United States Department of the Interior
BUREAU OF LAND MANAGEMENT

Colorado State Office
Denver Federal Center, Building 40
Lakewood, Colorado 80225
www.blm.gov/colorado

In Reply Refer To:
CO-932 (7250)

Mr. Rob Viehl
Colorado Water Conservation Board
1313 Sherman Street, Room 721
Denver, Colorado 80203

Dear Mr. Viehl:

The Bureau of Land Management (BLM) is writing this letter to formally communicate its recommendation for an increase to the existing instream flow water right on Derby Creek, located in Water Division 5.

Location and Land Status. Derby Creek originates on the east side of the Flattops Wilderness Area, approximately 16.0 miles northwest of the community of Burns. Derby Creek flows into the Colorado River at the unincorporated community of Derby Junction. This recommendation addresses the portion of Derby Creek that starts at the confluence with South Fork Derby Creek and ends at the confluence of Derby Creek with the Colorado River, a distance of approximately 8.2 miles. The BLM manages 0.81 miles of this reach, the U.S. Forest Service manages 2.68 miles of this reach, while approximately 4.71 miles are in private ownership.

Existing Instream Flow Water Right. In 1985, the Colorado Water Conservation Board (CWCB) appropriated an instream flow water right on the reach of Derby Creek described above. The protected flow rate is 7.5 cfs, year-round.

Biological Summary. Derby Creek is a cold water, moderate to high gradient stream. The reach that is the subject of this recommendation flows through a canyon that ranges from 1/8 to ½ mile in width. The upper part of the reach flows through heavily forested lands, while the lower part of the reach flows through more open vegetation. Substrate is generally from medium to very large size, ranging from 2-inch cobbles to three-foot diameter boulders. Riffles are limited, and a high percentage of the stream is comprised of step-pool habitat. Water quality is good for supporting salmonid fish species, but the presence of didymo algae indicates that the stream may be low in certain nutrients, such as phosphorus.

Fish surveys indicate self-sustaining populations of brown trout and mottled sculpin. The creek appears to be a preferred tributary spawning location for brown trout that reside in the Colorado River because surveys have documented abundant young-of-the-year specimens. The brown trout and mottled sculpin populations appear robust, with good densities and a diversity of age classes present. Fish surveys also documented a limited number of rainbow trout.

Macroinvertebrate surveys have indicated relatively abundant populations of mayfly, golden stonefly and caddisfly. Derby Creek significantly exceeds aquatic life use thresholds as measured by the Benthic Macroinvertebrate Multimetric Index (MMI), achieving a score of 56.5 versus the attainment threshold score of 45.

The creek supports a vigorous riparian community comprised of alder, dogwood, willow, hawthorn, narrowleaf cottonwood and spruce. When the creek flows through confined canyons, the riparian community provides good cover and shading for the creek and contributes substantially to bank stability.

R2Cross Analysis. The BLM collected the following R2Cross data from Derby Creek:

Cross Section Date	Discharge Rate	Bankfull Top Width	Summer Flow Recommendation (meets 3 of 3 hydraulic criteria)
07/15/2021 #1	10.56 cfs	30.30 feet	8.74 cfs
07/15/2021 #2	9.87 cfs	30.57 feet	12.49 cfs
09/23/2021 #1	7.47 cfs	31.50 feet	10.68 cfs
		Average:	10.63 cfs

BLM's analysis of this data indicates that the following flows are needed to protect the natural environment to a reasonable degree.

> 10.6 cubic feet per second is recommended during the snowmelt runoff period, from April 1 to June 30. This recommendation is driven by the average velocity criteria. In many locations, the Derby Creek channel is wide and high gradient with large substrate, so meeting the velocity criteria is important for maintaining the limited amount of riffle habitat. Implementing this recommendation would require an increase of 3.10 cfs over the current instream flow water right.

Rationale for Instream Flow Increase. BLM believes an instream flow increase for Derby Creek is warranted because of physical habitat characteristics. The R2Cross data summarized above clearly indicates that the current instream flow water right does not provide sufficient physical habitat during the warm weather portions of the year when the fish populations are feeding and growing. When the existing instream flow right is applied to the cross sections that were collected, the stream would exhibit 60 percent to 71 percent wetted perimeter. During the warm weather season, the fish populations need to have access to as much of the stream channel as possible for feeding and resting if they are to survive the pronounced cold winters in this canyon. In addition, there appears to be significant competition for limited habitat in Derby Creek, because brown trout from the Colorado River also make use the creek.

Water Availability. The BLM recommends using a variety of data sources to confirm water availability, because BLM is not aware of any historical gage data on this creek. Use of CSUFlows can provide an estimate of natural hydrology, but this estimate should be further

refined with on-site flow measurements.

The BLM is aware of the following water right within the proposed instream flow reach:

Rogers Ditch – 21.4 cfs

The BLM is aware of the following water rights upstream from the recommended reach:

Pipeline Ditch – 15.0 cfs
Derby Ditch – 28.0 cfs
Grand River Land and Cattle Company Ditch – 18.4 cfs
Middle Derby Ditch – 40.0 cfs
Trail Creek Ditch – 5.2 cfs
South Derby Ditch – 32.0 cfs
Lion Basin Ditch – 31.76 cfs

Relationship to Land Management Plans. The BLM's land management plan calls for protection and improvement of historic fisheries as a means of increasing native fish and sport fish populations. In addition, BLM has committed to managing the Upper Colorado River corridor for high quality recreational fishing, and it appears that Derby Creek plays an important role in helping to maintain the fishery in the Colorado River. The BLM plan also calls for making instream flow recommendations to the Colorado Water Conservation Board to meet minimum instream flow requirements to maintain native fisheries and sport fisheries. Finally, the land use plan calls for maintaining and improving the function of riparian areas to achieve advanced ecological stage for the riparian community and protecting those riparian and wetland systems from sources of potential degradation. Increasing the existing instream flow water right would assist in meeting these objectives.

Data sheets, R2Cross output, fishery survey information, and photographs of the cross sections were included with BLM's draft recommendation in February 2022. BLM thanks both Colorado Parks and Wildlife and the Colorado Water Conservation Board for their cooperation in this effort.

If you have any questions regarding our instream flow recommendation, please contact Roy Smith at 303-239-3940.

Sincerely,

ALAN BITTNER

Digitally signed by ALAN BITTNER
Date: 2024.12.11 17:54:05 -07'00'

Alan Bittner
Deputy State Director
Resources and Fire

Cc:

James Roberts, Colorado River Valley Field Office
Tyler McLachlan, Colorado River Valley Field Office
Colin Brady, Upper Colorado River District

SiteCode: CR-LS-10525 StreamName: Derby Creek

Date: 9/1/2016 MidLat: 39.884975 MidLong: -106.957161

StreamOrder: 4 StreamSizeOrder: LS StreamSizeBankfull: LargeWadeable

Ecoregion: SouthernRockies InvasiveInvertSp: ABSENT MMI_Macroinvertebrate: 56.3

OE_MMI_ModelUsed: CO-EDAS2017 - Biotype 1

MacroinvertebrateCount: 300

TotalNitrogen: 112.3 PRD_TotalNitrogen: 147.6 TotalPhosphorous: 50.6

PRD_TotalPhosphorous: 18.6 SpecificConductance: 233

PRD_SpecificConductance: 153 pH: 8.3 InstantTemp: 14.3

MeanAugTemp: 10.86

Aquatic Life Use Thresholds			
Biotype		Attaintment Threshold	Impairment Threshold
1	Transition	45	34
2	Mountains	48	40
3	Plains & Xeric	42	29

COLORADO WATER CONSERVATION BOARD

FIELD DATA FOR INSTREAM FLOW DETERMINATIONS

COLORADO DIVISION OF WILDLIFE

LOCATION INFORMATION

STREAM NAME: Derby Creek					CROSS-SECTION NO.: 1	
CROSS-SECTION LOCATION: 1/4 mile above confluence w/ Colorado River						
DATE: 7-15-2	OBSERVERS: R. Smith, J. Thompson					
LEGAL DESCRIPTION	¼ SECTION: NW NW	SECTION: 22	TOWNSHIP: 2 N/S	RANGE: 85 E/W	PM: 6th	
COUNTY: Eagle	WATERSHED: Colorado River	WATER DIVISION: 5	DOW WATER CODE:			
MAP(S): USGS:	Zone 13S 336863					
USFS:	4415130					

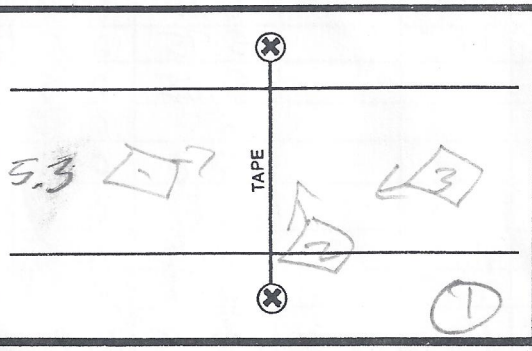
SUPPLEMENTAL DATA

SAG TAPE SECTION SAME AS DISCHARGE SECTION: YES / NO	METER TYPE: M-M			
METER NUMBER:	DATE RATED:	CALIB/SPIN: ____ sec	TAPE WEIGHT: surveyed ____ lbs/foot	TAPE TENSION: surveyed ____ lbs
CHANNEL BED MATERIAL SIZE RANGE: 2" cobbles to 3-foot boulders	PHOTOGRAPHS TAKEN: YES/NO	NUMBER OF PHOTOGRAPHS:		

CHANNEL PROFILE DATA

STATION	DISTANCE FROM TAPE (ft)	ROD READING (ft)
⊗ Tape @ Stake LB	0.0	surveyed
⊗ Tape @ Stake RB	0.0	surveyed
① WS @ Tape LB/RB	0.0 25.6	5.10 / 5.10
② WS Upstream	5.0	5.03
③ WS Downstream	24.6	5.43
SLOPE	0.4 / 29.6 = 0.014	

SKETCH



LEGEND:
- Stake ⊗
- Station ①
- Photo ◇1→
- Direction of Flow

AQUATIC SAMPLING SUMMARY

STREAM ELECTROFISHED: YES/NO	DISTANCE ELECTROFISHED: ____ft	FISH CAUGHT: YES/NO	WATER CHEMISTRY SAMPLED: YES/NO

LENGTH - FREQUENCY DISTRIBUTION BY ONE-INCH SIZE GROUPS (1.0-1.9, 2.0-2.9, ETC.)

