

**This sheet shows how the "measured flows" are determined**

**Step 1:**

**Summary of flows for all trips and transects**

Flows are calculated in worksheets "A" through "L"

**Trip 1 - Flow Summary**

Reach	Site	# of TRs	TR				
			1	2	3	4	5
Stetson	A	5	11.5	9.8	10.7	13.0	10.8
	B	5	10.7	10.0	11.7	13.7	13.8
	C	4	14.7	11.5	13.0	15.5	
	D	3	13.5	13.6	12.4		
Canyon	E	4	51.6	41.4	49.3	35.9	
	F	3	45.2	48.5	49.5		
	G	4	45.3	39.6	47.6	52.2	
	H	4	39.6	49.2	46.8	45.3	
Alluvial	I	4	58.9	50.4	49.1	50.2	
	J	3	53.8	55.4	47.8		
	K	4	41.2	53.0	43.4	43.5	
	L	5	54.9	67.4	44.9	58.8	59.6

**Trip 5 - Flow Summary**

Reach	Site	# of TRs	TR				
			1	2	3	4	5
Stetson	A	5	16.6	19.3	20.3	22.9	20.2
	B	5	24.7	23.5	23.9	29.9	23.0
	C	4	33.3	n/m	n/m	34.0	
	D	3	33.3	34.5	33.6		
Canyon	E	4	100.2	86.2	107.8	100.1	
	F	3	n/m	n/m	n/m		
	G	4	n/m	n/m	n/m	n/m	
	H	4	n/m	n/m	n/m	n/m	
Alluvial	I	4	n/m	n/m	n/m	n/m	
	J	3	n/m	126.0	122.3		
	K	4	88.8	94.9	74.3	130.0	
	L	5	n/m	n/m	n/m	n/m	n/m

Note: n/m stands for "not measured"

**Step 2:**

**Determine outliers**

We calculated % of total flow each cell carries in a transect. If the greatest % in a transect is too high, the transect is removed from average flow calculation.

**Trip 1 - determine outliers**

Reach	Site	# of TRs	TR				
			1	2	3	4	5
Stetson	A	5	outlier				
	B	5		outlier		outlier	outlier
	C	4				outlier	
	D	3		outlier			
Canyon	E	4				outlier	
	F	3	outlier				
	G	4		outlier			
	H	4					
Alluvial	I	4				outlier	
	J	3			outlier		
	K	4	outlier	outlier			
	L	5		outlier			

**Trip 5 - determine outliers**

Reach	Site	# of TRs	TR				
			1	2	3	4	5
Stetson	A	5					
	B	5				outlier	outlier
	C	4					
	D	3					
Canyon	E	4		outlier			
	F	3					
	G	4					
	H	4					
Alluvial	I	4					
	J	3					
	K	4					
	L	5					

**Step 3:**

**Calculate "measured flow" for each site**

After all outliers are removed, the remaining flows are listed below. The remaining flow are used to calculate "Site Ave Q", which is the "measured flow" to be entered in the hydraulic model for each site.

**Trip 1 - calculate measured flows**

Reach	Site	# of TRs	TR					Site Ave Q (cfs)
			1	2	3	4	5	
Stetson	A	5		9.8	10.7	13.0	10.8	11.1
	B	5	10.7		11.7			11.2
	C	4	14.7	11.5	13.0			13.0
	D	3	13.5		12.4			12.9
Canyon	E	4	51.6	41.4	49.3			48.1
	F	3		48.5	49.5			48.1
	G	4	45.3		47.6	52.2		48.4
	H	4	39.6	49.2	46.8	45.3		45.2
Alluvial	I	4	58.9	50.4	49.1			53.5
	J	3	53.8	55.4				53.5
	K	4			43.4	43.5		43.4
	L	5	54.9		44.9	58.8	59.6	54.5

E & F are averaged together  
F just d/s of E

**Trip 5 - calculate measured flows**

Reach	Site	# of TRs	TR					Site Ave Q (cfs)
			1	2	3	4	5	
Stetson	A	5	16.6	19.3	20.3	22.9	20.2	19.9
	B	5	24.7	23.5	23.9			24.0
	C	4	33.3			34.0		33.7
	D	3	33.3	34.5	33.6			33.8
Canyon	E	4	100.2		107.8	100.1		102.7
	F	3						102.7
	G	4						
	H	4						
Alluvial	I	4						
	J	3		126.0	122.3			124.2
	K	4	88.8	94.9	74.3	130.0		97.0
	L	5						

Site I just u/s of Site J  
Use Q of Site I for Site J