 100  
Lenah, 98  
Lenah Run at Lenah, Va., 98  
Lester Manor, 257  
Levisa Fork at Big Rock, Va., 637  
Levisa Fork near Grundy, Va., 636  
Lexington, 320, 322  
Lick Creek near Chatham Hill, Va., 677  
Lick Run, 293  
Lightfoot, 447  
Limestone Branch near Leesburg, Va., 91  
Lincoln, 93  
Linville Creek at Broadway, Va., 62  
Little Back Creek near Sunrise, Va., 272  
Little Falling River at Hat Creek, Va., 533  
Little Hunting Creek at Gum Springs, Va., 141  
Little Pimmit Run at Arlington, Va., 121  
Little Pimmit Run tributary at Arlington, Va., 119  
Little River at Graysontown, Va., 615  
Little River at Wardell, Va., 697  
Little River near Copper Valley, Va., 614  
Little River near Doswell, Va., 244  
Little Stony Creek at Pembroke, Va., 622  
Little Willis River at Curdsville, Va., 390  
Little Winns Creek near Turbeville, Va., 565  
Locust Dale, 216  
Long Branch at Arlington, Va., 122  
Long Branch at Newington Road near Accotink, Va., 150  
Long Branch at Vienna, Va., 145  
Long Branch near Annandale, Va., 148  
Long Meadow near Broadway, Va., 63  
Lorton, 155, 156, 157  
Louisa, 247  
Lovettsville, 87  
Lovingston, 338  
Lucky Run at Arlington, Va., 124  
Lunenburg, 481  
Luray, 53, 54  
Lynch River at Nortonville, Va., 377  
Lynchburg, 334  
Lyndhurst, 39  
Lynnwood, 50

## M

Major, 329  
Manassas, 167, 173  
Manassas Park, 174  
Manassas Run at Route 645 near Front Royal, Va., 85  
Mannboro, 429  
Maple Swamp Branch near Meadows of Dan, Va., 545  
Marion, 665

Marshall, 194  
 Martinsville, 556  
 Mascot, 234  
 Matoaca, 432  
 Mattaponi River near Beulahville, Va., 263  
 Mattaponi River near Bowling Green, Va., 259  
 Mattoax, 425  
 Maury River at Rockbridge Baths, Va., 317  
 Maury River near Buena Vista, Va., 325  
 Maury River near Lexington, Va., 322  
 McKenney, 461  
 McLean, 115, 116  
 Meadow Creek at New Castle, Va., 295  
 Meadows of Dan, 545  
 Meadowview, 671, 673  
 Mechums River near White Hall, Va., 366  
 Meherrin River at Emporia, Va., 489  
 Meherrin River near Lawrenceville, Va., 484  
 Mendota, 685  
 Merrifield, 127  
 Middle Branch Chopawamsic Creek near Garrisonville, Va.,  
 187  
 Middle Fork Holston River at Chilhowie, Va., 668  
 Middle Fork Holston River at Groseclose, Va., 663  
 Middle Fork Holston River at Seven Mile Ford, Va., 666  
 Middle Fork Holston River near Groseclose, Va., 664  
 Middle Fork Holston River near Meadowview, Va., 671  
 Middle River near Grottoes, Va., 36  
 Middle River near Verona, Va., 34  
 Middle Run near Lorton, Va., 155  
 Middleburg, 92  
 Middletown, 76  
 Midlothian, 409  
 Mill Creek near Buchanan, Va., 308  
 Mill Creek near Trout Dale, Va., 587  
 Mill Creek tributary at Galax, Va., 594  
 Miller Creek near Scottsville, Va., 350  
 Miller Yard, 704  
 Millrun Branch near McKenney, Va., 461  
 Millwood, 86  
 Mineral, 239  
 Mira Fork tributary near Dugspur, Va., 603  
 Montevideo, 52  
 Montross, 227  
 Montvale, 513  
 Moores Creek near Charlottesville, Va., 382  
 Moormans River near Free Union, Va., 370  
 Moormans River near White Hall, Va., 368  
 Morrisville, 207  
 Motto River tributary near Cedon, Va., 261  
 Mount Airy, 574  
 Mount Clinton, 21  
 Mount Crawford, 25, 28  
 Mount Jackson, 66, 67  
 Mountain Grove, 271, 273  
 Mountain Run near Burr Hill, Va., 222  
 Mountain Run near Culpeper, Va., 208  
 Mountain Run tributary near Gordonsville, Va., 237

