

Appendix 2\_7C Streamflow statistics for site S9 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, milimeter; 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:	190.85 km <sup>2</sup>	Basin percent above 3000 m:	93.91
Basin slope percent:	36.9	Mean October precipitation:	14.7 mm
Centroid elevation:	3277.5 m	Mean November precipitation:	44.9 mm
Basin percent irrigated:	4.06	Mean December precipitation:	65.4 mm
		Mean January precipitation:	76.5 mm

Streamgage: Syahang River near Gardandewal 343400068110000 4-16.R0.00-3A  
Drainage area, km<sup>2</sup>: 161.7

**Results**

Streamgage data:		Ungaged site estimate:	area exponent
7Q10:	0.2 m <sup>3</sup> /s	0.24 m <sup>3</sup> /s	1.14
7Q2:	0.53 m <sup>3</sup> /s	0.63 m <sup>3</sup> /s	1.03
90% flow duration:	0.5 m <sup>3</sup> /s	0.61 m <sup>3</sup> /s	1.25
80% flow duration:	0.58 m <sup>3</sup> /s	0.71 m <sup>3</sup> /s	1.18
Mean annual discharge:	1.66 m <sup>3</sup> /s	1.97 m <sup>3</sup> /s	1.04
October mean monthly discharge:	0.75 m <sup>3</sup> /s	0.90 m <sup>3</sup> /s	1.10
November mean monthly discharge:	0.72 m <sup>3</sup> /s	0.86 m <sup>3</sup> /s	1.09
December mean monthly discharge:	0.64 m <sup>3</sup> /s	0.77 m <sup>3</sup> /s	1.08
January mean monthly discharge:	0.63 m <sup>3</sup> /s	0.75 m <sup>3</sup> /s	1.06
February mean monthly discharge:	0.63 m <sup>3</sup> /s	0.74 m <sup>3</sup> /s	1.00
March mean monthly discharge:	0.91 m <sup>3</sup> /s	1.06 m <sup>3</sup> /s	0.92
April mean monthly discharge:	3.97 m <sup>3</sup> /s	4.61 m <sup>3</sup> /s	0.90
May mean monthly discharge:	6.6 m <sup>3</sup> /s	7.85 m <sup>3</sup> /s	1.05
June mean monthly discharge:	2.46 m <sup>3</sup> /s	2.99 m <sup>3</sup> /s	1.18
July mean monthly discharge:	0.99 m <sup>3</sup> /s	1.18 m <sup>3</sup> /s	1.08
August mean monthly discharge:	0.62 m <sup>3</sup> /s	0.74 m <sup>3</sup> /s	1.06
September mean monthly discharge:	0.74 m <sup>3</sup> /s	0.89 m <sup>3</sup> /s	1.09
October minimum monthly discharge:	0.55 m <sup>3</sup> /s	0.67 m <sup>3</sup> /s	1.20
November minimum monthly discharge:	0.51 m <sup>3</sup> /s	0.62 m <sup>3</sup> /s	1.19
December minimum monthly discharge:	0.39 m <sup>3</sup> /s	0.47 m <sup>3</sup> /s	1.18
January minimum monthly discharge:	0.45 m <sup>3</sup> /s	0.55 m <sup>3</sup> /s	1.21
February minimum monthly discharge:	0.47 m <sup>3</sup> /s	0.57 m <sup>3</sup> /s	1.17
March minimum monthly discharge:	0.59 m <sup>3</sup> /s	0.70 m <sup>3</sup> /s	1.04
April minimum monthly discharge:	2.32 m <sup>3</sup> /s	2.75 m <sup>3</sup> /s	1.03
May minimum monthly discharge:	2.8 m <sup>3</sup> /s	3.40 m <sup>3</sup> /s	1.17
June minimum monthly discharge:	1.12 m <sup>3</sup> /s	1.39 m <sup>3</sup> /s	1.30
July minimum monthly discharge:	0.18 m <sup>3</sup> /s	0.22 m <sup>3</sup> /s	1.25
August minimum monthly discharge:	0.12 m <sup>3</sup> /s	0.15 m <sup>3</sup> /s	1.29
September minimum monthly discharge:	0.49 m <sup>3</sup> /s	0.60 m <sup>3</sup> /s	1.27