SPECIES (FILL IN)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	>15	TOTAL

AQUATIC INSECTS IN STREAM SECTION BY COMMON OR SCIENTIFIC ORDER NAME:

mayfly, caddisfly (very abundant), golden stonefly

COMMENTS

pH = 8.5
Temp = 12.4°
Salinity = 0.2
Cond = 248.3
Much didymo algae.
Riparian = Spruce - alder - hawthorn dogwood. willow

DISCHARGE/CROSS SECTION NOTES

STREAM NAME:	CROSS-SECTION NO.:	DATE:	SHEET ___ OF ___
Derby Creek	1	7-15-21	

BEGINNING OF MEASUREMENT	EDGE OF WATER LOOKING DOWNSTREAM: (0.0 AT STAKE) LEFT / RIGHT	Gage Reading: _____ ft	TIME:

Features: Stake (S), Grassline (G), Waterline (W), Rock (R)	Distance From Initial Point (ft)	Width (ft)	Total Vertical Depth From Tape/Inst (ft)	Water Depth (ft)	Depth of Observation (ft)	Revolutions	Time (sec)	Velocity (ft/sec) At Point	Velocity (ft/sec) Mean in Vertical	Area (ft^2)	Discharge (cfs)
RS/BF	2.5		3.32								
	3.1		3.66								
	4.1		4.45								
RW	5.3		5.10								
	6.5		5.4	0.30				0.62			
	7.5		5.35	0.25				0.36			
	8.0		5.6	0.50				1.26			
	8.5		5.6	0.50				1.79			
	9.0		5.6	0.50				1.76			
	10.0		5.25	0.15				1.00			
	11.0		5.55	0.45				2.16			
	11.5		5.9	0.80				2.14			
	12.0		6.05	0.95				0.85			
	12.5		6.0	0.90				0.96			
	13.0		5.65	0.55				1.52			
	13.5		5.70	0.60				1.95			
	14.0		6.10	1.00				1.83			
	14.5		5.95	0.85				1.38			
	15.0		5.85	0.75				1.38			
	15.5		6.0	0.90				0.18			
	16.0		5.8	0.70				0.61			
	16.5		5.7	0.60				1.11			
	17.0		5.85	0.75				1.08			
	17.5		5.8	0.70				1.03			
	18.0		5.75	0.65				0.95			
	18.5		5.75	0.65				1.26			
	19.0		5.80	0.70				1.09			
	20.0		5.45	0.35				0.92			
	21.0		5.5	0.40				0.24			
	22.0		5.5	0.40				0.00			
	23.0		5.35	0.25				0.46			
LW	25.0		5.10								
	27.7		5.05								
	29.2		4.69								
	30.8		4.24								
BF	32.8		5.32								
LS/BF	33.3		2.11								
TOTALS:											

End of Measurement	Time:	Gage Reading: _____ ft	CALCULATIONS PERFORMED BY:	CALCULATIONS CHECKED BY:

COLORADO WATER CONSERVATION BOARD

FIELD DATA FOR INSTREAM FLOW DETERMINATIONS

COLORADO DIVISION OF WILDLIFE

LOCATION INFORMATION

STREAM NAME: Derby Creek						CROSS-SECTION NO.: 2	
CROSS-SECTION LOCATION: 1/4 mile above confluence w/ Colorado River							
DATE: 7-15-21	OBSERVERS: R. Smith, J. Thompson						
LEGAL DESCRIPTION	¼ SECTION: NW NW	SECTION: 22	TOWNSHIP: 2 N/S	RANGE: 85 E/W	PM: 6th		
COUNTY: Eagle	WATERSHED: Colorado River	WATER DIVISION: 5	DOW WATER CODE:				
MAP(S): USGS:	Zone 13S 356924 4415109						
USFS:							

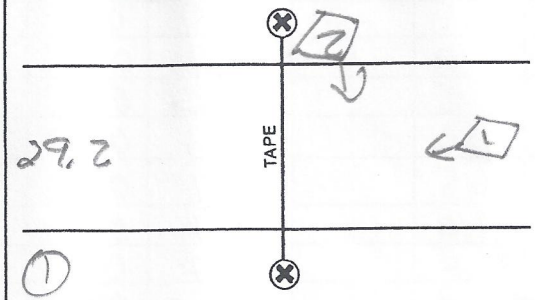
SUPPLEMENTAL DATA

SAG TAPE SECTION SAME AS DISCHARGE SECTION: YES / NO	METER TYPE: M-M			
METER NUMBER:	DATE RATED:	CALIB/SPIN: ____ sec	TAPE WEIGHT: surveyed ____ lbs/foot	TAPE TENSION: surveyed ____ lbs
CHANNEL BED MATERIAL SIZE RANGE: 2" cobble to 3-foot boulders	PHOTOGRAPHS TAKEN: (YES)/NO	NUMBER OF PHOTOGRAPHS: 3		

CHANNEL PROFILE DATA

STATION	DISTANCE FROM TAPE (ft)	ROD READING (ft)
⊗ Tape @ Stake LB	0.0	surveyed
⊗ Tape @ Stake RB	0.0	surveyed
① WS @ Tape LB/RB	0.0 6.8	5.40 / 5.40
② WS Upstream	16.8	5.14
③ WS Downstream	21.8	6.01
SLOPE	0.87 / 38.6 = .023	

SKETCH



LEGEND:
Stake ⊗
Station ①
Photo ◇
Direction of Flow

AQUATIC SAMPLING SUMMARY

STREAM ELECTROFISHED: YES/(NO)	DISTANCE ELECTROFISHED: ____ft	FISH CAUGHT: YES/NO	WATER CHEMISTRY SAMPLED: (YES)/NO

LENGTH - FREQUENCY DISTRIBUTION BY ONE-INCH SIZE GROUPS (1.0-1.9, 2.0-2.9, ETC.)

SPECIES (FILL IN)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	>15	TOTAL

AQUATIC INSECTS IN STREAM SECTION BY COMMON OR SCIENTIFIC ORDER NAME:

COMMENTS

DISCHARGE/CROSS SECTION NOTES

STREAM NAME: Derby Creek (1 of 2) | CROSS-SECTION NO.: 2 | DATE: 7-15-21 | SHEET 1 OF 2

BEGINNING OF MEASUREMENT | EDGE OF WATER LOOKING DOWNSTREAM: (0.0 AT STAKE) LEFT / RIGHT | Gage Reading: _____ ft | TIME: 11:30 am.

Features: Stake (S) Grassline (G) Waterline (W) Rock (R)	Distance From Initial Point (ft)	Width (ft)	Total Vertical Depth From Tape/Inst (ft)	Water Depth (ft)	Depth of Observation (ft)	Revolutions	Time (sec)	Velocity (ft/sec) At Point	Velocity (ft/sec) Mean in Vertical	Area (ft^2)	Discharge (cfs)
LS	0.5		2.32								
	3.0		4.04								
BF	3.2		4.12								
	4.5		4.84								
	6.1		5.00								
	6.8		5.40								
	7.0		5.75	0.35				0.70			
	8.0		5.85	0.45				0.30			
	9.0		5.85	0.45				0.79			
	10.0		5.9	0.50				0.16			
	11.0		5.9	0.50				0.87			
	11.5		5.9	0.50				0.69			
	12.0		5.95	0.55				0.56			
	12.5		5.95	0.55				0.63			
	13.0		5.95	0.55				0.63			
	13.5		5.95	0.55				0.17			
	14.0		5.9	0.50				0.34			
	14.5		5.9	0.50				0.63			
	15.0		5.9	0.50				0.81			
	15.5		6.05	0.65				0.87			
	16.0		5.8	0.40				0.63			
	16.5		5.7	0.30				0.39			
	17.0		5.7	0.30				0.71			
	17.4		5.7	0.30				1.15			
	17.8		5.95	0.55				2.16			
	18.2		5.85	0.45				2.53			
	18.6		5.9	0.50				2.69			
	19.0		5.9	0.50				3.18			
	19.4		5.9	0.50				3.14			
	19.8		6.05	0.65				2.39			
	20.2		6.1	0.70				1.76			
	20.6		6.3	0.90				1.52			
	21.0		6.25	0.85				1.16			
	21.5		6.1	0.70				0.37			
	22.0		6.15	0.75				0.11			
	22.5		6.1	0.70				0.72			
←		cont'd on next sheet →						0			
	29.2	5.40									
	30.0	5.15									
	31.0	4.30									
BF/RS	33.9	4.19									
TOTALS:											

End of Measurement | Time: | Gage Reading: _____ ft | CALCULATIONS PERFORMED BY: | CALCULATIONS CHECKED BY:

COLORADO WATER CONSERVATION BOARD

FIELD DATA FOR INSTREAM FLOW DETERMINATIONS

COLORADO DIVISION OF WILDLIFE

LOCATION INFORMATION

STREAM NAME: Derby Creek					CROSS-SECTION NO.: 1	
CROSS-SECTION LOCATION: 1/4 mile upstream from confluence with Colorado River						
DATE: 9-23-21	OBSERVERS: R. Smith, J. Thompson, T. Fresquez					
LEGAL DESCRIPTION	¼ SECTION: NW NW	SECTION: 22	TOWNSHIP: 3 N/S	RANGE: 85 E/W	PM: 6th	
COUNTY: Eagle	WATERSHED: Colorado River	WATER DIVISION: 5	DOW WATER CODE:			
MAP(S): USGS:	336720					
USFS:	4415201					

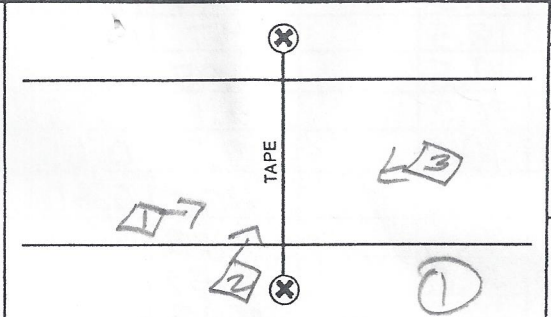
SUPPLEMENTAL DATA

SAG TAPE SECTION SAME AS DISCHARGE SECTION: YES / NO	METER TYPE: M-M			
METER NUMBER:	DATE RATED:	CALIB/SPIN: _____ sec	TAPE WEIGHT: surveyed _____ lbs/foot	TAPE TENSION: surveyed _____ lbs
CHANNEL BED MATERIAL SIZE RANGE: gravel to 4-foot boulder	PHOTOGRAPHS TAKEN: YES/NO	NUMBER OF PHOTOGRAPHS: 3		

CHANNEL PROFILE DATA

STATION	DISTANCE FROM TAPE (ft)	ROD READING (ft)
⊗ Tape @ Stake LB	0.0	surveyed
⊗ Tape @ Stake RB	0.0	surveyed
① WS @ Tape LB/RB	0.0	4.35 / 4.35
② WS Upstream	21.0	3.40
③ WS Downstream	4.9	4.40
SLOPE	1.0 / 25.9	.0386

SKETCH



AQUATIC SAMPLING SUMMARY

STREAM ELECTROFISHED: YES/NO	DISTANCE ELECTROFISHED: _____ft	FISH CAUGHT: YES/NO	WATER CHEMISTRY SAMPLED: YES/NO

LENGTH - FREQUENCY DISTRIBUTION BY ONE-INCH SIZE GROUPS (1.0-1.9, 2.0-2.9, ETC.)