Mountville, 94  
 Muddy Creek at Mount Clinton, Va., 21  
 Muddy Run near Stanardsville, Va., 371  
 Musgrave Branch near Drewryville, Va., 465  
 My Ladys Swamp near Saluda, Va., 235

## N

Narrows, 629  
 Naruna, 531  
 Nassawadox, xviii, 9  
 Nettleridge, 547  
 New Castle, 295, 296, 297, 298, 300  
 New Market, 64  
 New River at Allisonia, Va., 607  
 New River at Eggleston, Va., 620  
 New River at Glen Lyn, Va., 631  
 New River at Ivanhoe, Va., 595  
 New River at Radford, Va., 617  
 New River near Baywood, Va., 589  
 New River near Galax, Va., 590  
 Niagara, 502  
 Nibbs Creek tributary near Amelia, Va., 428  
 Nicholas Creek near Ferrum, Va., 551  
 Nininger Creek near Bedford, Va., 521  
 North Anna River at Hart Corner near Doswell, Va., 243  
 North Anna River near Doswell, Va., 241  
 North Anna River near Partlow, Va., 240  
 North Branch Chopawamsic Creek near Independent Hill,  
 Va., 186  
 North Fork Catoclin Creek at Route 681 near Waterford, Va.,  
 89  
 North Fork Clinch River at Duffield, Va., 713  
 North Fork Goose Creek at Route 729 near Lincoln, Va., 93  
 North Fork Hardware River at Red Hill, Va., 353  
 North Fork Holston River at Holston, Va., 684  
 North Fork Holston River at Mendota, Va., 685  
 North Fork Holston River near Gate City, Va., 692  
 North Fork Holston River near Saltville, Va., 680  
 North Fork Moormans River near White Hall, Va., 367  
 North Fork near Fincastle, Va., 306  
 North Fork Pound River at Pound, Va., 644  
 North Fork Powell River at Pennington Gap, Va., 717  
 North Fork Rivanna River near Earlysville, Va., 379  
 North Fork Rivanna River near Proffit, Va., 380  
 North Fork Shenandoah River at Cootes Store, Va., 60  
 North Fork Shenandoah River at Mount Jackson, Va., 67  
 North Fork Shenandoah River near Riverton, Va., 80  
 North Fork Shenandoah River near Strasburg, Va., 72  
 North Fork Shenandoah River tributary near Waterlick, Va.,  
 77  
 North Garden, 354  
 North Holiday Creek near Toga, Va., 417  
 North Mayo River near Spencer, Va., 548  
 North Meherrin River near Briery, Va., 479  
 North Meherrin River near Keysville, Va., 480  
 North Meherrin River near Lunenburg, Va., 481  
 North River at Port Republic, Va., 38

North River near Burketown, Va., 26  
North River near Stokesville, Va., 17  
North River tributary near Mount Crawford, Va., 28  
Nortonsville, 377  
Norwood, 344  
Nottoway River near Burkeville, Va., 451  
Nottoway River near Rawlings, Va., 455  
Nottoway River near Sebrell, Va., 466  
Nottoway River near Stony Creek, Va., 457

## O

Occoquan, 177, 179  
Occoquan River near Manassas, Va., 167  
Occoquan River near Occoquan, Va., 177  
Old Liberty, 558  
Omega, 579  
Opequon Creek near Berryville, Va., 12  
Opequon Creek near Stephens City, Va., 11

## P

Paces, 566  
Palmyra, 385, 387  
Pamunkey Creek at Lahore, Va., 238  
Pamunkey River near Hanover, Va., 253  
Pamunkey River tributary number 1 near Hanover, Va., 252  
Parker Branch near Stanardsville, Va., 375  
Parr, 301  
Partlow, 240  
Passage Creek near Buckton, Va., 78  
Peak Creek at Pulaski, Va., 609  
Peak Creek tributary near Pulaski, Va., 610  
Pedlar Mills, 331  
Pedlar River at Forest Road near Buena Vista, Va., 330  
Pedlar River near Pedlar Mills, Va., 331  
Pembroke, 622  
Penn Daw Outfall at Alexandria, Va., 140  
Pennington Gap, 717, 719  
Petersburg, 431  
Phenix, 538  
Philpott, 552  
Pigg River near Sandy Level, Va., 510  
Pigg River near Toshes, Va., 511  
Pike Branch at Alexandria, Va., 139  
Pimmit Run at Arlington, Va., 118  
Pimmit Run near Falls Church, Va., 117  
Piney Branch at Vienna, Va., 109  
Piney River, 340  
Piney River at Piney River, Va., 340  
Piney Run at Reston, Va., 111  
Piney Run near Lovettsville, Va., 87  
Piscataway Creek near Tappahannock, Va., 230  
Po River near Spotsylvania, Va., 258  
Pohick Creek at Lorton, Va., 157  
Pohick Creek near Springfield, Va., 154  
Pohick Creek tributary near Burke, Va., 153  
Point Pleasant, 623

