

Table 4. Summary for Annual Precipitation for Selected Areas in the Susquehanna River Basin, Calendar Year 2003

River Location	Season	Calendar Year 2003 Precipitation	Average Long-term Precipitation	Departure From Long Term
		inches	inches	inches
Susquehanna River above Towanda, Pa	January-March	6.58	7.94	-1.36
	April-June	8.77	10.02	-1.25
	July-September	15.06	10.25	+4.81
	October-December	9.71	8.73	+0.98
	Yearly Total	40.12	36.94	+3.18
Susquehanna River above Danville, Pa.	January-March	6.13	7.87	-1.74
	April-June	9.13	10.11	-0.99
	July-September	13.97	10.39	+3.58
	October-December	9.43	8.75	+0.68
	Yearly Total	38.66	37.12	+1.54
West Branch Susquehanna River above Lewisburg, Pa.	January-March	8.38	8.87	-0.49
	April-June	11.55	11.43	+0.12
	July-September	21.25	11.61	+9.64
	October-December	12.18	9.44	+2.74
	Yearly Total	53.36	41.35	+12.01
Juniata River above Newport, Pa.	January-March	8.57	8.79	-0.22
	April-June	13.09	11.01	+2.08
	July-September	16.21	10.89	+5.32
	October-December	10.57	9.13	+1.44
	Yearly Total	48.44	39.82	+8.62
Susquehanna River above Marietta, Pa.	January-March	7.99	8.49	-0.50
	April-June	11.68	10.71	+0.97
	July-September	16.21	10.79	+5.42
	October-December	10.88	9.06	+1.81
	Yearly Total	46.76	39.05	+7.71
Conestoga River above Conestoga, Pa.	January-March	10.19	8.57	+1.62
	April-June	14.16	10.85	+3.31
	July-September	16.96	11.79	+5.17
	October-December	14.09	9.50	+4.59
	Yearly Total	55.40	40.71	+14.69

WATER DISCHARGE

Water discharge data were obtained from the USGS and are listed in Table 5. Lewisburg recorded the second highest rainfall for the year but also recorded the lowest percent of flow above the LTM. This could be due to the watershed being mostly forested and thus allowing for less runoff. Water discharges were above the LTM at all sites ranging from 147.3 percent of the LTM at Lewisburg to 176.2 percent at Conestoga. Figure 3 compares the 2003 discharges with the LTM discharges for each site.

ANNUAL NUTRIENT AND SUSPENDED-SEDIMENT LOADS AND YIELDS

Loads and yields represent two methods for describing nutrient and SS amounts within a

basin. Loads refer to the actual amount of the constituent being transported in the water column past a given point over a specific duration of time and are expressed in pounds. Yields compare the transported load with the acreage of the watershed and are expressed in lbs/acre. This allows for easy watershed comparisons. This project reports loads and yields for the constituents listed in Table 6 as computed by the Minimum Variance Unbiased Estimator (MVUE) described by Cohn and others (1989). This estimator relates the constituent concentration to water discharge, seasonal effects, and long-term trends, and computes the best-fit regression equation. Daily loads of the constituents were then calculated from the daily mean water discharge records. The loads were reported along with the estimates of accuracy. Tables 7-19 show the loads and yields for the six monitoring stations, as well as an