NOTE: The annual measured river flow rate shown in the tables below is not used in the dose calculations unless the calculated "effective" river flow rate is higher.

NOTE: (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).

NOTE: (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)

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

NOTE: (d) In 2014, the calculated effective flow rate for the water treatment plants was higher than the measured flow rate at River Mile 118.8. Therefore, the measured flow rate of 9,440 cfs was used in the dose calculations for these locations.

Data Table 6-6 Calculated Effective River Flow Rates
Calculated Effective River Flow Rates

Savannah River Monthly Flow Rate Based on USGS Daily Flow Rate Average is Monthly Average at River Mile 118.8 (Hwy 301)

Month	Flow (cfs)
January	25,445
February	13,946
March	11,449
April	12,452
May	7,882
June	6,516
July	6,922
August	6,842
September	5,915
October	4,938
November	5,258
December	5,907
Average	**9,456**

Savannah River Annual Flow Rate Annual Average Based on USGS Daily Flow Rate at River Mile 118.8 (Hwy 301)

Year	Flow (cfs)
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
2014	**9,440**
10-y Average	**7,544**

River Flow Rate Adjustment Based on Tritium Measurements

Total Tritium Released to the Savannah River: **2,933**   Curies
(701 Ci from SRS, 90 Ci from the Barnwell Low-Level Disposal Facility, and 2,142 Ci from Plant Vogtle)

Location	Finished Water Meas. Conc. (pCi/ml)	Calculated Total Flow (ml)	Effective Flow Rate (cfs)
Savannah I&D - calc [a,b]	N/A	N/A	12480[d]
Beaufort-Jasper/Chelsea - calc [a,b]	0.263	1.12E+16	12480[d]
Beaufort-Jasper/Purrysburg - calc [a,b]	N/A	N/A	12480[d]
River Mile 118.8 - calc [a,b]	0.385	7.62E+15	8,531
Estuary (1.1 x River Mile 118.8 Effective Flow Rate [c]			9,384