Pony Mountain Branch near Culpeper, Va., 209  
Popes Head Creek near Fairfax, Va., 175  
Port Republic, 38, 47  
Port Royal, 225  
Possum Jaw Creek near Chatham Hill, Va., 678  
Potts Creek near Covington, Va., 284  
Pound, 644, 645, 646  
Pound River above Indian Creek at Pound, Va., 645  
Pound River below Bold Camp Creek, at Pound, Va., 646  
Pound River below Flannagan Dam near Haysi, Va., 649  
Pound River near Georges Fork, Va., 647  
Powder Mill Creek at Rocky Mount, Va., 508  
Powell River at Big Stone Gap, Va., 714  
Powell River near Jonesville, Va., 720  
Powell River near Pennington Gap, Va., 719  
Powells Creek near Crozet, Va., 365  
Powells Creek near Turbeville, Va., 564  
Proffit, 380  
Providence Forge, 443, 445, 446  
Pughs Run near Woodstock, Va., 70  
Pughs Run tributary near Columbia Furnace, Va., 71  
Pulaski, 609, 610

## Q

Quantico Creek near Dumfries, Va., 181

## R

Rabbit Branch near Burke, Va., 151  
Radford, 617  
Randolph, 540  
Rapidan, 218  
Rapidan River at Rapidan, Va., 218  
Rapidan River near Culpeper, Va., 219  
Rapidan River near Ruckersville, Va., 214  
Rapidan River near Stanardsville, Va., 211  
Rappahannock River at Kellys Ford, Va., 205  
Rappahannock River at Remington, Va., 203  
Rappahannock River near Fredericksburg, Va., 223  
Rappahannock River near Warrenton, Va., 195  
Rawley Springs, 20  
Rawlings, 455  
Red Hill, 353  
Reed Creek at Grahams Forge, Va., 601  
Reedy Creek Industrial Drainage near Chesterfield, Va., 413  
Reedy Creek near Dawn, Va., 262  
Remington, 203  
Renick Run near Buchanan, Va., 311  
Reston, 101, 102, 103, 108, 110, 111  
Richlands, 695  
Richmond, 405, 407, 439, 440, 441  
Right Hand Fork near Appomattox, Va., 537  
Rivanna River at Palmyra, Va., 385  
Rivanna River below Moores Creek near Charlottesville, Va., 383  
Riverside, 324  
Riverton, 80, 81, 84

Rixeyville, 201  
 Roanoke, 499  
 Roanoke (Staunton) River at Brookneal, Va., 525  
 Roanoke (Staunton) River at Clarksville, Va., 580  
 Roanoke (Staunton) River at Clarkton, Va., 536  
 Roanoke (Staunton) River at Randolph, Va., 540  
 Roanoke (Staunton) River near Clover, Va., 544  
 Roanoke (Staunton) River near Toshes, Va., 507  
 Roanoke Creek at Saxe, Va., 542  
 Roanoke River at Altavista, Va., 517  
 Roanoke River at Buggs Island, Va., 581  
 Roanoke River at Glenvar, Va., 498  
 Roanoke River at Lafayette, Va., 495  
 Roanoke River at Niagara, Va., 502  
 Roanoke River at Roanoke, Va., 499  
 Roanoke River near Gretna, Va., 512  
 Roanoke River near Wabun, Va., 497  
 Robinson River near Locust Dale, Va., 216  
 Rock Run tributary 2 near Goldvein, Va., 210  
 Rockbridge Baths, 317, 319  
 Rocketts Creek tributary near Gum Spring, Va., 396  
 Rockfish River near Greenfield, Va., 345  
 Rocky Mount, 505, 508  
 Rocky Run at Lawrenceville, Va., 488  
 Rocky Run near Dolphin, Va., 487  
 Rocky Run near Great Falls, Va., 112  
 Roseland, 337  
 Ruckersville, 214  
 Rush River at Washington, Va., 197  
 Rush River tributary near Washington, Va., 198  
 Russell Fork at Bartlick, Va., 651  
 Russell Fork at Council, Va., 640  
 Russell Fork at Haysi, Va., 642  
 Russell Fork near Birchleaf, Va., 641  
 Rustburg, 529, 530

