

9-275-1	10/24/08	U.S. DEPARTMENT OF THE INTERIOR U.S. Geological Survey				Meas. No.	
Station Number						Processed by	
		ADCP Discharge Measurement Notes				Checked by	
Station Name		Birds Point Inflow					
Date		06-01, 2011		Party		BR/2M	
Width	Area / Rated Area	Velocity	Index Vel.	Gage Height	Discharge		
588	5,685	0.228	—	—	1,760		
Gage Height Change		Meas. plots	From rating	Shift	ADCP Sync'd to WT		
in hrs.		% diff	No.:		Y at _____ or N		
ADCP Mfr / Model / Frequency			Serial No.	Firmware	Software		
RS M9			2010	1.50	2.50		
Boat/Motors Used		GPS Used	ADCP Depth	Diag. Test / Errors?			
		no	0.3	<input checked="" type="checkbox"/> Y or <input checked="" type="checkbox"/> N			
Compass Calib. & Total Error		Mag. Var	MagVar Method		Moving Bed?		
<input checked="" type="checkbox"/> Y or <input checked="" type="checkbox"/> N		M2Q9	-1.6	On-site <input checked="" type="checkbox"/> Mode	Previous		<input checked="" type="checkbox"/> Y or <input checked="" type="checkbox"/> N
Meas. Water Temp		ADCP Water Temp	Weather / Air Temp		Wind Speed / Dir.		
84 °F / C at		85 °F / C at			°F / C		
Gage Readings						Site Conditions	
Time				Inside	Outside	Max Water Depth	
						Max Water Speed	
S 1425						Max Boat Speed	
		SEE REVERSE FOR				Water Mode	
		COMBINED QM				Bottom Mode	
F 1500						Streambed material	
						Salinity	
						ppt at	
Weighted MGH						Checkbar found	
GH corrections						Checkbar changed to:	
Correct MGH						at	
Wading, cable, ice, <input checked="" type="checkbox"/> boat, upstr., downstr., side bridge				ft., mi. upstr., downstr. of gage			
Measurement rated:		excellent (2%), good (5%), fair (8%), <input checked="" type="checkbox"/> poor (>8%)				based on following conditions	
Flow							
Cross section:							
Control:							
Gage operating:	<input checked="" type="checkbox"/> Y or <input checked="" type="checkbox"/> N	Record removed:	<input checked="" type="checkbox"/> Y or <input checked="" type="checkbox"/> N	Filename:			
Battery voltage	V		Intakes/Orifice cleaned/purged:				
Bubble-gage psi:	Tank		Line		Bubble rate	/ min	
Extreme-GH indicators:		Max		Min		CSG Checked	<input checked="" type="checkbox"/> Y or <input checked="" type="checkbox"/> N
HWM on stick			Ref elev.		HWM elevation		
GH of zero flow = GH			- depth at control		=	ft.	Rated =
				Sheet No.		of	sheets

Acoustic Profiler Discharge Measurement Notes							Filename Prefix:
Left Bank:	Sloping Vertical Other: _____					Right Bank:	Sloping Vertical Other: _____
Transect No.	Starting			Ending		Total Discharge	Notes
	Bank	Time	Distance	Distance	Time		
1	L R					93	} Northern Most breach hole Q = 89.6
2	L R					103	
3	L R					78	
4	L R					84	
5	L R					176	} Middle Breach hole Q = 132
6	L R					112	
7	L R					102	
8	L R					137	
9	L R					1,550	} Lower (Southern) Breach hole Q = 1,540
10	L R					1,610	
11	L R					1,390	
12	L R					1,600	
	L R						
Notes							
Combined total of inflows = 1,762 cfs							

Discharge Measurement Summary

Date Measured: Wednesday, June 01, 2011

Site Information		Measurement Information	
Site Name	birdspoint	Party	bcr/zwm
Station Number		Boat/Motor	
Location		Meas. Number	