SPECIES (FILL IN)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	>15	TOTAL

AQUATIC INSECTS IN STREAM SECTION BY COMMON OR SCIENTIFIC ORDER NAME:

COMMENTS

pH = 8.67
Temp = 11.1°C
Cond = 306
Salinity = 0.2

CFSD 1-86

DISCHARGE/CROSS SECTION NOTES

STREAM NAME: Derby Creek | CROSS-SECTION NO.: 1 | DATE: 9-23-21 | SHEET ___ OF ___

BEGINNING OF MEASUREMENT | EDGE OF WATER LOOKING DOWNSTREAM: (0.0 AT STAKE) LEFT / RIGHT | Gage Reading: _____ ft | TIME: 2:15 pm

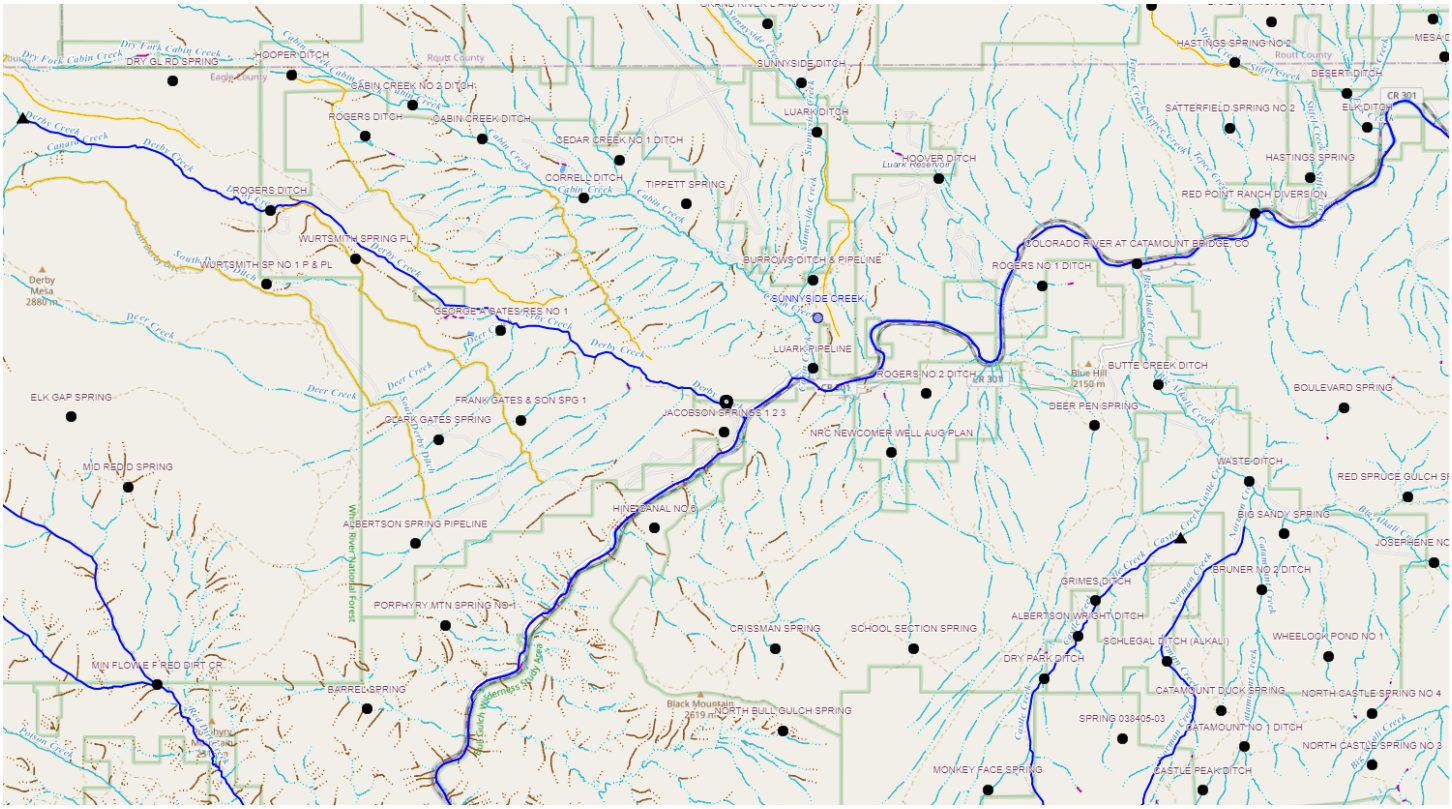
Features (Stake (S), Grassline (G), Waterline (W), Rock (R))	Distance From Initial Point (ft)	Width (ft)	Total Vertical Depth From Tape/Inst (ft)	Water Depth (ft)	Depth of Observation (ft)	Revolutions	Time (sec)	Velocity (ft/sec) At Point	Velocity (ft/sec) Mean in Vertical	Area (ft^2)	Discharge (cfs)
RS	0		1.22								
	1.4		1.48								
BF	2.3		2.34								
	4.0		3.29								
	5.5		3.40								
	7.6		3.40								
	10.3		4.11								
WE	12.4		4.35								
	12.5		4.5	0.15				0.42			
	13.0		4.55	0.20				1.29			
	14.0		4.6	0.25				0.00			
	15.0		4.55	0.20				1.01			
	15.5		4.6	0.25				0.70			
	16.0		4.55	0.20				0.27			
	16.5		4.65	0.30				1.09			
	17.5		4.45	0.10				0.00			
	18.5		4.7	0.35				0.24			
	19.5		4.95	0.60				0.20			
	20.0		5.1	0.75				0.74			
	20.5		5.0	0.65				0.78			
	21.0		4.95	0.60				0.66			
	21.5		5.25	0.90				1.31			
	22.0		5.35	1.00				3.01			
	22.5		5.15	0.80				1.91			
	23.0		4.95	0.60				1.06			
	23.5		4.9	0.55				1.42			
	24.0		5.15	0.80				0.98			
	24.5		4.7	0.35				0.88			
	25.5		5.0	0.65				0.00			
	26.5		5.05	0.70				0.58			
	27.0		5.1	0.75				1.10			
	28.0		5.4	1.05				0.50			
	28.5		4.65	0.30				0.56			
	29.5		4.55	0.20				0.29			
	30.5		4.75	0.40				0.30			
WE	32.1		4.35								
	33.1		3.75								
BF	33.8		2.34								
	34.0		1.62								
LS	38.9		0.34								
TOTALS:											

End of Measurement | Time: | Gage Reading: _____ ft | CALCULATIONS PERFORMED BY: | CALCULATIONS CHECKED BY:

R2Cross RESULTS

Stream Name: Debry Creek
Stream Locations: 0.25 mile upstream from confluence with CO River
Fieldwork Date: 07/15/2021
Cross-section: 1
Observers: R Smith, J Thompson
Coordinate System: UTM Zone 13
X (easting): 336863
Y (northing): 4415130
Date Processed: 04/04/2023
Slope: 0.014
Discharge: R2Cross data file: 10.56 (cfs)
Computation method: Ferguson VPE
R2Cross data filename: Debry Creek 7-15-21 #1.xlsx
R2Cross version: 2.0.2

LOCATION



ANALYSIS RESULTS

Habitat Criteria Results

Bankfull top width (ft) = 30.3

	Habitat Criteria	Discharge (cfs) Meeting Criteria
Mean Depth (ft)	0.3	2.37
Percent Wetted Perimeter (%)	50.0	2.77
Mean Velocity (ft/s)	1.0	8.74