## S

Saddle Creek tributary near Independence, Va., 588  
 Saddletree Creek near Lawrenceville, Va., 483  
 Sago, 509  
 Saltville, 680  
 Saluda, 235  
 Sandy Creek near Wylliesburg, Va., 543  
 Sandy Level, 510  
 Sandy River near Danville, Va., 559  
 Sandy Run near Fairfax Station, Va., 178  
 Saxe, 542  
 Schenks Branch at Charlottesville, Va., 381  
 Scott Run near McLean, Va., 115  
 Scottsville, 350, 351, 358, 359  
 Seacock Creek at Unity, Va., 473  
 Seacock Creek near Ivor, Va., 472  
 Sebrell, 466, 468  
 Seven Mile Ford, 666  
 Shadwell, 384  
 Shawsville, 493  
 Shelleys, 687

Shenandoah River at Riverton, Va., 81  
 Short Pump, 404  
 Sideburn Branch near Fairfax Station, Va., 152  
 Slate River near Arvonnia, Va., 362  
 Slemp Creek tributary near Sugar Grove, Va., 654  
 Smilax Branch at Reston, Va., 103  
 Smith Creek above old dam near Clifton Forge, Va., 286  
 Smith Creek near New Market, Va., 64  
 Smith Creek tributary near South Hill, Va., 585  
 Smith River at Bassett, Va., 554  
 Smith River at Martinsville, Va., 556  
 Smith River at Smith River Church near Woolwine, Va., 550  
 Smith River near Philpott, Va., 552  
 Snake Creek near Brookneal, Va., 535  
 Snakeden Branch at Reston, Va., 108  
 Snow Creek at Sago, Va., 509  
 South Anna River near Ashland, Va., 250  
 South Anna River tributary number 6 near Ashland, Va., 249  
 South Boston, 569  
 South Branch Chopawamsic Creek near Garrisonville, Va., 188  
 South Branch North Fork Hardware River near North Garden, Va., 354  
 South Fork Broad Run near Arcola, Va., 99  
 South Fork Catoclin Creek at Route 698 near Waterford, Va., 88  
 South Fork Goose Creek at Montvale, Va., 513  
 South Fork Holston River at Riverside near Chilhowie, Va., 657  
 South Fork Holston River at Teas, Va., 656  
 South Fork Holston River near Chilhowie, Va., 659  
 South Fork Holston River near Damascus, Va., 661  
 South Fork Little Difficult Run near Fairfax, Va., 107  
 South Fork Powell River at Big Stone Gap, Va., 716  
 South Fork Quantico Creek at Camp 5 near Joplin, Va., 184  
 South Fork Quantico Creek near Dumfries, Va., 185  
 South Fork Quantico Creek near Independent Hill, Va., 182  
 South Fork Rivanna River near Charlottesville, Va., 374  
 South Fork Rivanna River near Earlysville, Va., 373  
 South Fork Roanoke River near Shawsville, Va., 493  
 South Fork Shenandoah River at Front Royal, Va., 58  
 South Fork Shenandoah River near Luray, Va., 54  
 South Fork Shenandoah River near Lynnwood, Va., 50  
 South Fork Shenandoah River tributary near Luray, Va., 53  
 South Fork Sycolin Creek near Leesburg, Va., 97  
 South Hill, 585  
 South Mayo River near Nettleridge, Va., 547  
 South River at Harriston, Va., 45  
 South River at Port Republic, Va., 47  
 South River at Waynesboro, Va., 42  
 South River near Dooms, Va., 43  
 South River near Riverside, Va., 324  
 South River near Stanardsville, Va., 213  
 South River near Steeles Tavern, Va., 323  
 South River near Waynesboro, Va., 40  
 South River tributary near Harriston, Va., 44  
 South Run near Lorton, Va., 156  
 Sowell Branch near Charlottesville, Va., 355

