

12-4-2009

Ex. 281-US-425

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Stream: Crooked Creek  
 Site: WD-3  
 Date: 5/15/2004  
 Habitat: Glide

Flow: Low

(1) Level Loop Survey (BM & HP)

BM/HP (ft)	BS (ft)	HI (ft)	FS (ft)	Elev (ft)
BM	2.91	102.91		100.00
HP1			3.10	99.81
HP2				
HP3			3.45	99.46
TP				
HP3	3.49	102.95		
HP2				
HP1			3.14	99.81
BM			2.95	100.00

Comment: No HP for TR2

Date: 6/27/2004  
 Habitat: Glide

Flow: High

(1) Level Loop Survey

BM/HP (ft)	BS (ft)	HI (ft)	FS (ft)	Elev (ft)
BM	3.56	103.56		100.00
HP1			3.74	99.82
HP2				
HP3			4.09	99.47
TP				
HP3	3.93	103.40		
HP2				
HP1			3.58	99.82
BM			3.40	100.00

Comment: No TR2 HP

Date: 8/19/2004  
 Habitat: Glide

Flow: Mid

(1) Level Loop Survey

BM/HP (ft)	BS (ft)	HI (ft)	FS (ft)	Elev (ft)
BM	3.62	103.62		100.00
HP1			3.79	99.83
HP2				
HP3			4.15	99.47
TP				
HP3	4.22	103.69		
HP2				
HP1			3.86	99.83
BM			3.69	100.00

Comment: No TR2 HP

(2) Water Surface Elevation (WSE) Survey

TR	Sta L/R bank (ft)	Ave (ft)	HI (ft)	FS (ft)	Rod (ft)	WSE (ft)	Ave WSE (ft)	Q (cfs)
1-L	0	0.00	102.73	5.87	0.00	96.86	96.86	39.2
1-R	0	0		5.87	0.00	96.86	96.86	
2-L	32	75.00	102.95	6.07	0.00	96.88	96.88	37.7
2-R	118			6.08	0.00	96.87		
3-L	134	167.00	102.95	6.05	0.00	96.90	96.90	37.9
3-R	200			6.06	0.00	96.89		

Ave Q = 38.3

Note: HI for TR1 is 102.73 (instr was moved)  
 WSE slope = 0.021%

(3) Meter and propeller ID for Velocity Correction

Meter ID: 4099  
 Propeller ID: 1b

(2) Water Surface Elevation (WSE) Survey

TR	Sta L/R bank (ft)	Ave (ft)	HI (ft)	FS (ft)	Rod (ft)	WSE (ft)	Ave WSE (ft)	Q (cfs)
1-L	0	0.00	103.40	6.62	0.00	96.78	96.78	41.3
1-R	0	0		6.62	0.00	96.78	96.78	
2-L	32	75.00	103.40	6.59	0.00	96.81	96.81	40.3
2-R	118			6.60	0.00	96.80		
3-L	134	167.00	103.40	6.57	0.00	96.83	96.83	37.4
3-R	200			6.58	0.00	96.82		

Ave Q = 39.7

Note: Addit. survey pts d/s of TR1, u/s of TR3  
 WSE slope = 0.027%

(3) Meter and propeller ID for Velocity Correction

Meter ID: 5750  
 Propeller ID: 2b

(2) Water Surface Elevation (WSE) Survey

TR	Sta (ft)		HI (ft)	FS (ft)	Rod (ft)	WSE (ft)	Ave WSE (ft)	Q (cfs)
	L/R bank	Ave						
1-L	0	0.00	103.69	6.87		96.82	96.82	39.7
1-R	0			6.87		96.82		
2-L	32	75.00	103.69	6.86		96.83	96.83	38.7
2-R	118			6.86		96.83		
3-L	134	167.00	103.69	6.85		96.84	96.84	
3-R	200			6.85		96.84		

