Table 20. Example Calculation of Flow Profile Based on the Estimate of q (cfs/mi^2)

Reach	DA (mi^2)	Tributary USGS Gauge (cfs)	Tributary q x DA (cfs)	Tributary Flow (cfs)	Incremental Inflow q x DA (cfs)	WWTF Flow (cfs)		River Flow (cfs)
1	2	3	4	5	6	7		8
DA above Northbridge USGS Station: q_1 = 0.56 cfs/mi^2								
Headwater	60.5				33.97			33.97
1	1.14				0.64			34.61
2	6.20				3.48	UBWPAD	44.6	82.69
3	0.60				0.34			83.03
4	2.28				1.28			84.31
Singletary	6.02		3.38	3.38				87.69
5	6.40				3.59			91.28
6	1.40				0.79	Millbury	1.69	93.76
7	8.53				4.79			98.55
Spring	7.17		4.03	4.03				102.6
8	1.35				0.76			103.3
Cronin	3.23		1.81	1.81				105.1
Quinsigamond	34.23	11.00	4.83	15.83				121.0
9	0.68				0.38			121.4
10	3.18				1.79	Grafton	1.86	125.0
DA between Northbridge and the Woonsocket USGS Station: q_2 = 0.46 cfs/mi^2								
11	1.82				0.84			125.8
12	1.34				0.62			126.5
13	4.06				1.87			128.3
14	0.70				0.32	Northbridge	1.39	130.0
15	1.20				0.55			130.6
16	0.50				0.23			130.8
17	0.60				0.28			131.1
Mumford	68.5		31.54	31.54				162.6
West	37.4		17.22	17.22				179.9
18	7.20				3.32	Uxbridge	0.85	184.0
19	1.19				0.55			184.6
20	0.57				0.26			184.8
Flow Profile Calculated to the Woonsocket USGS Station								
	0.04				0.02			184.8
Branch	93.1	116.0		116.0				300.8
	4.5				2.07			302.9
	4.5				2.07			305.0
	15.6				7.18			312.2
Mill	23		10.59	10.59				322.8
Peters	11.6		5.34	5.34				328.1