STAGING TABLE

Feature	Distance to Water (ft)	Top Width (ft)	Mean Depth (ft)	Maximum Depth (ft)	Area (sq ft)	Wetted Perimeter (ft)	Percent Wetted Perimeter	Hydraulic Radius (ft)	Manning's n	Mean Velocity (ft/s)	Discharge (cfs)
Bankfull	3.32	30.3	1.88	2.78	57.07	31.94	100.0	1.79	0.05	5.63	321.29
	3.35	30.18	1.86	2.75	56.16	31.81	99.59	1.77	0.05	5.56	312.43
	3.4	29.99	1.82	2.7	54.66	31.59	98.89	1.73	0.05	5.45	297.9
	3.45	29.79	1.78	2.65	53.16	31.37	98.2	1.69	0.05	5.34	283.69
	3.5	29.59	1.75	2.6	51.68	31.15	97.51	1.66	0.05	5.22	269.81
	3.55	29.39	1.71	2.55	50.21	30.93	96.82	1.62	0.05	5.1	256.25
	3.6	29.2	1.67	2.5	48.74	30.71	96.12	1.59	0.05	4.99	243.01
	3.65	29.0	1.63	2.45	47.29	30.48	95.43	1.55	0.05	4.87	230.11
	3.7	28.82	1.59	2.4	45.84	30.28	94.79	1.51	0.05	4.74	217.4
	3.75	28.65	1.55	2.35	44.4	30.08	94.17	1.48	0.05	4.62	204.99
	3.8	28.48	1.51	2.3	42.98	29.88	93.54	1.44	0.05	4.49	192.91
	3.85	28.31	1.47	2.25	41.56	29.68	92.91	1.4	0.05	4.36	181.17
	3.9	28.14	1.43	2.2	40.14	29.48	92.28	1.36	0.05	4.23	169.77
	3.95	27.96	1.39	2.15	38.74	29.28	91.66	1.32	0.05	4.1	158.72
	4.0	27.79	1.34	2.1	37.35	29.08	91.03	1.28	0.05	3.96	148.01
	4.05	27.62	1.3	2.05	35.96	28.88	90.4	1.25	0.05	3.83	137.65
	4.1	27.45	1.26	2.0	34.59	28.68	89.78	1.21	0.05	3.69	127.64
	4.15	27.28	1.22	1.95	33.22	28.48	89.15	1.17	0.05	3.55	117.98
	4.2	27.1	1.18	1.9	31.86	28.28	88.52	1.13	0.06	3.41	108.69
	4.25	26.92	1.13	1.85	30.51	28.06	87.85	1.09	0.06	3.27	99.81
	4.3	26.68	1.09	1.8	29.17	27.8	87.02	1.05	0.06	3.14	91.51
	4.35	26.44	1.05	1.75	27.84	27.53	86.19	1.01	0.06	3.0	83.57
	4.4	26.19	1.01	1.7	26.52	27.27	85.36	0.97	0.06	2.86	75.98
	4.45	25.95	0.97	1.65	25.22	27.0	84.53	0.93	0.06	2.73	68.76
	4.5	25.68	0.93	1.6	23.93	26.71	83.63	0.9	0.06	2.59	61.96

	4.55	25.41	0.89	1.55	22.65	26.42	82.72	0.86	0.06	2.45	55.53
	4.6	25.14	0.85	1.5	21.39	26.13	81.81	0.82	0.07	2.31	49.46
	4.65	24.87	0.81	1.45	20.14	25.84	80.9	0.78	0.07	2.17	43.75
	4.7	24.6	0.77	1.4	18.9	25.55	79.98	0.74	0.07	2.03	38.42
	4.75	24.3	0.73	1.35	17.68	25.23	78.98	0.7	0.07	1.89	33.49
	4.8	24.0	0.69	1.3	16.47	24.91	77.98	0.66	0.08	1.76	28.91
	4.85	23.7	0.64	1.25	15.28	24.59	76.98	0.62	0.08	1.62	24.69
	4.9	23.39	0.6	1.2	14.1	24.27	75.98	0.58	0.08	1.48	20.83
	4.95	23.09	0.56	1.15	12.94	23.95	74.98	0.54	0.09	1.34	17.32
	5.0	22.79	0.52	1.1	11.79	23.63	73.98	0.5	0.09	1.2	14.15
	5.05	22.49	0.47	1.05	10.66	23.31	72.99	0.46	0.1	1.06	11.34
Waterline	5.1	19.7	0.49	1.0	9.61	20.51	64.2	0.47	0.1	1.1	10.56
	5.15	19.1	0.45	0.95	8.64	19.9	62.29	0.43	0.1	0.99	8.54
	5.2	18.5	0.42	0.9	7.7	19.29	60.39	0.4	0.11	0.88	6.76
	5.25	17.9	0.38	0.85	6.79	18.68	58.48	0.36	0.12	0.77	5.22
	5.3	16.99	0.35	0.8	5.91	17.75	55.55	0.33	0.12	0.68	4.02
	5.35	16.08	0.32	0.75	5.09	16.81	52.63	0.3	0.13	0.59	3.01
	5.4	14.14	0.31	0.7	4.33	14.83	46.42	0.29	0.14	0.56	2.44
	5.45	13.4	0.27	0.65	3.64	14.06	44.0	0.26	0.15	0.47	1.72
	5.5	10.51	0.29	0.6	3.02	11.13	34.84	0.27	0.15	0.51	1.53
	5.55	9.96	0.25	0.55	2.51	10.54	33.0	0.24	0.16	0.42	1.05
	5.6	8.5	0.24	0.5	2.02	9.04	28.29	0.22	0.17	0.38	0.77
	5.65	8.29	0.19	0.45	1.6	8.8	27.55	0.18	0.2	0.28	0.45
	5.7	7.5	0.16	0.4	1.21	7.97	24.96	0.15	0.23	0.21	0.26
	5.75	6.24	0.14	0.35	0.85	6.64	20.78	0.13	0.27	0.17	0.14
	5.8	4.47	0.13	0.3	0.58	4.8	15.02	0.12	0.28	0.16	0.09
	5.85	3.47	0.11	0.25	0.39	3.73	11.68	0.1	0.32	0.12	0.05
	5.9	2.73	0.08	0.2	0.23	2.91	9.12	0.08	0.4	0.08	0.02
	5.95	1.88	0.06	0.15	0.11	2.01	6.29	0.06	0.52	0.05	0.01
	6.0	1.13	0.04	0.1	0.04	1.19	3.71	0.03	0.81	0.02	0.0
	6.05	0.23	0.03	0.05	0.01	0.25	0.8	0.02	1.12	0.01	0.0
	6.08	0.07	0.01	0.01	0.0	0.08	0.24	0.01	3.07	0.0	0.0

This Manning's roughness coefficient was calculated based on velocity estimates from the Ferguson VPE method

MODEL SUMMARY

Measured Flow (Qm) =	10.56	(cfs)
Calculated Flow (Qc) =	10.56	(cfs)
(Qm-Qc)/Qm * 100 =	-0.01%	
Measured Waterline (WLm) =	5.1	(ft)
Calculated Waterline (WLc) =	5.1	(ft)
(WLm-WLc)/WLm * 100 =	0.00%	
Max Measured Depth (Dm) =	1	(ft)
Max Calculated Depth (Dc) =	1	(ft)
(Dm-Dc)/Dm * 100 =	-0.00%	
Mean Velocity =	1.1	(ft/s)
Manning's n =	0.096	
0.4 * Qm =	4.22	(cfs)
2.5 * Qm =	26.4	(cfs)

FIELD DATA

Feature	Station (ft)	Rod Height (ft)	Water depth (ft)	Velocity (ft/s)
Bankfull	2.5	3.32		
	3.1	3.66		
	4.1	4.45		
Waterline	5.3	5.1	0	0
	6.5	5.4	0.3	0.62
	7.5	5.35	0.25	0.36
	8	5.6	0.5	1.26
	8.5	5.6	0.5	1.79
	9	5.6	0.5	1.76
	10	5.25	0.15	1
	11	5.55	0.45	2.16
	11.5	5.9	0.8	2.14
	12	6.05	0.95	0.85
	12.5	6	0.9	0.96
	13	5.65	0.55	1.52
	13.5	5.7	0.6	1.95
	14	6.1	1	1.83
	14.5	5.95	0.85	1.38
	15	5.85	0.75	1.38
	15.5	6	0.9	0.18
	16	5.8	0.7	0.61
	16.5	5.7	0.6	1.11
	17	5.85	0.75	1.08
	17.5	5.8	0.7	1.03
	18	5.75	0.65	0.95
	18.5	5.75	0.65	1.26
	19	5.8	0.7	1.09
	20	5.45	0.35	0.92
	21	5.5	0.4	0.24
	22	5.5	0.4	0

	23	5.35	0.25	0.46
Waterline	25	5.1	0	0
	27.7	5.05		
	29.2	4.69		
	30.8	4.24		
Bankfull	32.8	3.32		
	33.3	3.11		

COMPUTED FROM MEASURED FIELD DATA

Wetted Perimeter (ft)	Water Depth (ft)	Area (ft^2)	Discharge (cfs)	Percent Discharge
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
1.24	0.3	0.33	0.2	1.94
1	0.25	0.19	0.07	0.64
0.56	0.5	0.25	0.32	2.98
0.5	0.5	0.25	0.45	4.24
0.5	0.5	0.38	0.66	6.25
1.06	0.15	0.15	0.15	1.42
1.04	0.45	0.34	0.73	6.9
0.61	0.8	0.4	0.86	8.11
0.52	0.95	0.47	0.4	3.82
0.5	0.9	0.45	0.43	4.09
0.61	0.55	0.28	0.42	3.96
0.5	0.6	0.3	0.58	5.54
0.64	1	0.5	0.92	8.66
0.52	0.85	0.42	0.59	5.55
0.51	0.75	0.38	0.52	4.9
0.52	0.9	0.45	0.08	0.77
0.54	0.7	0.35	0.21	2.02
0.51	0.6	0.3	0.33	3.15
0.52	0.75	0.38	0.41	3.83
0.5	0.7	0.35	0.36	3.41
0.5	0.65	0.33	0.31	2.92
0.5	0.65	0.33	0.41	3.88
0.5	0.7	0.53	0.57	5.42
1.06	0.35	0.35	0.32	3.05
1	0.4	0.4	0.1	0.91
1	0.4	0.4	0	0

1.01	0.25	0.38	0.17	1.63
2.02	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