Ave Q = 39.2

Note: WSE slope = 0.012%

(3) Meter and propeller ID for Velocity Correction

Meter ID: 5750  
 Propeller ID: 2b







GLIDE HGH TRANSECT 1  
 IOC 1101100100001000101000  
 QARD 30.0  
 QARD 32.0  
 QARD 34.0  
 QARD 36.0  
 QARD 38.3  
 QARD 39.2  
 QARD 39.7  
 QARD 41.0  
 QARD 43.0  
 QARD 44.0  
 QARD 45.0  
 QARD 46.0  
 QARD 47.0  
 QARD 48.0  
 QARD 49.0  
 QARD 51.0  
 QARD 52.0  
 QARD 54.0  
 QARD 55.0  
 QARD 56.0  
 QARD 57.0  
 QARD 58.0  
 QARD 59.0  
 QARD 60.0  
 QARD 61.0  
 QARD 62.0  
 QARD 64.0  
 QARD 66.0  
 QARD 68.0  
 QARD 70.0  
 XSEC 0.0 0.0 1.0 94.85 0.000340  
 0.0-15.0100.1 -7.0100.1 1.0 98.2 3.0 97.5 8.0 97.2 13.5 97.0  
 0.0 14.0 96.8 15.0 94.2 16.0 94.1 17.0 93.9 18.0 93.8 19.0 93.8  
 0.0 20.0 93.9 21.0 93.9 22.0 94.0 23.0 94.1 24.0 94.2 25.0 94.4  
 0.0 26.5 94.5 28.0 94.8 29.5 94.9 31.0 95.0 32.5 95.2 34.0 95.3  
 0.0 35.5 95.4 37.0 95.3 38.5 95.2 40.0 95.2 41.5 95.8 41.8 96.8  
 0.0 43.0 96.8 48.0 96.9 53.0 97.2 58.0 97.4 61.1 97.6 73.1 97.8  
 NS 0.0 1.3 1.3 1.3 1.2 1.2 1.2  
 NS 0.0 1.2 .08 3.2 3.4 3.4 3.4 3.4  
 NS 0.0 3.4 3.4 3.4 3.4 3.4 3.4  
 NS 0.0 3.3 3.3 3.3 3.2 3.2 3.2  
 NS 0.0 3.2 3.2 .20 3.2 3.2 1.2 1.2  
 NS 0.0 2.1 1.2 1.2 1.2 1.2 1.2  
 WSL 0.0 96.50 96.57 96.64 96.71 96.78 96.80  
 WSL 0.0 96.81 96.85 96.91 96.93 96.96 96.98  
 WSL 0.0 97.00 97.03 97.05 97.10 97.12 97.16  
 WSL 0.0 97.18 97.20 97.22 97.23 97.25 97.26  
 WSL 0.0 97.28 97.30 97.33 97.37 97.40 97.44  
 CAL1 0.0 96.78 39.7  
 VEL1 0.0 0.00 0.22 0.77 0.85 0.93 0.91  
 VEL1 0.0 0.85 0.83 0.86 0.86 0.84 0.88 0.87 0.87 0.83 0.76 0.71 0.67  
 VEL1 0.0 0.70 0.53 0.10 0.28-0.03 0.00  
 CAL2 0.0 96.86 38.3  
 VEL2 0.0  
 VEL2 0.0  
 VEL2 0.0  
 CAL3 0.0 96.82 39.2  
 VEL3 0.0  
 VEL3 0.0  
 VEL3 0.0  
 ENDJ

GLIDE HGH TRANSECT 2  
 IOC 1101100100001000101000  
 QARD 30.0  
 QARD 32.0  
 QARD 34.0  
 QARD 36.0  
 QARD 38.3  
 QARD 39.2  
 QARD 39.7  
 QARD 41.0  
 QARD 43.0  
 QARD 44.0  
 QARD 45.0  
 QARD 46.0  
 QARD 47.0  
 QARD 48.0  
 QARD 49.0  
 QARD 51.0  
 QARD 52.0  
 QARD 54.0  
 QARD 55.0  
 QARD 56.0  
 QARD 57.0  
 QARD 58.0  
 QARD 59.0  
 QARD 60.0  
 QARD 61.0  
 QARD 62.0  
 QARD 64.0  
 QARD 66.0  
 QARD 68.0  
 QARD 70.0  
 XSEC 0.0 0.0 1.0 95.16 0.000340  
 0.0 0.0 97.6 1.0 97.5 6.0 97.2 11.0 97.1 16.0 96.9 19.0 97.0  
 0.0 19.5 96.8 19.7 96.6 20.1 96.8 20.6 96.8 21.0 96.2 22.5 96.1  
 0.0 24.0 95.9 25.5 95.6 27.0 95.6 28.5 95.6 30.0 95.6 31.5 95.5  
 0.0 33.0 95.4 34.5 95.3 36.0 95.2 37.5 94.9 39.0 94.6 40.5 94.3  
 0.0 42.0 94.1 43.5 94.1 45.0 93.8 46.5 93.7 48.0 93.6 49.0 93.7  
 0.0 50.0 94.1 51.0 94.0 51.7 94.0 52.0 95.6 53.0 96.2 53.8 96.8  
 0.0 54.5 97.0 59.0 97.3 64.3 97.4 94.3 97.3  
 NS 0.0 1.3 1.3 1.3 1.2 1.2 1.2  
 NS 0.0 2.1 0.3 2.1 1.2 1.2 0.3 2.1 2.3  
 NS 0.0 0.3 2.3 2.3 2.3 2.3 2.3 2.3  
 NS 0.0 2.3 3.2 3.2 3.2 3.2 2.3  
 NS 0.0 2.3 2.3 3.2 3.2 3.4 3.4  
 NS 0.0 3.2 0.2 3.2 0.3 3.2 0.30 2.1 0.3 1.2 2.1  
 NS 0.0 1.2 1.2 1.2 1.2  
 WSL 0.0 96.52 96.60 96.66 96.73 96.80 96.83  
 WSL 0.0 96.84 96.88 96.93 96.96 96.98 97.01  
 WSL 0.0 97.03 97.05 97.07 97.12 97.14 97.19  
 WSL 0.0 97.20 97.22 97.24 97.26 97.27 97.29  
 WSL 0.0 97.31 97.32 97.36 97.39 97.43 97.46  
 CAL1 0.0 96.81 39.7  
 VEL1 0.0 0.00 0.01 0.00 0.00 0.01 0.05  
 VEL1 0.0 0.01 0.44 0.64 0.63 0.80 0.65 0.67 0.71 0.72 0.79 0.83 0.90  
 VEL1 0.0 0.86 0.81 0.87 0.89 0.90 0.64 0.33 0.03 0.01 0.01 0.01 0.00  
 VEL1 0.0  
 CAL2 0.0 96.88 38.3  
 VEL2 0.0  
 VEL2 0.0  
 VEL2 0.0  
 VEL2 0.0  
 CAL3 0.0 96.83 39.2  
 VEL3 0.0  
 VEL3 0.0  
 VEL3 0.0  
 VEL3 0.0  
 ENDJ

