

Data Table 6-6, Calculated Effective River Flow Rates

**Savannah River Monthly Flow Rate
Based on USGS Daily Flow Rate
Average is Monthly Average**

	Flow, cfs
Month	River Mile 118.8 (Hwy 301)
January	4,156
February	6,053
March	5,984
April	5,737
May	6,015
June	8,116
July	19,446
August	15,559
September	9,449
October	5,728
November	5,930
December	8,963
Average	8,428

**Savannah River Annual Flow Rate
Annual Average Based on
USGS Daily Flow Rate
10-y History
Annual Average River Flow**

Year	River Mile 118.8 cfs
2004	8,778
2005	11,935
2006	6,818
2007	6,088
2008	4,833
2009	7,666
2010	9,893
2011	5,714
2012	4,570
2013	8,479
10-y Average	7,477

Measured river flow in tables above and to right are only for record, they are not used in dose calculations. See effective flow rates below for calculated flows based on tritium concentration measurements.

River Flow Rate Adjustment Based on Tritium Measurements

Tritium Released from SRS and Plant Vogtle 2,979 Curies
(1,082 Ci from SRS and 1,897 Ci from Vogtle)

Location	Finished Water Meas. Conc. pCi/ml	Calculated Total Flow ml	Effective Flow Rate cfs
Savannah I&D - calc ^(a,b)	0.427	6.98E+15	7,813
Beaufort-Jasper/Chelsea - calc ^(a,b)	0.460	6.48E+15	7,252
Beaufort-Jasper/Purrysburg - calc ^(a,b)	0.425	7.01E+15	7,849
River Mile 118.8 - calc ^(a,b)	0.580	5.14E+15	5,752
Estuary (1.1 x River Mile 118.8 Effective Flow Rate) ^c			6,327

a) Total flow calculated on basis of releases of tritium and measured tritium concentrations in the river using the following equation: Total flow, ml=(Q,Ci)(1.0E+12 pCi/Ci)/(Conc,pCi/ml).

b) Effective Flow rate, in cfs, is calculated using the following equation:
Flow Rate, cfs = (Total Flow, ml/yr)/(8.93E+11 ml-sec/ft³-yr)

c) Estuary effective flow rate is used for the collective dose calculation