

Data Repository Item DR2006149

TABLE DR1. BASE FLOW DISCHARGES AND REGRESSIONS

Drainage Area (km ²)	Base Q #1 (m ³ /s)	Base Q #2 (m ³ /s)	Base Q #3 (m ³ /s)	Base Q #4 (m ³ /s)	Base Q #5 (m ³ /s)	Base Q #6 (m ³ /s)	Base Q #7 (m ³ /s)	Base Q #8 (m ³ /s)	Base Q #9 (m ³ /s)	Base Q #10 (m ³ /s)	Base Q #11 (m ³ /s)	Base Q #12 (m ³ /s)	c value using dummy variables
Little Lehigh Creek gauges													
Rt. 100	55	0.41 ± 0.07	0.36 ± 0.08	0.36 ± 0.08	0.34 ± 0.09	0.35 ± 0.08	0.26 ± 0.10	0.24 ± 0.10	0.32 ± 0.09	0.38 ± 0.08			
Ancient Oaks	118	1.32 ± 0.21	1.05 ± 0.11	0.86 ± 0.05	0.79 ± 0.04	0.70 ± 0.01	N.D.*	0.57 ± 0.02	0.57 ± 0.02	0.76 ± 0.03			
Mill Creek	132	1.26 ± 0.20	1.13 ± 0.15	1.02 ± 0.11	0.97 ± 0.10	0.97 ± 0.10	N.D.*	N.D.*	N.D.*	N.D.*			
Macungie	170	1.49 ± 0.58	1.17 ± 0.37	1.01 ± 0.25	0.97 ± 0.23	0.94 ± 0.21	N.D.*	0.43 ± 0.04	0.50 ± 0.02	0.99 ± 0.24			
Allentown§	209	3.31	2.80	2.43	2.36	2.35	1.42	1.30	1.22	2.72			
Allentown 10th	254												
St. §		4.22	3.47	3.17	2.97	2.97	1.61	1.53	1.39	4.02			
<u>$Q = kA^c$</u>													
c		1.49 ± 0.34	1.44 ± 0.37	1.38 ± 0.42	1.39 ± 0.20	1.38 ± 0.46	1.22 ± 0.14	1.13 ± 0.66	0.92 ± 0.53	1.47 ± 0.64			1.31 ± 0.16
k		3.01 ± 0.75	2.98 ± 0.80	2.89 ± 0.91	2.94 ± 0.86	2.93 ± 0.98	2.72 ± 0.30	2.63 ± 1.44	2.15 ± 1.16	3.07 ± 0.70			N.A.†
r ²		0.95 ± 0.18	0.94 ± 0.02	0.92 ± 0.22	0.92 ± 0.20	0.90 ± 0.24	0.99 ± 0.07	0.79 ± 0.35	0.80 ± 0.28	0.83 ± 0.34			0.90 ± 0.24
Sacony Creek gauges													
Bowers	16	0.53 ± 0.02	0.39 ± 0.03	0.35 ± 0.04	0.44 ± 0.01	0.39 ± 0.03	0.37 ± 0.03	0.39 ± 0.03	N.D.*	N.D.*	0.23 ± 0.05	0.22 ± 0.05	0.21 ± 0.05
Kutztown	51	N.D.*	1.16 ± 0.15	1.30 ± 0.19	1.24 ± 0.15	N.D.*	1.16 ± 0.15	1.09 ± 0.12	1.70 ± 0.34	1.20 ± 0.16	N.D.*	N.D.*	N.D.*
SGL	126	5.04 ± 1.86	N.D.*	N.D.*	N.D.*	1.76 ± 0.69	N.D.*	N.D.*	2.36 ± 1.10	1.61 ± 0.60	1.43 ± 0.49	1.27 ± 0.40	1.33 ± 0.44
Virgin	141	7.01 ± 2.96	3.40 ± 1.18	2.59 ± 0.41	5.03 ± 1.97	2.26 ± 0.68	3.13 ± 1.06	2.75 ± 0.89	3.02 ± 1.01	2.00 ± 0.57	1.63 ± 0.43	1.41 ± 0.43	1.47 ± 0.37
<u>$Q = kA^c$</u>													
c		1.12 ± .017	0.98 ± 0.09	0.91 ± 0.00	1.01 ± 0.30	0.76 ± 0.11	0.97 ± 0.03	0.89 ± 0.03	0.49 ± 0.35	0.44 ± 0.28	0.88 ± 0.01	0.83 ± 0.02	0.89 ± 0.01
k		-1.61 ± 0.32	-1.59 ± 0.16	-1.54 ± 0.00	-1.70 ± 0.52	-1.32 ± 0.21	-1.59 ± 0.06	-1.47 ± 0.04	-0.61 ± 0.71	-0.67 ± 0.57	-1.69 ± 0.02	-1.64 ± 0.03	-1.74 ± 0.02
r ²		0.99 ± 0.13	1.00 ± 0.06	1.00 ± 0.00	0.98 ± 0.20	0.99 ± 0.08	1.00 ± 0.02	1.00 ± 0.01	0.88 ± 0.12	0.90 ± 0.10	1.00 ± 0.01	1.00 ± 0.01	1.00 ± 0.01

*N.D. = not determined

†N.A. = Not applicable

§ Variance for USGS gauges not determined so they are not reported