

9-275-1	10/24/08	U.S. DEPARTMENT OF THE INTERIOR U.S. Geological Survey				Meas. No.	1
Station Number		ADCP Discharge Measurement Notes				Processed by	
36374009 186601						Checked by	
Station Name		IN FLOW OF FLOW#1 (MIDDLE BRANCH)					
Date	5-6	2011	Party	ESS/CSB	Gage Height	Discharge	
Width	Area/Rated Area	Velocity	Index Vel.				
409	5240	.93				4440	
Gage Height Change	Meas. plots	From rating	Shift		ADCP Sync'd to WT		
	hrs.	% diff	No.		at		
ADCP Mfr / Model / Frequency		Serial No.	Firmware		Software		
BDI/R10/1200		2339	10.16		2.07		
Boat/Motors Used		GPS Used	ADCP Depth	Diag. Test / Errors?			
MOUSE WOODRIDGE TRIMMER AG.		1.6					
Compass Calib. & Total Error	Mag. Var	On-site Model	Previous	Moving Bed?			
Or N	.4	-1.6					
Meas. Water Temp	ADCP Water Temp	Weather / Air Temp	Wind Speed / Dir.				
15.6 °F (Cat)	15.8 °F (Cat)	CCR WARM	5-10 WSW				
Gage Readings				Site Conditions			
Time	Inside	Outside	Max Water Depth	Max Water Speed			
1037			15.2				
1107			Max Boat Speed	Water Mode	12		
			Bottom Mode	Streambed material			
			Salinity	ppt at			
Weighted MGH			Checkbar found	Checkbar changed to:			
GH corrections				at			
Correct MGH							
Wading, cable, ice, boat, upstr., downstr., side bridge				ft., mi. upstr., downstr. of gage			
Measurement rated: excellent (2%), good (5%), fair (8%), poor (>8%)				based on following conditions			
Flow: Some REVERSE FLOW							
Cross section: FAIRLY EVEN							
Control:							
Gage operating: Y or N Record removed: Y or N Filename:							
Battery voltage: V Intakes/Orifice cleaned/purged:							
Bubble-gage psi: Tank Line Min Max Bubble rate / min							
Extreme-GH indicators: Max Min							
HWM on stick Ref elev. HWM elevation							
GH of zero flow = GH - depth at control = ft. Rated =							
Sheet No. of sheets							

Station Number:

Meas. No:

Station Name: Inflow Outflow #1 (middle breach)

Date: 05/06/2011

Party: ESS/CSB

Width: 409 ft

Processed by: ESS

Boat/Motor: MO WSC Wldrdg

Area: 5,240 ft²

Mean Velocity: 0.930 ft/s

Gage Height: 0.00 ft

G.H.Change: 0.000 ft

Discharge: 4,440 ft³/s

Area Method: Avg. Course

ADCP Depth: 1.600 ft

Index Vel.: 0.00 ft/s

Rating No.: 1

Nav. Method: DGPS

Shore Ens.:10

Adj. Mean Vel: 0.00 ft/s

Qm Rating: P

MagVar Method: Model (-1.6°)

Bottom Est: Power (0.1667)

Rated Area: 0.000 ft²

Diff.: 0.000%

Depth Sounder: Not Used

Top Est: Power (0.1667)

Control1: Unspecified

Control2: Unspecified

Control3: Unspecified

Screening Thresholds:

BT 3-Beam Solution: YES

Max. Vel.: 10.2 ft/s

ADCP:

WT 3-Beam Solution: NO

Max. Depth: 15.2 ft

Type/Freq.: Rio Grande/1200 kHz

BT Error Vel.: 0.33 ft/s

Mean Depth: 12.7 ft

Serial #: 2339

Firmware: 10.16

WT Error Vel.: 3.50 ft/s

% Meas.: 59.77

Bin Size: 25 cm

Blank: 25 cm

BT Up Vel.: 1.00 ft/s

Water Temp.: 15.6 °C

BT Mode: 5

BT Pings: 1

WT Up Vel.: 6.00 ft/s

ADCP Temp.: 15.8 °C

WT Mode: 12

WT Pings: 1

Use Weighted Mean Depth: YES

WV : 175

WO : 1, 7

Performed Diag. Test: YES

Project Name: Middle Breach Inflow 050611

Performed Moving Bed Test: NO

Software: 2.07

Performed Compass Test: YES

Meas. Location:

Tr.#	Edge Distance			#Ens.	Discharge						Width	Area	Time		Mean Vel.		% Bad	
	L	R	Top		Middle	Bottom	Left	Right	Total	Start			End	Boat	Water	Ens.	Bins	
000	L	10	20	562	1528	2726	633	11.6	-31.7	4866	579	7269	10:37	10:42	3.50	0.67	17	2
002	R	20	32	508	796	1942	367	7.88	-22.7	3090	531	6918	10:48	10:52	3.50	0.45	1	4
003	L	20	32	136	1173	1773	639	-22.1	41.4	3604	317	2668	10:54	10:55	5.14	1.35	28	1
004	R	20	32	129	946	2192	443	-23.8	35.9	3593	424	5425	10:55	10:56	6.06	0.66	0	1
005	L	0	0	207	1130	2634	486	0.000	0.000	4251	312	4101	10:57	10:59	3.92	1.04	1	1
006	R	0	0	230	1544	3578	691	0.000	0.000	5814	315	4312	10:59	11:01	3.54	1.35	0	2
007	L	0	0	178	1541	3740	699	0.000	0.000	5980	332	4708	11:02	11:04	3.99	1.27	0	1
008	R	0	0	239	1136	2621	524	0.000	0.000	4280	464	6548	11:05	11:07	4.19	0.65	0	2
Mean		9	15	273	1224	2651	560	-3.30	2.86	4435	409	5243	Total	00:29	4.23	0.93	6	2
SDev		10	16	167	287	711	123	12.9	25.2	1052	106.6	1591.7			0.92	0.36		
SD/M		1.13	1.10	0.61	0.23	0.27	0.22	3.91	8.82	0.24	0.26	0.30			0.22	0.39		

Remarks:

Discharge for transects in *italics* have a total Q more than 5% from the mean