GLIDE HGH TRANSECT 3  
 IOC 1101100100001000101000  
 QARD 30.0  
 QARD 32.0  
 QARD 34.0  
 QARD 36.0  
 QARD 38.3  
 QARD 39.2  
 QARD 39.7  
 QARD 41.0  
 QARD 43.0  
 QARD 44.0  
 QARD 45.0  
 QARD 46.0  
 QARD 47.0  
 QARD 48.0  
 QARD 49.0  
 QARD 51.0  
 QARD 52.0  
 QARD 54.0  
 QARD 55.0  
 QARD 56.0  
 QARD 57.0  
 QARD 58.0  
 QARD 59.0  
 QARD 60.0  
 QARD 61.0  
 QARD 62.0  
 QARD 64.0  
 QARD 66.0  
 QARD 68.0  
 QARD 70.0  
 XSEC 0.0 0.0 1.0 95.16 0.000340  
 0.0 0.0 97.3 1.0 97.2 5.0 97.1 9.0 97.0 13.0 96.8 16.0 96.8  
 0.0 17.0 96.4 18.0 96.0 19.0 95.9 20.0 95.9 21.5 95.7 23.0 95.5  
 0.0 24.5 95.2 26.0 94.7 27.5 94.4 29.0 94.3 30.5 93.6 32.0 93.3  
 0.0 33.5 93.2 35.0 93.4 36.5 93.4 38.0 93.7 39.0 94.1 41.0 94.6  
 0.0 42.5 94.7 44.0 95.1 45.5 95.6 46.7 96.2 47.3 97.2 48.4 98.6  
 0.0 49.5 99.0 52.0 99.2  
 NS 0.0 1.3 1.3 1.2 1.2 2.1 2.1  
 NS 0.0 .25 2.1 .15 2.3 2.3 2.3 3.2 .046 3.2  
 NS 0.0 .047 3.2 3.2 3.2 3.2 3.2 3.4  
 NS 0.0 3.4 3.2 3.2 3.2 3.2 3.2  
 NS 0.0 3.4 3.4 3.8 1.3 1.3 1.3  
 NS 0.0 1.3 1.3  
 WSL 0.0 96.55 96.62 96.69 96.75 96.83 96.85  
 WSL 0.0 96.86 96.90 96.96 96.98 97.01 97.03  
 WSL 0.0 97.05 97.07 97.10 97.14 97.16 97.21  
 WSL 0.0 97.23 97.25 97.26 97.28 97.30 97.31  
 WSL 0.0 97.33 97.35 97.38 97.42 97.45 97.49  
 CAL1 0.0 96.83 39.7  
 VEL1 0.0 0.00 0.01 0.05 0.22 0.44 0.73 0.82  
 VEL1 0.0 0.88 0.72 0.82 0.62 0.62 0.59 0.49 0.58 0.59 0.53 0.63 0.50  
 VEL1 0.0 0.56 0.26 0.14-0.09  
 CAL2 0.0 96.90 38.3  
 VEL2 0.0  
 VEL2 0.0  
 VEL2 0.0  
 CAL3 0.0 96.84 39.2  
 VEL3 0.0  
 VEL3 0.0  
 VEL3 0.0  
 ENDJ