System Information		System Setup		Units	
System Type	RS-M9	Transducer Depth (ft)	0.30	Distance	ft
Serial Number	2010	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)	65.99
Depth Reference	Bottom-Track	Right Method	Sloped Bank	Area (ft2)	751.2
Coordinate System	ENU	Top Fit Type	Power Fit	Mean Speed (ft/s)	0.120
		Bottom Fit Type	Power Fit	Total Q (cfs)	89.612

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 L	2:25:47 PM	0:00:55	87.0	70.12	50.86	67.42	781.8	1.275	0.119	-0.55	1.18	4.40	67.06	21.12	93.223	--	71.9
2 R	2:27:01 PM	0:00:52	86.8	60.52	48.23	64.79	681.0	1.164	0.151	-1.83	-0.92	6.14	69.46	29.82	102.672	--	67.7
3 L	2:28:09 PM	0:00:52	86.5	60.45	48.85	65.41	746.1	1.163	0.105	-7.04	-0.79	4.97	54.64	26.28	78.056	--	70.0
4 R	2:29:19 PM	0:00:56	85.9	58.81	49.78	66.34	795.7	1.050	0.106	-1.01	-0.17	4.62	56.38	24.67	84.498	--	66.7
		Mean	86.6	62.48	49.43	65.99	751.2	1.163	0.120	-2.61	-0.17	5.03	61.89	25.47	89.612	0.000	69.1
		Std Dev	0.4	4.47	0.99	0.99	44.3	0.079	0.019	2.60	0.83	0.67	6.46	3.13	9.264	0.000	2.0
		COV	0.0	0.072	0.020	0.015	0.059	0.068	0.154	0.998	4.798	0.133	0.104	0.123	0.103	0.000	0.029

Exposure Time: 0:03:35

Tr1=20110601142546.riv; Tr2=20110601142701.riv; Tr3=20110601142808.riv; Tr4=20110601142919.riv;

Comments																	
Tr1=20110601142546.riv - ; Tr2=20110601142701.riv - ; Tr3=20110601142808.riv - ; Tr4=20110601142919.riv - ;																	

Compass Calibration																	
File Name: CompassCal20110601142256.txt																	
Results: PASS																	
Score is excellent.																	
Magnetic interference is very low.																	
Calibration score: M2.00Q9																	

System Test																	
Not Loaded																	

Parameters and settings marked with a * are not constant for all files.

Report generated using SonTek RiverSurveyor Live v2.50

Discharge Measurement Summary

Date Measured: Wednesday, June 01, 2011

Site Information		Measurement Information	
Site Name	birdspoint	Party	bcr/zwm
Station Number		Boat/Motor	
Location		Meas. Number	

System Information		System Setup		Units	
System Type	RS-M9	Transducer Depth (ft)	0.30	Distance	ft
Serial Number	2010	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)	62.65
Depth Reference	Bottom-Track	Right Method	Sloped Bank	Area (ft2)	651.5
Coordinate System	ENU	Top Fit Type	Power Fit	Mean Speed (ft/s)	0.202
		Bottom Fit Type	Power Fit	Total Q (cfs)	131.809

Measurement Results																	
Tr	Time		Temp.	Distance				Mean Vel		Discharge							%
#	Time	Duration		Track	DMG	Width	Area	Boat	Water	Left	Right	Top	Middle	Bottom	Total	LCTotal	Measured
5	L 2:39:17 PM	0:01:18	84.5	91.94	64.97	70.97	758.8	1.179	0.232	0.04	-0.65	11.06	114.46	51.21	176.118	--	65.0
6	R 2:40:57 PM	0:01:03	85.4	68.04	55.22	61.22	616.4	1.080	0.182	-0.11	1.68	5.56	74.07	30.95	112.157	--	66.0
7	L 2:42:17 PM	0:01:02	85.2	67.98	53.31	59.31	651.6	1.096	0.157	-0.50	-4.58	5.37	74.39	27.53	102.198	--	72.8
8	R 2:43:38 PM	0:01:01	85.6	62.03	53.09	59.09	579.2	1.017	0.236	0.37	-1.40	6.97	89.08	41.75	136.762	--	65.1
		Mean	85.2	72.50	56.65	62.65	651.5	1.093	0.202	-0.05	-1.24	7.24	88.00	37.86	131.809	0.000	67.2
		Std Dev	0.4	11.49	4.87	4.87	67.1	0.058	0.034	0.31	2.24	2.29	16.44	9.33	28.508	0.000	3.2
		COV	0.0	0.158	0.086	0.078	0.103	0.053	0.166	6.099	1.813	0.317	0.187	0.246	0.216	0.000	0.048

