

9-275-1	10/24/08	U.S. DEPARTMENT OF THE INTERIOR U.S. Geological Survey				Meas. No.	18
Station Number		ADCP Discharge Measurement Notes				Processed by	SS
365690890710						Checked by	201
Station Name BIRDS POINT BEACH BR CAIRO (UPR BEACH)							
Date	5-18	2011	Party	ESS/TL	Gage Height	Discharge	
Width	Area	Rated Area	Velocity	Index Vel.			
8780	47300		1.51	-		71200	
Gage Height Change	Meas. plots	From rating	Shift		ADCP Sync'd to WT		
	in hrs.	%diff	No.		Y or N		
ADCP Mfr./Model / Frequency		Serial No.		Firmware	Software		
SONTEK/M9 / 3MHz		1155		1.50	2.50		
Boat/Motors Used		GPS Used		ADCP Depth	Diag. Test / Errors?		
MOUSE WOODRIDGE		SONTEK M9		25	Y or N		
Compass Calib. & Total Error		Mag. Var		Mag/Var Method	Moving Bed?		
Y or N		M489		-1.6	On-site (Model) Previous	Y or N	
Meas. Water Temp		ADCP Water Temp		Weather / Air Temp	Wind Speed / Dir.		
18.5 °F / Cat		18.7 °F / Cat		CLE WARM	5-10 S		
Gage Readings							
Time		Inside	Outside	Site Conditions			
1735				Max Water Depth			
1827				Max Water Speed			
1915				Max Boat Speed			
				Water Mode			
				Bottom Mode			
				Streambed material			
				Salinity			
				ppt at			
Weighted MGH				Checkbar found			
GH corrections				Checkbar changed to:			
Correct MGH				at			
Wading, cable, ice, both upstr., downstr., side bridge							
ft. ml. upstr., downstr. of gage							
Measurement rated: excellent (2%), good (5%), fair (8%), poor (>8%) based on following conditions							
Flow	UNEVEN						
Cross section:	UNEVEN						
Control:							
Gage operating:	Y or N	Record removed:	Y or N	Filename:			
Battery voltage	V	Intakes/Orifice cleaned/purged:					
Bubble-gage psi:	Tank	Line	Bubble rate	/ min			
Extreme-GH indicators:	Max	Min	CSG Checked	Y or N			
HWM on stick	Ref elev.	HWM elevation					
GH of zero flow ~ GH	- depth at control	=	ft.	Rated=			
Sheet No.				of	sheets		

Discharge Measurement Summary

Date Measured: Wednesday, May 18, 2011

Site Information			Measurement Information		
Site Name		upper breach	Party		
Station Number			Boat/Motor		
Location			Meas. Number		
System Information		System Setup		Units	
System Type	RS-M9	Transducer Depth (ft)	0.25	Distance	ft
Serial Number	1155	Salinity (ppt)	0.0	Velocity	ft/s
Firmware Version	1.50	Magnetic Declination (deg)	-1.6	Area	ft2
Software Version	2.50			Discharge	cfs
				Temperature	degF

Discharge Calculation Settings								Discharge Results	
Track Reference	Bottom-Track	Left Method	Sloped Bank		Width (ft)				8,783.39
Depth Reference	Vertical Beam	Right Method	Sloped Bank		Area (ft2)				47,337.4
Coordinate System	ENU	Top Fit Type	Power Fit		Mean Speed (ft/s)				1.506
		Bottom Fit Type	Power Fit		Total Q (cfs)				71,183.391

Measurement Results																	
Tr	Time			Distance				Mean Vel		Discharge							%
#	Time	Duration	Temp.	Track	DMG	Width	Area	Boat	Water	Left	Right	Top	Middle	Bottom	Total	LCTotal	Measured
1	R 05:35:06 PM	0:27:09	66.1	10,152.54	8,639.38	8,858.38	45,867.7	6.232	1.592	327.21	141.20	9,495.31	53,421.67	9,919.40	73,022.401	--	73.2
4	L 06:21:56 PM	0:22:03	65.7	9,545.25	8,535.39	8,708.39	48,807.0	7.215	1.421	431.05	107.37	8,506.80	51,294.05	9,219.85	69,344.385	--	74.0
		Mean	65.9	9,848.90	8,587.39	8,783.39	47,337.4	6.724	1.506	379.13	124.28	9,001.05	52,357.86	9,569.63	71,183.391	0.000	73.6
		Std Dev	0.2	303.65	51.99	74.99	1,469.7	0.491	0.086	51.92	16.92	494.25	1,063.81	349.78	1,839.008	0.000	0.4
		COV	0.0	0.031	0.006	0.009	0.031	0.073	0.057	0.137	-0.136	0.055	0.020	0.037	0.026	0.000	0.006

Exposure Time: 0:49:12

Tr1=20110518173505.riv; Tr4=20110518182156r.rivr;

Comments

Tr1=20110518173505.riv - ; Tr4=20110518182156r.rivr - ;

Compass Calibration

File Name: CompassCal20110518172445.txt

Results: PASS
Score is excellent.
Magnetic interference is very low.

Calibration score: M4.00Q9

System Test

File Name: SystemTest20110518173014.txt

System Test: PASS