DISCLAIMER

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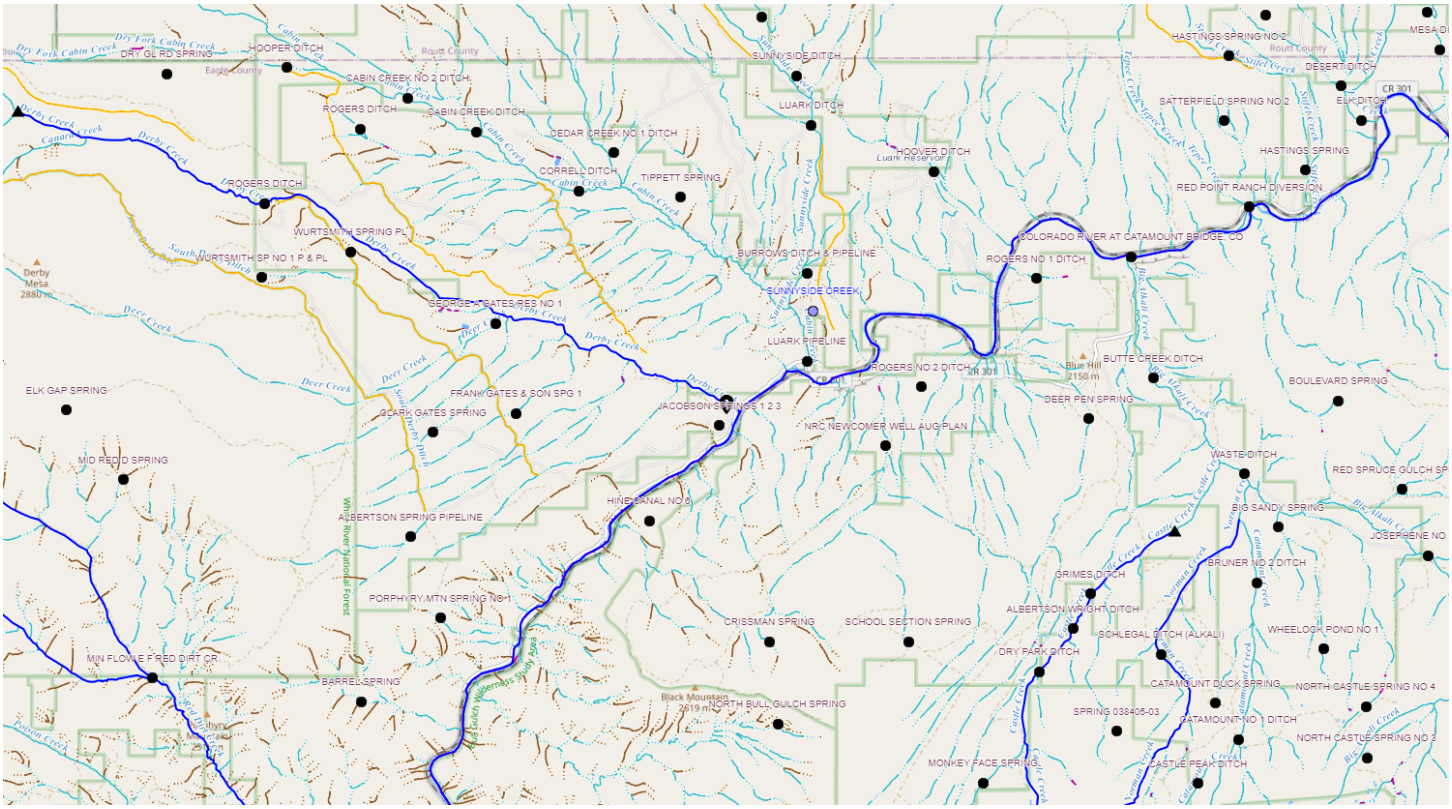
R2Cross RESULTS

Stream Name: Debry Creek
Stream Locations: 0.25 upstream from confluence with CO River
Fieldwork Date: 07/15/2021
Cross-section: 2
Observers: R Smith, J Thompson
Coordinate System: UTM Zone 13
X (easting): 336924
Y (northing): 4415109
Date Processed: 04/04/2023
Slope: 0.023
Discharge: R2Cross data file: 9.87 (cfs)
Computation method: Ferguson VPE
R2Cross data filename: Debry Creek 7-15-21 #2.xlsx
R2Cross version: 2.0.2

LOCATION



ANALYSIS RESULTS

Habitat Criteria Results

Bankfull top width (ft) = 30.57

	Habitat Criteria	Discharge (cfs) Meeting Criteria
Mean Depth (ft)	0.3	2.84
Percent Wetted Perimeter (%)	50.0	0.33
Mean Velocity (ft/s)	1.0	12.49

STAGING TABLE

Feature	Distance to Water (ft)	Top Width (ft)	Mean Depth (ft)	Maximum Depth (ft)	Area (sq ft)	Wetted Perimeter (ft)	Percent Wetted Perimeter	Hydraulic Radius (ft)	Manning's n	Mean Velocity (ft/s)	Discharge (cfs)
Bankfull	4.19	30.57	1.38	2.11	42.18	31.82	100.0	1.33	0.08	3.49	147.33
	4.2	30.29	1.38	2.1	41.88	31.53	99.1	1.33	0.08	3.5	146.6
	4.25	28.88	1.4	2.05	40.4	30.11	94.63	1.34	0.08	3.55	143.29
	4.3	27.47	1.42	2.0	38.99	28.69	90.16	1.36	0.08	3.61	140.6
	4.35	27.33	1.38	1.95	37.62	28.51	89.6	1.32	0.08	3.47	130.61
	4.4	27.18	1.33	1.9	36.25	28.33	89.03	1.28	0.08	3.34	120.99
	4.45	27.03	1.29	1.85	34.9	28.15	88.46	1.24	0.08	3.2	111.75
	4.5	26.88	1.25	1.8	33.55	27.97	87.9	1.2	0.08	3.07	102.88
	4.55	26.73	1.21	1.75	32.21	27.79	87.33	1.16	0.08	2.93	94.4
	4.6	26.58	1.16	1.7	30.88	27.6	86.76	1.12	0.09	2.79	86.3
	4.65	26.43	1.12	1.65	29.55	27.42	86.2	1.08	0.09	2.66	78.58
	4.7	26.28	1.07	1.6	28.24	27.24	85.63	1.04	0.09	2.52	71.24
	4.75	26.13	1.03	1.55	26.93	27.06	85.06	0.99	0.09	2.39	64.27
	4.8	25.98	0.99	1.5	25.62	26.88	84.49	0.95	0.1	2.25	57.69
	4.85	25.75	0.94	1.45	24.33	26.62	83.68	0.91	0.1	2.13	51.71
	4.9	25.19	0.92	1.4	23.05	26.04	81.85	0.89	0.1	2.03	46.9
	4.95	24.64	0.89	1.35	21.81	25.46	80.03	0.86	0.1	1.94	42.39
	5.0	24.08	0.86	1.3	20.59	24.88	78.21	0.83	0.11	1.85	38.16
	5.05	23.93	0.81	1.25	19.39	24.71	77.65	0.78	0.11	1.72	33.38
	5.1	23.78	0.77	1.2	18.2	24.53	77.09	0.74	0.12	1.59	28.95
	5.15	23.64	0.72	1.15	17.01	24.35	76.53	0.7	0.12	1.46	24.86
	5.2	23.39	0.68	1.1	15.84	24.08	75.69	0.66	0.13	1.34	21.24
	5.25	23.14	0.63	1.05	14.67	23.81	74.85	0.62	0.13	1.22	17.94
	5.3	22.89	0.59	1.0	13.52	23.54	74.0	0.57	0.14	1.11	14.95
	5.35	22.65	0.55	0.95	12.38	23.28	73.16	0.53	0.15	0.99	12.26

Waterline	5.4	22.4	0.5	0.9	11.26	23.01	72.31	0.49	0.16	0.88	9.87
	5.45	22.2	0.46	0.85	10.14	22.77	71.57	0.45	0.17	0.77	7.76
	5.5	22.0	0.41	0.8	9.04	22.54	70.83	0.4	0.19	0.66	5.93
	5.55	21.8	0.36	0.75	7.94	22.3	70.09	0.36	0.21	0.55	4.38
	5.6	21.6	0.32	0.7	6.86	22.06	69.35	0.31	0.23	0.45	3.09
	5.65	21.4	0.27	0.65	5.78	21.83	68.6	0.26	0.26	0.36	2.06
	5.7	20.3	0.23	0.6	4.72	20.69	65.03	0.23	0.29	0.29	1.35
	5.75	18.77	0.2	0.55	3.72	19.11	60.05	0.19	0.34	0.23	0.84
	5.8	16.94	0.17	0.5	2.82	17.25	54.22	0.16	0.39	0.17	0.49
	5.85	14.93	0.13	0.45	2.0	15.21	47.79	0.13	0.46	0.13	0.25
	5.9	9.51	0.14	0.4	1.31	9.75	30.65	0.13	0.46	0.13	0.17
	5.95	6.0	0.15	0.35	0.88	6.18	19.43	0.14	0.43	0.14	0.13
	6.0	5.27	0.11	0.3	0.6	5.42	17.03	0.11	0.53	0.1	0.06
	6.05	4.12	0.09	0.25	0.37	4.22	13.27	0.09	0.66	0.07	0.02
	6.1	2.97	0.06	0.2	0.19	3.05	9.6	0.06	0.87	0.04	0.01
	6.15	1.03	0.09	0.15	0.09	1.09	3.41	0.08	0.69	0.06	0.01
	6.2	0.77	0.06	0.1	0.04	0.8	2.52	0.06	0.95	0.03	0.0
	6.25	0.5	0.02	0.05	0.01	0.51	1.62	0.02	1.89	0.01	0.0
	6.29	0.15	0.01	0.01	0.0	0.15	0.49	0.01	5.16	0.0	0.0

This Manning's roughness coefficient was calculated based on velocity estimates from the Ferguson VPE method

MODEL SUMMARY

Measured Flow (Qm) =	9.87	(cfs)
Calculated Flow (Qc) =	9.87	(cfs)
(Qm-Qc)/Qm * 100 =	0.00%	
Measured Waterline (WLm) =	5.4	(ft)
Calculated Waterline (WLc) =	5.4	(ft)
(WLm-WLc)/WLm * 100 =	-0.00%	
Max Measured Depth (Dm) =	0.9	(ft)
Max Calculated Depth (Dc) =	0.9	(ft)
(Dm-Dc)/Dm * 100 =	0.00%	
Mean Velocity =	0.88	(ft/s)
Manning's n =	0.16	
0.4 * Qm =	3.95	(cfs)
2.5 * Qm =	24.68	(cfs)