Speedwell, 598  
 Speers Ferry, 711  
 Spencer, 548  
 Spotsylvania, 258  
 Spout Run at Route 621 near Millwood, Va., 86  
 Spring Creek, 19  
 Spring Creek near Abingdon, Va., 674  
 Spring Grove, 436  
 Spring Mills, 528  
 Springfield, 134, 154  
 Sprouses Corner, 389  
 Sprouts Creek near Chatham Hill, Va., 679  
 Staffordsville, 624  
 Staley Creek near Marion, Va., 665  
 Stanardsville, 211, 212, 213, 371, 375, 376, 378  
 Stanley, 56  
 State Farm, 398  
 Staunton, 31, 32, 33  
 Stave Run at Reston, Va., 101  
 Stave Run near Reston, Va., 102  
 Steeles Tavern, 323  
 Stephens City, 11  
 Stockton Creek near Afton, Va., 364  
 Stokesville, 17  
 Stony Creek, 457  
 Stony Creek at Columbia Furnace, Va., 69  
 Stony Creek at Fort Blackmore, Va., 706  
 Stony Creek at Ka, Va., 705  
 Stony Creek near Dinwiddie, Va., 459  
 Stony Run tributary to tributary at Short Pump, Va., 404  
 Strasburg, 72  
 Stuart, 546  
 Studley, 256  
 Sugar Grove, 654, 655  
 Sugar Run near Speedwell, Va., 598  
 Sugarland Run at Herndon, Va., 104  
 Sugarland Run near Dranesville, Va., 105  
 Sunrise, 269, 270, 272  
 Sussex, 463  
 Sweet Chalybeate, 280  
 Sweet Springs Creek tributary at Sweet Chalybeate, Va., 280  
 Swift Creek near Chester, Va., 433  
 Swift Creek tributary Industrial Drainage near Walthall, Va., 434  
 Swift Run tributary near Stanardsville, Va., 378

## T

Tappahannock, 229, 230  
 Taylorstown, 90  
 Teas, 656  
 Terrys Fork, 613  
 Thomas Creek at Keene, Va., 357  
 Thompson Creek near Coulwood, Va., 699  
 Thorne Springs Branch near Dublin, Va., 611  
 Thornton Gap, 196  
 Thornton River near Laurel Mills, Va., 200  
 Thornton River tributary near Thornton Gap, Va., 196

Three Creek tributary near Drewryville, Va., 464  
 Tinker Creek near Daleville, Va., 501  
 Toano, 266  
 Toga, 416, 417  
 Toshes, 507, 511  
 Totopotomoy Creek near Atlee, Va., 255  
 Totopotomoy Creek near Studley, Va., 256  
 Trevilians, 248  
 Tripps Run at Falls Church, Va., 129  
 Tripps Run near Falls Church, Va., 131  
 Tripps Run tributary near Falls Church, Va., 130  
 Trout Dale, 586, 587  
 Tuckahoe Creek tributary 1 at Route 288 near Centerville, Va., 401  
 Tuckahoe Creek tributary 2 at Route 288 near Centerville, Va., 402  
 Tuckahoe Creek tributary to tributary 3 near Centerville, Va., 403  
 Turbeville, 564, 565, 568  
 Turkeycock Run at Alexandria, Va., 135  
 Tye (Buffalo) River near Norwood, Va., 344  
 Tye River, 343  
 Tye River at Roseland, Va., 337  
 Tye River near Lovingston, Va., 338

## U

Union Hall, 506  
 Unity, 473  
 Upham Brook near Richmond, Va., 441

## V

Vansant, 635  
 Vaughans Creek near Hixburg, Va., 419  
 Verona, 34  
 Victoria, 453  
 Vienna, 109, 144, 145

## W

Wabun, 497  
 Waldrop Creek near Louisa, Va., 247  
 Walker Creek at Bane, Va., 625  
 Walker Creek at Staffordsville, Va., 624  
 Wallace, 675  
 Wallen Creek near Trout Dale, Va., 586  
 Walthall, 434  
 War Branch near Hinton, Va., 22  
 Wardell, 697  
 Ware Creek near Toano, Va., 266  
 Warrenton, 158, 163, 195  
 Washington, 197, 198  
 Washington Ditch near Cypress Chapel, Va., 449  
 Waterford, 88, 89  
 Waterlick, 77  
 Waynesboro, 40, 42  
 West Augusta, 312

West Branch Long Hill Swamp near Lightfoot, Va., 447  
West Fork Cove Creek near Bluefield, Va., 628  
Whispering Creek at Sprouses Corner, Va., 389  
White Hall, 366, 367, 368, 369  
White Oak Run near Grottoes, Va., 48  
Whitethorn Creek tributary at Gretna, Va., 572  
Williamsville, 289  
Willis River at Curdsville, Va., 388  
Willis River at Lakeside Village, Va., 391  
Winchester, 14, 15, 74  
Wolf Creek near Narrows, Va., 629  
Woodbridge, 180

Woodstock, 70  
Woolwine, 550  
Wylliesburg, 543

## Y

Yorkers Swamp near Center Cross, Va., 232

## Z

Zuni, 471