Flow Calculations for Sand River

Date: 8/1/2016

Stream Width: 12 feet

Staff Gauge Level: n/a

Field Crew: CA

Segment Center	Segment Width	Segment Depth	Segment Area	Depth - 20%	Depth - 60%	Depth - 80%	Velocity at (Depth - 20%)	Velocity at (Depth - 60%)	Velocity at (Depth - 80%)	Average Velocity	Segment Flow
(feet)	(feet)	(feet)	(sqft)	(feet)	(feet)	(feet)	(fps)	(fps)	(fps)	(fps)	(cfs)
0.5	1.0	2.80	2.80	2.24	1.12	0.56	0.01		0.02	0.02	0.042
2	2.0	3.40	6.80	2.72	1.36	0.68	0.15		0.06	0.11	0.714
4	2.0	3.70	7.40	2.96	1.48	0.74	0.08		0.31	0.20	1.443
6	2.0	3.60	7.20	2.88	1.44	0.72	0.15		0.36	0.26	1.836
8	2.0	3.70	7.40	2.96	1.48	0.74	0.62		0.85	0.74	5.439
10	2.0	3.70	7.40	2.96	1.48	0.74	0.90		0.65	0.78	5.735
11.5	1.0	3.00	3.00	2.40	1.20	0.60	0.90		0.88	0.89	2.670

Σ (sqft) = **42.0**

Total Flow (cfs): **17.88**

Total Flow (gpm): **8045.55**

Comments: 11.585592 MGD
Large amount of rotation affecting flow on left side of culvert.