

Appendix 2\_5C Streamflow statistics for site S27 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:	11568.3 km <sup>2</sup>	Basin percent above 3000 m:	63.7
Basin slope percent:	34.2	Mean October precipitation:	13.3 mm
Centroid elevation:	2399.4 m	Mean November precipitation:	31.5 mm
Basin percent irrigated:	4.4 %	Mean December precipitation:	42.4 mm
		Mean January precipitation:	51.8 mm

Streamgage: Helmand River at Gizab (332300066170000)		4-0.000-9M	
Drainage area, km <sup>2</sup> : 20739		<b>Results</b>	
Streamgage data:		<b>Ungaged site estimate:</b>	area exponent
7Q10:	25.2 m <sup>3</sup> /s	12.97 m <sup>3</sup> /s	1.14
7Q2:	34 m <sup>3</sup> /s	18.64 m <sup>3</sup> /s	1.03
90% flow duration:	32.5 m <sup>3</sup> /s	15.71 m <sup>3</sup> /s	1.25
80% flow duration:	39.1 m <sup>3</sup> /s	19.65 m <sup>3</sup> /s	1.18
Mean annual discharge:	111 m <sup>3</sup> /s	60.61 m <sup>3</sup> /s	1.04
October mean monthly discharge:	41.3 m <sup>3</sup> /s	21.77 m <sup>3</sup> /s	1.10
November mean monthly discharge:	47.4 m <sup>3</sup> /s	25.15 m <sup>3</sup> /s	1.09
December mean monthly discharge:	46.8 m <sup>3</sup> /s	24.96 m <sup>3</sup> /s	1.08
January mean monthly discharge:	48 m <sup>3</sup> /s	25.81 m <sup>3</sup> /s	1.06
February mean monthly discharge:	66.8 m <sup>3</sup> /s	37.24 m <sup>3</sup> /s	1.00
March mean monthly discharge:	186 m <sup>3</sup> /s	108.77 m <sup>3</sup> /s	0.92
April mean monthly discharge:	360 m <sup>3</sup> /s	213.11 m <sup>3</sup> /s	0.90
May mean monthly discharge:	286 m <sup>3</sup> /s	155.07 m <sup>3</sup> /s	1.05
June mean monthly discharge:	119 m <sup>3</sup> /s	59.87 m <sup>3</sup> /s	1.18
July mean monthly discharge:	57.8 m <sup>3</sup> /s	30.75 m <sup>3</sup> /s	1.08
August mean monthly discharge:	34.1 m <sup>3</sup> /s	18.37 m <sup>3</sup> /s	1.06
September mean monthly discharge:	35 m <sup>3</sup> /s	18.51 m <sup>3</sup> /s	1.09
October minimum monthly discharge:	28.2 m <sup>3</sup> /s	14.00 m <sup>3</sup> /s	1.20
November minimum monthly discharge:	32.2 m <sup>3</sup> /s	16.07 m <sup>3</sup> /s	1.19
December minimum monthly discharge:	30.5 m <sup>3</sup> /s	15.27 m <sup>3</sup> /s	1.18
January minimum monthly discharge:	32.7 m <sup>3</sup> /s	16.09 m <sup>3</sup> /s	1.21
February minimum monthly discharge:	35.7 m <sup>3</sup> /s	18.04 m <sup>3</sup> /s	1.17
March minimum monthly discharge:	143 m <sup>3</sup> /s	77.81 m <sup>3</sup> /s	1.04
April minimum monthly discharge:	230 m <sup>3</sup> /s	125.86 m <sup>3</sup> /s	1.03
May minimum monthly discharge:	137 m <sup>3</sup> /s	69.11 m <sup>3</sup> /s	1.17
June minimum monthly discharge:	71.5 m <sup>3</sup> /s	33.55 m <sup>3</sup> /s	1.30
July minimum monthly discharge:	30.3 m <sup>3</sup> /s	14.62 m <sup>3</sup> /s	1.25
August minimum monthly discharge:	18.3 m <sup>3</sup> /s	8.63 m <sup>3</sup> /s	1.29
September minimum monthly discharge:	22 m <sup>3</sup> /s	10.51 m <sup>3</sup> /s	1.27