

9-275-I  
REV (10-01)

Geological Survey  
Water Resources Division  
Acoustic Profiler Discharge Measurement Notes

Processed by CBR  
Ck'd by RMP

Sta. No. \_\_\_\_\_

Sta. Name Inflow at Bird Pt Levee

Date 05/11, 2011 Party CBR/KMH

Width 8560 Area 74300 Vel. 3.78 G.H. - Disch. 280810

Profiler Water Temp. 21.30 °C at 1736 Rated area: — Index Velocity —

Profiler S/N: 5954 Mfgr: RD1 Freq: 1200 Firmware: 10.16 Software Ver. 2.07

Depth Cell Size	0.82	Other commands:	Profiler Depth	0.42
No. of Cells	30		Config. file	
Blanking Distance	6.82		Deployment	tethered
Water Mode	12		Moving Bed	
Ambiguity Vel.			Moving Bed Present:	Y N
Water pings	1		Diag. Test	ADCP TEST
Bottom pings	1		Diag. Test Errors:	Y (N)

Boat/Motor Used 513 ADCP Time to WT ☐ (@            GPS: VTG

Mag. Var. 1) -1.4 2) \_\_\_\_\_ 3) \_\_\_\_\_ 4) \_\_\_\_\_ Avg: \_\_\_\_\_ Comp. Cal.: 1.3<sup>e</sup>

GAGE READINGS					
Time				Inside	Outside
1745	START				
1820	END				
			$\text{Max } V = 14.7 \text{ A}/\text{s}$		
			$\text{Max } D = 42.8$		
Weighed MGH					
GH correction					
Correct MGH					

Samples collected: water quality, sediment, biological, other: \_\_\_\_\_

Measurements documented on other sheets:  
water quality, aux/base gage, other:

Rain gage serviced/calibrated \_\_\_\_\_

Weather clear,

Wind Spd. 0 Dir. -

Air Temp. 25 °C at 1805

Water Temp. 21.1 °C at 1736

Specific Cond: \_\_\_\_\_

Checkbar/chain found \_\_\_\_\_

Changed to \_\_\_\_\_ at \_\_\_\_\_

Correct \_\_\_\_\_

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: uneven, turbulent, channelized

Cross section: Low flow slack water at levee breach.

Control: \_\_\_\_\_

Gage operating: — Record removed: Y or N      Filename: —

Battery voltage: \_\_\_\_\_ Intakes/Orifice cleaned/purged: \_\_\_\_\_

Bubble-gage psi: Tank \_\_\_\_\_, Line \_\_\_\_\_; Bubble rate \_\_\_\_\_/min.

Extreme-GH indicators: max \_\_\_\_\_, min \_\_\_\_\_.

CSG checked:            HWM height on stick            Ref elev            HWM elev           

Remarks: Reference VTG, 50-200' DS of bird pt levee

GH of zero flow = GH \_\_\_\_\_ - depth at control \_\_\_\_\_ = \_\_\_\_\_ ft. rated \_\_\_\_\_

[illegible]

Notes:

Station Number: Inflow  
Station Name: Bird\_Pt\_Levee

Meas. No: 3  
Date: 05/11/2011

Party: CBR/KMH	Width: 8,560 ft	Processed by: CBR
Boat/Motor: 513	Area: 74,300 ft²	Mean Velocity: 3.78 ft/s
Gage Height: 0.00 ft	G.H.Change: 0.000 ft	Discharge: 281,000 ft³/s

Area Method: Avg. Course	ADCP Depth: 0.420 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: F
MagVar Method: Model (-1.4°)	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:		ADCP:
BT 3-Beam Solution: YES	Max. Vel.: 14.7 ft/s	Type/Freq.: Rio Grande/1200 kHz
WT 3-Beam Solution: NO	Max. Depth: 40.6 ft	Serial #: 5954      Firmware: 10.16
BT Error Vel.: 0.33 ft/s	Mean Depth: 8.68 ft	Bin Size: 25 cm      Blank: 25 cm
WT Error Vel.: 3.50 ft/s	% Meas.: 53.61	BT Mode: 5      BT Pings: 1
BT Up Vel.: 1.00 ft/s	Water Temp.: 21.1 °C	WT Mode: 12      WT Pings: 1
WT Up Vel.: 10.00 ft/s	ADCP Temp.: 18.2 °C	WV : 175      WO : 2, 4
Use Weighted Mean Depth: YES		

Performed Diag. Test: YES  
Performed Moving Bed Test: NO  
Performed Compass Test: YES  
Meas. Location: DS of Levee Breach 50'-200'

Project Name: Inflow\_3.mmt  
Software: 2.07

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	0	0	2664	72745	147952	61312	0.000	0.000	282008	8511	73792	17:40	18:00	8.09	3.82	1	1
001	R	0	0	2533	70716	153133	55764	0.000	0.000	279614	8602	74708	18:01	18:19	8.54	3.74	2	1
Mean		0	0	2598	71731	150542	58538	0.000	0.000	280811	8557	74250	Total	00:39	8.32	3.78	1	1
SDev		0	0	93	1434	3664	3923	0.000	0.000	1693	64.3	647.9			0.31	0.06		
SD/M		0.00	0.00	0.04	0.02	0.02	0.07	0.00	0.00	0.01	0.01	0.01			0.04	0.01		

Remarks: VTG Reference