FIELD DATA

Feature	Station (ft)	Rod Height (ft)	Water depth (ft)	Velocity (ft/s)
	0.5	2.32		
	3	4.04		
Bankfull	3.2	4.12		
	4.5	4.84		
	6.1	5		
Waterline	6.8	5.4	0	0
	7	5.75	0.35	0.7
	8	5.85	0.45	0.3
	9	5.85	0.45	0.79
	10	5.9	0.5	0.16
	11	5.9	0.5	0.87
	11.5	5.9	0.5	0.69
	12	5.95	0.55	0.56
	12.5	5.95	0.55	0.63
	13	5.95	0.55	0.63
	13.5	5.95	0.55	0.17
	14	5.9	0.5	0.34
	14.5	5.9	0.5	0.63
	15	5.9	0.5	0.81
	15.5	6.05	0.65	0.87
	16	5.8	0.4	0.63
	16.5	5.7	0.3	0.39
	17	5.7	0.3	0.71
	17.4	5.7	0.3	1.15
	17.8	5.95	0.55	2.16
	18.2	5.85	0.45	2.53
	18.6	5.9	0.5	2.69
	19	5.9	0.5	3.18
	19.4	5.9	0.5	3.14
	19.8	6.05	0.65	2.39

	20.2	6.1	0.7	1.76
	20.6	6.3	0.9	1.52
	21	6.25	0.85	1.16
	21.5	6.1	0.7	0.37
	22	6.15	0.75	0.11
	22.5	6.1	0.7	0.72
	23	6.15	0.75	0.16
	23.5	6	0.6	0.42
	24	6.1	0.7	1.01
	25	5.95	0.55	0
	26	5.8	0.4	1.34
	27	5.75	0.35	1.19
	28	5.75	0.35	0.09
Waterline	29.2	5.4	0	0
	30	5.15		
	31	4.3		
Bankfull	33.9	4.19		

COMPUTED FROM MEASURED FIELD DATA

Wetted Perimeter (ft)	Water Depth (ft)	Area (ft^2)	Discharge (cfs)	Percent Discharge
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0.4	0.35	0.21	0.15	1.49
1	0.45	0.45	0.14	1.37
1	0.45	0.45	0.36	3.6
1	0.5	0.5	0.08	0.81
1	0.5	0.38	0.33	3.3
0.5	0.5	0.25	0.17	1.75
0.5	0.55	0.28	0.15	1.56
0.5	0.55	0.28	0.17	1.75
0.5	0.55	0.28	0.17	1.75
0.5	0.55	0.28	0.05	0.47
0.5	0.5	0.25	0.09	0.86
0.5	0.5	0.25	0.16	1.59
0.5	0.5	0.25	0.2	2.05
0.52	0.65	0.33	0.28	2.86
0.56	0.4	0.2	0.13	1.28
0.51	0.3	0.15	0.06	0.59
0.5	0.3	0.14	0.1	0.97
0.4	0.3	0.12	0.14	1.4
0.47	0.55	0.22	0.48	4.81
0.41	0.45	0.18	0.46	4.61
0.4	0.5	0.2	0.54	5.45
0.4	0.5	0.2	0.64	6.44
0.4	0.5	0.2	0.63	6.36
0.43	0.65	0.26	0.62	6.29

0.4	0.7	0.28	0.49	4.99
0.45	0.9	0.36	0.55	5.54
0.4	0.85	0.38	0.44	4.49
0.52	0.7	0.35	0.13	1.31
0.5	0.75	0.38	0.04	0.42
0.5	0.7	0.35	0.25	2.55
0.5	0.75	0.38	0.06	0.61
0.52	0.6	0.3	0.13	1.28
0.51	0.7	0.53	0.53	5.37
1.01	0.55	0.55	0	0
1.01	0.4	0.4	0.54	5.43
1	0.35	0.35	0.42	4.22
1	0.35	0.39	0.03	0.35
1.25	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

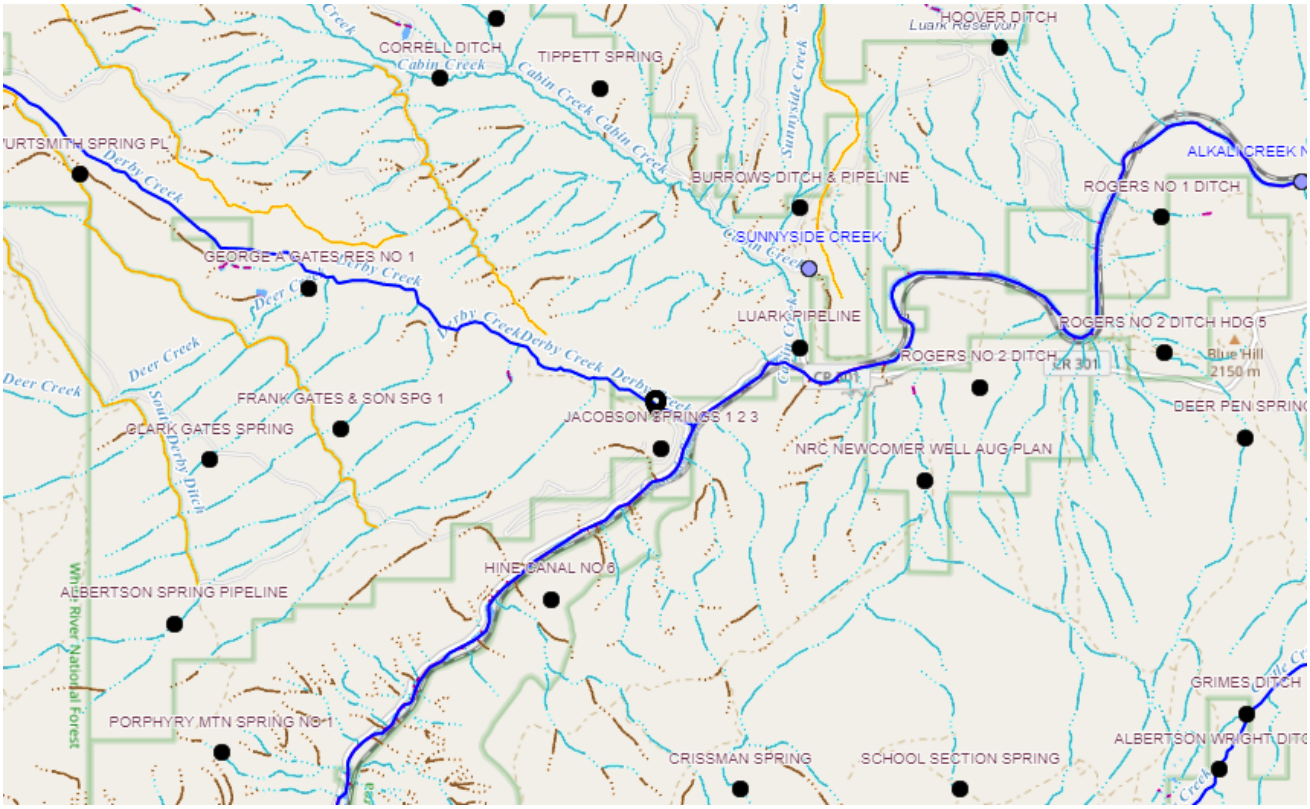
DISCLAIMER

"The Colorado Water Conservation Board makes no representations about the use of the software contained in the R2Cross platform for any purpose besides that for which it was designed. To the maximum extent permitted by applicable law, all information, modeling results, and software are provided “as is” without warranty or condition of any kind, including all implied warranties or conditions of merchantability, or fitness for a particular purpose. The user assumes all responsibility for the accuracy and suitability of this program for a specific application. In no event shall the Colorado Water Conservation Board or any state agency, official or employee be liable for any direct, indirect, punitive, incidental, special, consequential damages or any damages whatsoever including, without limitation, damages for loss of use, data, profits, or savings arising from the implementation, reliance on, or use of or inability to use the R2Cross platform.

R2Cross RESULTS

Stream Name: Derby Creek
Stream Locations: 1/4 mile upstream from confluence with Colorado River
Fieldwork Date: 09/23/2021
Cross-section: 1
Observers: R. Smith, J. Thompson
Coordinate System: UTM Zone 13
X (easting): 336720
Y (northing): 4415201
Date Processed: 04/04/2023
Slope: 0.0386
Discharge: R2Cross data file: 7.47 (cfs)
Computation method: Ferguson VPE
R2Cross data filename: Derby Creek 9-23-21 #1.xlsx
R2Cross version: 2.0.2

LOCATION



ANALYSIS RESULTS

Habitat Criteria Results

Bankfull top width (ft) = 31.5

	Habitat Criteria	Discharge (cfs) Meeting Criteria
Mean Depth (ft)	0.3	2.74
Percent Wetted Perimeter (%)	50.0	2.35
Mean Velocity (ft/s)	1.0	10.68

STAGING TABLE

Feature	Distance to Water (ft)	Top Width (ft)	Mean Depth (ft)	Maximum Depth (ft)	Area (sq ft)	Wetted Perimeter (ft)	Percent Wetted Perimeter	Hydraulic Radius (ft)	Manning's n	Mean Velocity (ft/s)	Discharge (cfs)
Bankfull	2.34	31.5	2.0	3.06	63.13	34.08	100.0	1.85	0.07	6.23	393.49
	2.35	31.48	2.0	3.05	62.82	34.05	99.91	1.84	0.07	6.2	389.56
	2.4	31.36	1.95	3.0	61.25	33.89	99.44	1.81	0.07	6.04	370.21
	2.45	31.25	1.91	2.95	59.68	33.74	98.98	1.77	0.07	5.89	351.34
	2.5	31.13	1.87	2.9	58.12	33.58	98.51	1.73	0.07	5.73	332.96
	2.55	31.02	1.82	2.85	56.57	33.42	98.05	1.69	0.07	5.57	315.07
	2.6	30.91	1.78	2.8	55.02	33.26	97.58	1.65	0.08	5.41	297.66
	2.65	30.79	1.74	2.75	53.48	33.1	97.12	1.62	0.08	5.25	280.74
	2.7	30.68	1.69	2.7	51.94	32.94	96.66	1.58	0.08	5.09	264.32
	2.75	30.56	1.65	2.65	50.41	32.79	96.19	1.54	0.08	4.93	248.39
	2.8	30.45	1.61	2.6	48.89	32.63	95.73	1.5	0.08	4.77	232.95
	2.85	30.33	1.56	2.55	47.37	32.47	95.26	1.46	0.08	4.6	218.02
	2.9	30.22	1.52	2.5	45.85	32.31	94.8	1.42	0.08	4.44	203.59
	2.95	30.11	1.47	2.45	44.34	32.15	94.33	1.38	0.08	4.28	189.66
	3.0	29.99	1.43	2.4	42.84	31.99	93.87	1.34	0.09	4.11	176.23
	3.05	29.88	1.38	2.35	41.34	31.84	93.4	1.3	0.09	3.95	163.32
	3.1	29.76	1.34	2.3	39.85	31.68	92.94	1.26	0.09	3.79	150.91
	3.15	29.65	1.29	2.25	38.37	31.52	92.48	1.22	0.09	3.62	139.0
	3.2	29.53	1.25	2.2	36.89	31.36	92.01	1.18	0.09	3.46	127.61
	3.25	29.42	1.2	2.15	35.41	31.2	91.55	1.13	0.1	3.3	116.73
	3.3	29.19	1.16	2.1	33.95	30.93	90.74	1.1	0.1	3.15	106.91
	3.35	28.48	1.14	2.05	32.51	30.19	88.57	1.08	0.1	3.07	99.72
	3.4	25.67	1.21	2.0	31.1	27.35	80.24	1.14	0.1	3.3	102.76
	3.45	25.46	1.17	1.95	29.82	27.1	79.5	1.1	0.1	3.16	94.25
	3.5	25.24	1.13	1.9	28.55	26.84	78.76	1.06	0.1	3.02	86.14

