

Appendix 2\_3C Streamflow statistics for site S4 estimated using a drainage-area-ratio method and historical streamflows (Olson, S.A., and Mack,T.J., 2011, Technique for estimation of streamflow statistics in mineral areas of interest in Afghanistan: U.S. Geological Survey Open-File Report 2011-1176)

[km<sup>2</sup>, square kilometer; mm, millimeter; m, meter; m<sup>3</sup>/s, cubic meter per second; The streamgage, listed with Afghan identification number, is the historical site used for the ungaged site estimate.]

**Basin Characteristics:**

Drainage area:	1078.12 km <sup>2</sup>	Basin percent above 3000 m:	63.9
Basin slope percent:	34.2	Mean October precipitation:	25.9 mm
Centroid elevation:	3084.2 m	Mean November precipitation:	53 mm
Basin percent irrigated:	2.22	Mean December precipitation:	62 mm
		Mean January precipitation:	56 mm

Streamgage: Warduj River near Baharak 15-10.R00-2A  
Drainage area, km<sup>2</sup>: 3382.5

Streamgage data:	Ungaged site estimate:		area exponent
7Q10:	6.86 m <sup>3</sup> /s	1.87 m <sup>3</sup> /s	1.14
7Q2:	8.34 m <sup>3</sup> /s	2.57 m <sup>3</sup> /s	1.03
90% flow duration:	9.46 m <sup>3</sup> /s	2.28 m <sup>3</sup> /s	1.25
80% flow duration:	10.7 m <sup>3</sup> /s	2.78 m <sup>3</sup> /s	1.18
Mean annual discharge:	34.8 m <sup>3</sup> /s	10.64 m <sup>3</sup> /s	1.04
October mean monthly discharge:	21.5 m <sup>3</sup> /s	6.14 m <sup>3</sup> /s	1.10
November mean monthly discharge:	15.4 m <sup>3</sup> /s	4.45 m <sup>3</sup> /s	1.09
December mean monthly discharge:	12.8 m <sup>3</sup> /s	3.74 m <sup>3</sup> /s	1.08
January mean monthly discharge:	11.2 m <sup>3</sup> /s	3.32 m <sup>3</sup> /s	1.06
February mean monthly discharge:	10.5 m <sup>3</sup> /s	3.34 m <sup>3</sup> /s	1.00
March mean monthly discharge:	9.55 m <sup>3</sup> /s	3.34 m <sup>3</sup> /s	0.92
April mean monthly discharge:	10.5 m <sup>3</sup> /s	3.76 m <sup>3</sup> /s	0.90
May mean monthly discharge:	19.3 m <sup>3</sup> /s	5.82 m <sup>3</sup> /s	1.05
June mean monthly discharge:	74.8 m <sup>3</sup> /s	19.48 m <sup>3</sup> /s	1.18
July mean monthly discharge:	103 m <sup>3</sup> /s	29.91 m <sup>3</sup> /s	1.08
August mean monthly discharge:	84.6 m <sup>3</sup> /s	25.20 m <sup>3</sup> /s	1.06
September mean monthly discharge:	45.2 m <sup>3</sup> /s	12.97 m <sup>3</sup> /s	1.09
October minimum monthly discharge:	18.8 m <sup>3</sup> /s	4.77 m <sup>3</sup> /s	1.20
November minimum monthly discharge:	14.3 m <sup>3</sup> /s	3.67 m <sup>3</sup> /s	1.19
December minimum monthly discharge:	11.4 m <sup>3</sup> /s	2.94 m <sup>3</sup> /s	1.18
January minimum monthly discharge:	9.86 m <sup>3</sup> /s	2.46 m <sup>3</sup> /s	1.21
February minimum monthly discharge:	8.44 m <sup>3</sup> /s	2.22 m <sup>3</sup> /s	1.17
March minimum monthly discharge:	7.38 m <sup>3</sup> /s	2.24 m <sup>3</sup> /s	1.04
April minimum monthly discharge:	7.35 m <sup>3</sup> /s	2.26 m <sup>3</sup> /s	1.03
May minimum monthly discharge:	10.3 m <sup>3</sup> /s	2.70 m <sup>3</sup> /s	1.17
June minimum monthly discharge:	43.9 m <sup>3</sup> /s	9.97 m <sup>3</sup> /s	1.30
July minimum monthly discharge:	73.3 m <sup>3</sup> /s	17.60 m <sup>3</sup> /s	1.25
August minimum monthly discharge:	61 m <sup>3</sup> /s	14.00 m <sup>3</sup> /s	1.29
September minimum monthly discharge:	36.2 m <sup>3</sup> /s	8.52 m <sup>3</sup> /s	1.27