

9-275-1
REV (10-01)

U.S. DEPARTMENT OF THE INTERIOR
Geological Survey
Water Resources Division
Acoustic Profiler Discharge Measurement Notes

Meas. No. 7
Processed by CBR
Ck'd by Bank

Sta. No. -
Sta. Name Inflow-Bird Pt levee
Date 05/09 20 11 Party CBR/KMH 307,000
Width 8784 Area 91,272 Vel. 3.58 G.H. - Disch. 306,652

Profiler Water Temp. 17.02 °C at 0916 Rated area: - Index Velocity -
Profiler S/N 11170 Mfr: RDI Freq. 600 Firmware: 10.16 Software Ver. 2.07

| | | | |
|-------------------|------|-----------------|--|
| Depth Cell Size | 0.39 | Other commands: | |
| No. of Cells | 51 | | |
| Blanking Distance | 0.82 | Set bin size | |
| Water Mode | 12 | to 0.42' | |
| Ambiguity Vel. | 5.74 | | |
| Water pings | 1 | | |
| Bottom pings | 1 | | |

Profiler Depth 0.42
Config. file -
Deployment tethered
Moving Bed -
Moving Bed Present: Y N
Diag. Test ADCP TEST
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.: 0.38

| GAGE READINGS | | | | | |
|---------------------------------|-------|--|--|--------|---------|
| Time | | | | Inside | Outside |
| 1115 | start | | | - | - |
| 1255 | End | | | | |
| $V_{max} = 10.7 \text{ ft/sec}$ | | | | | |
| $D_{max} = 20.7'$ | | | | | |
| 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 overcast, warm
Wind Spd. - Dir. -
Air Temp. - °C at -
Water Temp. 16.7 °C at 0915
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, heavy sediment
Cross section: Below Bird Pt levee, low; RTW slack water below breach
Control: - in levee.
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: MNT DS of Bird Pt levee. ~ 50'-1250'.
Reference VTG ADCP = 1.7
GH of zero flow = GH - - depth at control - = - ft, rated -

[illegible]

Notes: DS of breached Bird Pt. Levee, LEW & REW slack water on edges of levee breach.

| | | |
|----------------------|----------------------|--------------------------|
| Party: CBR/KMH | Width: 8,900 ft | Processed by: CBR |
| Boat/Motor: 513 | Area: 92,700 ft² | Mean Velocity: 3.31 ft/s |
| Gage Height: 0.00 ft | G.H.Change: 0.000 ft | Discharge: 307,000 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: P |
| MagVar Method: Model (-1.4°) | Bottom Est: Power (0.1667) | Rated Area: 0.000 ft² | Diff.: 0.000% |
| Depth Sounder: 0.000 ft | Top Est: Power (0.1667) | Control1: Unspecified | |
| | | Control2: Unspecified | |
| | | Control3: Unspecified | |

| | | | |
|------------------------------|----------------------|--------------------------------|-----------------|
| Screening Thresholds: | | ADCP: | |
| BT 3-Beam Solution: YES | Max. Vel.: 12.3 ft/s | Type/Freq.: Rio Grande/600 kHz | |
| WT 3-Beam Solution: NO | Max. Depth: 20.7 ft | Serial #: 11170 | Firmware: 10.16 |
| BT Error Vel.: 0.33 ft/s | Mean Depth: 10.4 ft | Bin Size: 12 cm | Blank: 25 cm |
| WT Error Vel.: 3.50 ft/s | % Meas.: 65.22 | BT Mode: 5 | BT Pings: 1 |
| BT Up Vel.: 1.00 ft/s | Water Temp.: 62.1 °F | WT Mode: 12 | WT Pings: 1 |
| WT Up Vel.: 6.00 ft/s | ADCP Temp.: 60.5 °F | WV : 175 | WO : 5, 5 |
| Use Weighted Mean Depth: YES | | | |

Performed Diag. Test: YES

Performed Moving Bed Test: NO

Performed Compass Test: YES

Meas. Location: DS of levee Breech 50'-1200'

Project Name: Inflow_1.mmt

Software: 2.04

| 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 | |
| 001 | R | 0 | 0 | 4331 | 71912 | 207635 | 38740 | 0.000 | 0.000 | 318287 | 9006 | 92867 | 11:13 | 12:06 | 3.89 | 3.43 | 0 | 4 |
| 002 | L | 0 | 0 | 3837 | 66480 | 192339 | 36199 | 0.000 | 0.000 | 295018 | 8786 | 92568 | 12:06 | 12:54 | 3.45 | 3.19 | 0 | 4 |
| Mean | | 0 | 0 | 4084 | 69196 | 199987 | 37469 | 0.000 | 0.000 | 306652 | 8896 | 92717 | Total | 01:40 | 3.67 | 3.31 | 0 | 4 |
| SDev | | 0 | 0 | 349 | 3841 | 10816 | 1797 | 0.000 | 0.000 | 16454 | 155.7 | 211.6 | | | 0.31 | 0.17 | | |
| SD/M | | 0.00 | 0.00 | 0.09 | 0.06 | 0.05 | 0.05 | 0.00 | 0.00 | 0.05 | 0.02 | 0.00 | | | 0.08 | 0.05 | | |

Remarks: VTG reference

Lost GPS at the end of Trans. 002 at Ens # 9014 to 9756