	3.55	25.03	1.09	1.85	27.3	26.59	78.02	1.03	0.1	2.87	78.42
	3.6	24.81	1.05	1.8	26.05	26.34	77.28	0.99	0.11	2.73	71.1
	3.65	24.6	1.01	1.75	24.82	26.09	76.54	0.95	0.11	2.59	64.17
	3.7	24.38	0.97	1.7	23.59	25.84	75.8	0.91	0.11	2.44	57.63
	3.75	24.17	0.93	1.65	22.38	25.58	75.06	0.87	0.12	2.3	51.47
	3.8	23.9	0.89	1.6	21.18	25.29	74.19	0.84	0.12	2.16	45.81
	3.85	23.62	0.85	1.55	19.99	25.0	73.33	0.8	0.12	2.03	40.52
	3.9	23.35	0.81	1.5	18.81	24.7	72.47	0.76	0.13	1.89	35.59
	3.95	23.08	0.76	1.45	17.65	24.41	71.61	0.72	0.13	1.76	31.03
	4.0	22.8	0.72	1.4	16.51	24.11	70.75	0.68	0.14	1.62	26.82
	4.05	22.53	0.68	1.35	15.37	23.82	69.88	0.65	0.15	1.49	22.95
	4.1	22.25	0.64	1.3	14.25	23.53	69.02	0.61	0.15	1.36	19.43
	4.15	21.78	0.6	1.25	13.15	23.04	67.59	0.57	0.16	1.25	16.45
	4.2	21.26	0.57	1.2	12.07	22.5	66.01	0.54	0.17	1.14	13.81
	4.25	20.74	0.53	1.15	11.02	21.96	64.43	0.5	0.18	1.04	11.44
	4.3	20.22	0.49	1.1	10.0	21.42	62.86	0.47	0.19	0.93	9.33
Waterline	4.35	19.7	0.46	1.05	9.0	20.89	61.28	0.43	0.2	0.83	7.47
	4.4	19.47	0.41	1.0	8.02	20.62	60.5	0.39	0.22	0.71	5.73
	4.45	19.23	0.37	0.95	7.06	20.35	59.72	0.35	0.24	0.6	4.25
	4.5	18.55	0.33	0.9	6.11	19.63	57.58	0.31	0.26	0.51	3.14
	4.55	17.4	0.3	0.85	5.21	18.46	54.15	0.28	0.28	0.44	2.32
	4.6	12.75	0.35	0.8	4.46	13.77	40.4	0.32	0.25	0.54	2.43
	4.65	11.1	0.35	0.75	3.86	12.09	35.47	0.32	0.26	0.53	2.06
	4.7	10.42	0.32	0.7	3.32	11.36	33.34	0.29	0.27	0.47	1.56
	4.75	9.51	0.3	0.65	2.83	10.39	30.48	0.27	0.29	0.42	1.19
	4.8	9.06	0.26	0.6	2.36	9.87	28.96	0.24	0.32	0.35	0.82
	4.85	8.6	0.22	0.55	1.92	9.36	27.45	0.21	0.37	0.28	0.53
	4.9	8.14	0.18	0.5	1.5	8.84	25.94	0.17	0.43	0.21	0.31
	4.95	7.09	0.16	0.45	1.12	7.71	22.63	0.15	0.49	0.17	0.19
	5.0	5.86	0.14	0.4	0.8	6.38	18.73	0.12	0.55	0.13	0.11
	5.05	4.04	0.14	0.35	0.55	4.48	13.13	0.12	0.56	0.13	0.07
	5.1	2.73	0.14	0.3	0.38	3.07	8.99	0.12	0.56	0.13	0.05
	5.15	2.17	0.12	0.25	0.26	2.41	7.08	0.11	0.63	0.1	0.03
	5.2	1.76	0.09	0.2	0.16	1.95	5.71	0.08	0.78	0.07	0.01

	5.25	1.35	0.06	0.15	0.08	1.48	4.35	0.06	1.08	0.04	0.0
	5.3	0.77	0.04	0.1	0.03	0.86	2.52	0.03	1.62	0.02	0.0
	5.35	0.2	0.02	0.05	0.0	0.23	0.69	0.02	2.41	0.01	0.0
	5.38	0.06	0.01	0.01	0.0	0.07	0.21	0.01	6.56	0.0	0.0

This Manning's roughness coefficient was calculated based on velocity estimates from the Ferguson VPE method

MODEL SUMMARY

Measured Flow (Qm) =	7.47	(cfs)
Calculated Flow (Qc) =	7.47	(cfs)
(Qm-Qc)/Qm * 100 =	0.00%	
Measured Waterline (WLm) =	4.35	(ft)
Calculated Waterline (WLc) =	4.35	(ft)
(WLm-WLc)/WLm * 100 =	-0.00%	
Max Measured Depth (Dm) =	1.05	(ft)
Max Calculated Depth (Dc) =	1.05	(ft)
(Dm-Dc)/Dm * 100 =	0.00%	
Mean Velocity =	0.83	(ft/s)
Manning's n =	0.201	
0.4 * Qm =	2.99	(cfs)
2.5 * Qm =	18.68	(cfs)

FIELD DATA

Feature	Station (ft)	Rod Height (ft)	Water depth (ft)	Velocity (ft/s)
	0	1.22		
	1.4	1.48		
Bankfull	2.3	2.34		
	4	3.29		
	5.5	3.4		
	7.6	3.4		
	10.3	4.11		
Waterline	12.4	4.35	0	0
	12.5	4.5	0.15	0.42
	13	4.55	0.2	1.29
	14	4.6	0.25	0
	15	4.55	0.2	1.01
	15.5	4.6	0.25	0.7
	16	4.55	0.2	0.27
	16.5	4.65	0.3	1.09
	17.5	4.45	0.1	0
	18.5	4.7	0.35	0.24
	19.5	4.95	0.6	0.2
	20	5.1	0.75	0.74
	20.5	5	0.65	0.78
	21	4.95	0.6	0.66
	21.5	5.25	0.9	1.31
	22	5.35	1	3.01
	22.5	5.15	0.8	1.91
	23	4.95	0.6	1.06
	23.5	4.9	0.55	1.42
	24	5.15	0.8	0.98
	24.5	4.7	0.35	0.88
	25.5	5	0.65	0
	26.5	5.05	0.7	0.58

	27	5.1	0.75	1.1
	28	5.4	1.05	0.5
	28.5	4.65	0.3	0.56
	29.5	4.55	0.2	0.29
	30.5	4.75	0.4	0.3
Waterline	32.1	4.35	0	0
	33.1	3.75		
Bankfull	33.8	2.34		
	34	1.62		
	38.9	0.34		

COMPUTED FROM MEASURED FIELD DATA

Wetted Perimeter (ft)	Water Depth (ft)	Area (ft^2)	Discharge (cfs)	Percent Discharge
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0.18	0.15	0.04	0.02	0.25
0.5	0.2	0.15	0.19	2.59
1	0.25	0.25	0	0
1	0.2	0.15	0.15	2.03
0.5	0.25	0.12	0.09	1.17
0.5	0.2	0.1	0.03	0.36
0.51	0.3	0.23	0.25	3.28
1.02	0.1	0.1	0	0
1.03	0.35	0.35	0.08	1.12
1.03	0.6	0.45	0.09	1.2
0.52	0.75	0.38	0.28	3.71
0.51	0.65	0.33	0.25	3.39
0.5	0.6	0.3	0.2	2.65
0.58	0.9	0.45	0.59	7.89
0.51	1	0.5	1.5	20.14
0.54	0.8	0.4	0.76	10.22
0.54	0.6	0.3	0.32	4.25
0.5	0.55	0.28	0.39	5.22
0.56	0.8	0.4	0.39	5.25
0.67	0.35	0.26	0.23	3.09
1.04	0.65	0.65	0	0
1	0.7	0.53	0.3	4.07

0.5	0.75	0.56	0.62	8.28
1.04	1.05	0.79	0.39	5.27
0.9	0.3	0.23	0.13	1.69
1	0.2	0.2	0.06	0.78
1.02	0.4	0.52	0.16	2.09
1.65	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

DISCLAIMER

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General Site Field Visit Data Report *(Filters: Name begins with Derby Creek; Division = 5;)*

Type		Div	Name	CWCB Case Number	Segment ID	Visit Date	Location Description	Watershed Name
Stream		5	Derby Creek		23/5/A-001	4/11/2023	Derby Creek abv Colorado River	Colorado Headwaters
	Remarks	Date	Remark					
		11/04/23 00:00	Gage location investigation at most downstream BLM locations. Beaver activity noted.					
	GPS Log	No GPS Log records for this visit.						
	Photo Log	No Photo Log records for this visit.						
		5	Derby Creek		23/5/A-001	8/20/2022	Derby Creek at Colorado River	Colorado Headwaters
	Remarks	Date	Remark					
		20/08/22 00:00	There is a place to install a gage downstream of the road crossing, but it is very exposed. Photos. No AT&T cell service.					
	GPS Log	No GPS Log records for this visit.						
	Photo Log	No Photo Log records for this visit.						
		5	Derby Creek		23/5/A-001	9/6/2023	Derby Creek abv Colorado River	Colorado Headwaters
	Remarks	Date	Remark					
		06/09/23 14:47	Gage Installation					
	GPS Log	No GPS Log records for this visit.						
	Photo Log	No Photo Log records for this visit.						
		5	Derby Creek		23/5/A-001	12/19/2024	Derby Creek near State Bridge	Colorado Headwaters
	Remarks	Date	Remark					
		19/12/24 10:15	Roughly 2 ft of ice and snow compostie along banks, channel mostly open. Staff gage not readable. No measurement.					
	GPS Log	No GPS Log records for this visit.						
	Photo Log	No Photo Log records for this visit.						