Exposure Time: 0:04:24

Tr5=20110601143917.riv; Tr6=20110601144056.riv; Tr7=20110601144217.riv; Tr8=20110601144338.riv;

Comments
Tr5=20110601143917.riv - ; Tr6=20110601144056.riv - ; Tr7=20110601144217.riv - ; Tr8=20110601144338.riv - ;

Compass Calibration
File Name: CompassCal20110601142256.txt
Results: PASS Score is excellent. Magnetic interference is very low.
Calibration score: M2.00Q9

System Test
Not Loaded

Parameters and settings marked with a * are not constant for all files.

Report generated using SonTek RiverSurveyor Live v2.50

Discharge Measurement Summary

Date Measured: Wednesday, June 01, 2011

Site Information		Measurement Information	
Site Name	birdspoint	Party	bcr/zwm
Station Number		Boat/Motor	
Location		Meas. Number	

System Information		System Setup		Units	
System Type	RS-M9	Transducer Depth (ft)	0.30	Distance	ft
Serial Number	2010	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)	458.88
Depth Reference	Bottom-Track	Right Method	Sloped Bank	Area (ft2)	4,282.0
Coordinate System	ENU	Top Fit Type	Power Fit	Mean Speed (ft/s)	0.367
		Bottom Fit Type	Power Fit	Total Q (cfs)	1,537.425

Measurement Results																	
Tr	Time		Distance				Mean Vel		Discharge							% Measured	
#	Time	Duration	Temp.	Track	DMG	Width	Area	Boat	Water	Left	Right	Top	Middle	Bottom	Total	LCTotal	Measured
9	R 2:48:11 PM	0:02:18	83.9	442.91	422.65	461.65	4,855.1	3.209	0.319	7.17	0.22	129.05	1,019.85	392.00	1,548.297	--	65.9
10	L 2:50:48 PM	0:02:53	83.5	429.58	419.80	458.80	4,136.4	2.483	0.388	10.37	-0.81	172.81	984.32	439.17	1,605.868	--	61.3
11	R 2:54:07 PM	0:02:35	83.1	431.11	419.20	458.20	4,686.6	2.781	0.298	9.91	0.60	129.87	890.34	364.67	1,395.397	--	63.8
12	L 2:57:01 PM	0:02:40	82.4	431.76	417.86	456.86	3,450.1	2.698	0.464	10.19	-0.01	178.34	1,060.50	351.12	1,600.139	--	66.3
	Mean		83.2	433.84	419.88	458.88	4,282.0	2.793	0.367	9.41	0.00	152.52	988.75	386.74	1,537.425	0.000	64.3
	Std Dev		0.6	5.30	1.75	1.75	548.9	0.264	0.065	1.31	0.52	23.14	62.89	33.66	85.011	0.000	2.0
	COV		0.0	0.012	0.004	0.004	0.128	0.094	0.177	0.139	732.274	0.152	0.064	0.087	0.055	0.000	0.031

Exposure Time: 0:10:26

Tr9=20110601144810.riv; Tr10=20110601145047.riv; Tr11=20110601145407.riv; Tr12=20110601145700.riv;

Comments
Tr9=20110601144810.riv - ; Tr10=20110601145047.riv - ; Tr11=20110601145407.riv - ; Tr12=20110601145700.riv - ;

Compass Calibration
File Name: CompassCal20110601142256.txt
Results: PASS Score is excellent. Magnetic interference is very low.
Calibration score: M2.00Q9

System Test
Not Loaded

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