

Appendix 2\_15C Streamflow statistics for site S11 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:	105 km <sup>2</sup>	Basin percent above 3000 m:	4.93
Basin slope percent:	22.33	Mean October precipitation:	5.4 mm
Centroid elevation:	2385.6 m	Mean November precipitation:	13.5 mm
Basin percent irrigated:	15.14	Mean December precipitation:	28.9 mm
		Mean January precipitation:	42.4 mm

Notes: Percent irrigated land is 15. Use with caution.

Streamgage: Syahgel River at Syahgel		3-5.R00-3T	
Drainage area, km <sup>2</sup> : 149		<b>Results</b>	
Streamgage data:		<b>Ungaged site estimate:</b>	area exponent
90% flow duration:	0.02 m <sup>3</sup> /s	0.01 m <sup>3</sup> /s	1.25
80% flow duration:	0.03 m <sup>3</sup> /s	0.02 m <sup>3</sup> /s	1.18
Mean annual discharge:	0.19 m <sup>3</sup> /s	0.13 m <sup>3</sup> /s	1.04
October mean monthly discharge:	0.04 m <sup>3</sup> /s	0.03 m <sup>3</sup> /s	1.10
November mean monthly discharge:	0.05 m <sup>3</sup> /s	0.03 m <sup>3</sup> /s	1.09
December mean monthly discharge:	0.12 m <sup>3</sup> /s	0.08 m <sup>3</sup> /s	1.08
January mean monthly discharge:	0.29 m <sup>3</sup> /s	0.20 m <sup>3</sup> /s	1.06
February mean monthly discharge:	0.34 m <sup>3</sup> /s	0.24 m <sup>3</sup> /s	1.00
March mean monthly discharge:	0.42 m <sup>3</sup> /s	0.30 m <sup>3</sup> /s	0.92
April mean monthly discharge:	0.57 m <sup>3</sup> /s	0.42 m <sup>3</sup> /s	0.90
May mean monthly discharge:	0.34 m <sup>3</sup> /s	0.24 m <sup>3</sup> /s	1.05
June mean monthly discharge:	0.14 m <sup>3</sup> /s	0.09 m <sup>3</sup> /s	1.18
July mean monthly discharge:	0.1 m <sup>3</sup> /s	0.07 m <sup>3</sup> /s	1.08
August mean monthly discharge:	0.1 m <sup>3</sup> /s	0.07 m <sup>3</sup> /s	1.06
September mean monthly discharge:	0.03 m <sup>3</sup> /s	0.02 m <sup>3</sup> /s	1.09
October minimum monthly discharge:	0.01 m <sup>3</sup> /s	0.01 m <sup>3</sup> /s	1.20
November minimum monthly discharge:	0.01 m <sup>3</sup> /s	0.01 m <sup>3</sup> /s	1.19
December minimum monthly discharge:	0.03 m <sup>3</sup> /s	0.02 m <sup>3</sup> /s	1.18
January minimum monthly discharge:	0.07 m <sup>3</sup> /s	0.05 m <sup>3</sup> /s	1.21
February minimum monthly discharge:	0.08 m <sup>3</sup> /s	0.05 m <sup>3</sup> /s	1.17
March minimum monthly discharge:	0.15 m <sup>3</sup> /s	0.10 m <sup>3</sup> /s	1.04
April minimum monthly discharge:	0.06 m <sup>3</sup> /s	0.04 m <sup>3</sup> /s	1.03
May minimum monthly discharge:	0.02 m <sup>3</sup> /s	0.01 m <sup>3</sup> /s	1.17
June minimum monthly discharge:	0.01 m <sup>3</sup> /s	0.01 m <sup>3</sup> /s	1.30
July minimum monthly discharge:	0.02 m <sup>3</sup> /s	0.01 m <sup>3</sup> /s	1.25
August minimum monthly discharge:	0.02 m <sup>3</sup> /s	0.01 m <sup>3</sup> /s	1.29
September minimum monthly discharge:	0.01 m <sup>3</sup> /s	0.01 m <sup>3</sup> /s	1.27

**Drainage area ratio technique:**

Streamgage: Park River near Park Dasht		3-1.1L0-5T	
Drainage area, km <sup>2</sup> : 263.8		<b>Results</b>	
Streamgage data:		<b>Ungaged site estimate:</b>	area exponent
90% flow duration:	0.04 m <sup>3</sup> /s	0.01 m <sup>3</sup> /s	1.25
80% flow duration:	0.05 m <sup>3</sup> /s	0.02 m <sup>3</sup> /s	1.18
Mean annual discharge:	0.4 m <sup>3</sup> /s	0.15 m <sup>3</sup> /s	1.04
October mean monthly discharge:	0.06 m <sup>3</sup> /s	0.02 m <sup>3</sup> /s	1.10
November mean monthly discharge:	0.06 m <sup>3</sup> /s	0.02 m <sup>3</sup> /s	1.09
December mean monthly discharge:	0.09 m <sup>3</sup> /s	0.03 m <sup>3</sup> /s	1.08
January mean monthly discharge:	0.11 m <sup>3</sup> /s	0.04 m <sup>3</sup> /s	1.06
February mean monthly discharge:	0.32 m <sup>3</sup> /s	0.13 m <sup>3</sup> /s	1.00
March mean monthly discharge:	1.48 m <sup>3</sup> /s	0.63 m <sup>3</sup> /s	0.92
April mean monthly discharge:	1.89 m <sup>3</sup> /s	0.83 m <sup>3</sup> /s	0.90
May mean monthly discharge:	0.46 m <sup>3</sup> /s	0.18 m <sup>3</sup> /s	1.05
June mean monthly discharge:	0.13 m <sup>3</sup> /s	0.04 m <sup>3</sup> /s	1.18
July mean monthly discharge:	0.55 m <sup>3</sup> /s	0.20 m <sup>3</sup> /s	1.08
August mean monthly discharge:	0.2 m <sup>3</sup> /s	0.08 m <sup>3</sup> /s	1.06
September mean monthly discharge:	0.08 m <sup>3</sup> /s	0.03 m <sup>3</sup> /s	1.09
October minimum monthly discharge:	0.04 m <sup>3</sup> /s	0.01 m <sup>3</sup> /s	1.20
November minimum monthly discharge:	0.05 m <sup>3</sup> /s	0.02 m <sup>3</sup> /s	1.19
December minimum monthly discharge:	0.04 m <sup>3</sup> /s	0.01 m <sup>3</sup> /s	1.18
January minimum monthly discharge:	0.04 m <sup>3</sup> /s	0.01 m <sup>3</sup> /s	1.21
February minimum monthly discharge:	0.07 m <sup>3</sup> /s	0.02 m <sup>3</sup> /s	1.17
March minimum monthly discharge:	0.14 m <sup>3</sup> /s	0.05 m <sup>3</sup> /s	1.04
April minimum monthly discharge:	0.55 m <sup>3</sup> /s	0.21 m <sup>3</sup> /s	1.03
May minimum monthly discharge:	0.09 m <sup>3</sup> /s	0.03 m <sup>3</sup> /s	1.17
June minimum monthly discharge:	0.06 m <sup>3</sup> /s	0.02 m <sup>3</sup> /s	1.30
July minimum monthly discharge:	0.04 m <sup>3</sup> /s	0.01 m <sup>3</sup> /s	1.25
August minimum monthly discharge:	0.04 m <sup>3</sup> /s	0.01 m <sup>3</sup> /s	1.29
September minimum monthly discharge:	0.03 m <sup>3</sup> /s	0.01 m <sup>3</sup> /s	1.27