Discharge Measurment Field Visit Data Report *(Filters: Name begins with Derby Creek; Division = 5;)*

Div	Name	CWCB Case Number	Segment ID	Meas. Date	UTM	Location	Flow Amount (cfs)	Meas #	Rating	Station ID
5	Derby Creek		23/5/A-001	06/26/2023	UTMx: UTMy:	Derby Creek abv Colorado River	92.3	1		
5	Derby Creek		23/5/A-001	10/09/2023	UTMx: 336889 UTMy: 4415106	Gage - Debry Creek abv Colorado River	26.69	2		DERBYCRD5
5	Derby Creek		23/5/A-001	03/27/2024	UTMx: 336889 UTMy: 4415106	Gage - Debry Creek abv Colorado River	44.7	3		DERBYCRD5
5	Derby Creek		23/5/A-001	05/22/2024	UTMx: 337074 UTMy: 4414954	Derby Creek at Colorado River - DWR Hydro	57.23	4		DERBYCRD5
5	Derby Creek		23/5/A-001	05/28/2024	UTMx: 337076 UTMy: 4415065	Derby Creek at Colorado River - DWR Hydro	54.41	5		DERBYCRD5
5	Derby Creek		23/5/A-001	06/03/2024	UTMx: 337076 UTMy: 4415065	Derby Creek at Colorado River - DWR Hydro	93.04	6		DERBYCRD4
5	Derby Creek		23/5/A-001	06/14/2024	UTMx: 337076 UTMy: 4415065	Derby Creek at Colorado River -DWR Hydro	160.11	7		DERBYCRD5
5	Derby Creek		23/5/A-001	06/26/2024	UTMx: 336889 UTMy: 4415106	Gage - Derby Creek abv Colorado River	62.62	8		DERBYCRD5
5	Derby Creek		23/5/A-001	08/05/2024	UTMx: 336889 UTMy: 4415106	Gage - Derby Creek abv Colorado River	12.59	9		DERBYCRD5
5	Derby Creek		23/5/A-001	10/07/2024	UTMx: 336889 UTMy: 4415106	Derby Creek near State Bridge	19.69	10		DERBYD5

Discharge Measurement Summary

Site name	Derby
Site number	D5
Operator(s)	S.C
File name	Derby_20231009-155630.ft
Comment	

Start time	10/9/2023 2:29 PM
End time	10/9/2023 3:55 PM
Start location latitude	39.870
Start location longitude	-106.907
Calculations engine	FlowTracker2

Sensor type	Top Setting
Handheld serial number	FT2H2322005
Probe serial number	FT2P2317010
Probe firmware	1.30
Handheld software	1.7

# Stations	Avg interval (s)	Total discharge (ft³/s)
33	40	26.6900

Total width (ft)	Total area (ft²)	Wetted Perimeter (ft)
21.200	21.6575	22.168

Mean SNR (dB)	Mean depth (ft)	Mean velocity (ft/s)
50	1.022	1.2324

Mean temp (°F)	Max depth (ft)	Max velocity (ft/s)
45.100	1.650	2.9406

Discharge Uncertainty		
Category	**ISO**	**IVE**
Accuracy	1.0%	1.0%
Depth	0.2%	3.0%
Velocity	1.4%	13.0%
Width	0.1%	0.1%
Method	1.5%	
# Stations	1.6%	
Overall	**2.8%**	**13.4%**

Discharge equation	Mid Section
Discharge uncertainty	IVE
Discharge reference	Rated

Data Collection Settings	
Salinity	0.000 PSS-78
Temperature	-
Sound speed	-
Mounting correction	0.000 %

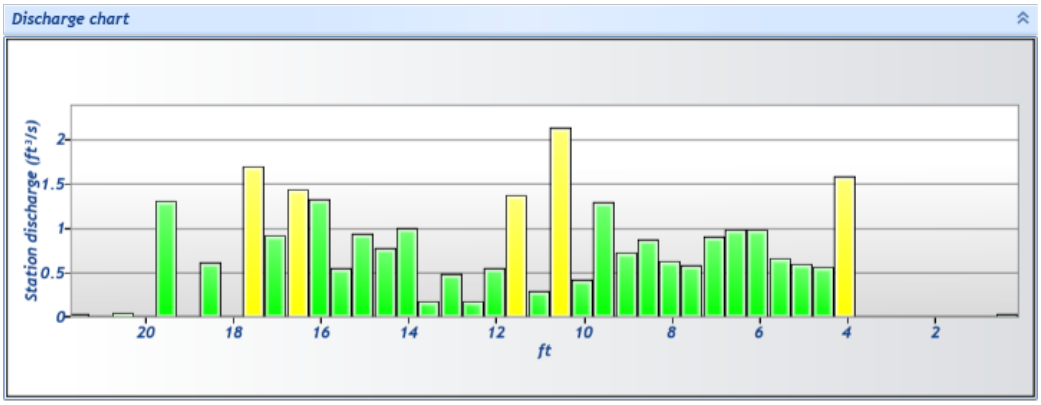
Summary overview

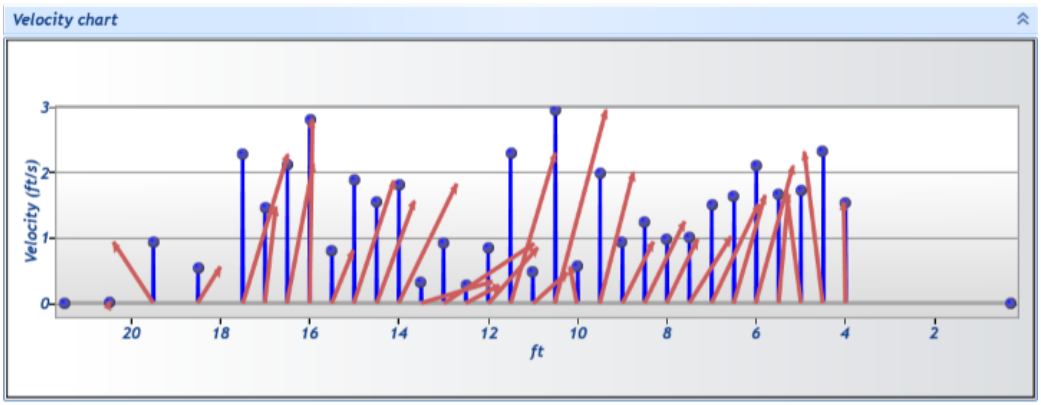
No changes were made to this file
Quality control warnings

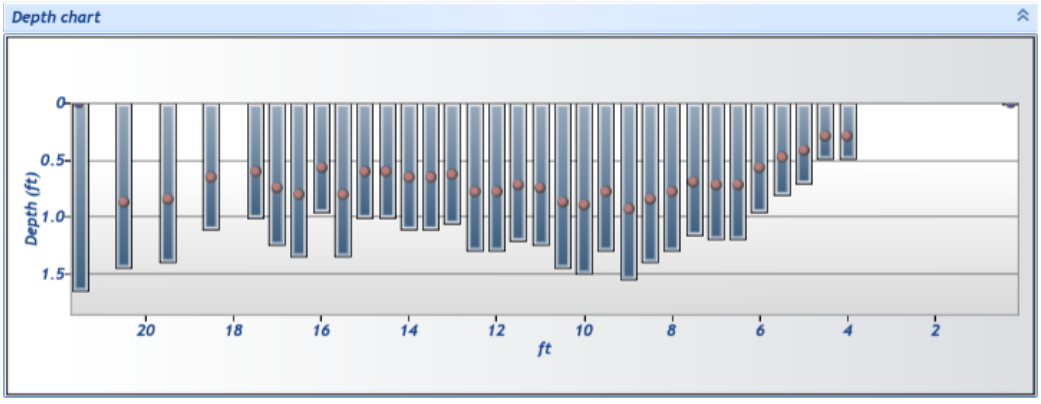
Discharge Measurement Summary

Site name	Derby
Site number	D5
Operator(s)	S.C
File name	Derby_20231009-155630.ft
Comment	

Station Warning Settings		
Station discharge OK	Station discharge < 5.00%	
Station discharge caution	5.00% >= Station discharge < 10.00%	
Station discharge warning	Station discharge >= 10.00%	







Discharge Measurement Summary

Site name	Derby
Site number	D5
Operator(s)	S.C
File name	Derby_20231009-155630.ft
Comment	

Measurement results

St#	Time	Location (ft)	Method	Depth (ft)	%Depth	Measured Depth (ft)	Samples	Velocity (ft/s)	Correction	Mean Velocity (ft/s)	Area (ft²)	Flow (ft³/s)	%Q	
0	2:29 PM	0.300	None	0.010	0.0000	0.000	0	0.0000	1.0000	1.5390	0.0185	0.0285	0.11	✓
1	2:30 PM	4.000	0.6	0.490	0.6000	0.294	80	1.5390	1.0000	1.5390	1.0290	1.5836	5.93	✓
2	2:35 PM	4.500	0.6	0.490	0.6000	0.294	80	2.3037	1.0000	2.3037	0.2450	0.5644	2.11	✓
3	2:38 PM	5.000	0.6	0.700	0.6000	0.420	80	1.7182	1.0000	1.7182	0.3500	0.6014	2.25	✓
4	2:41 PM	5.500	0.6	0.800	0.6000	0.480	80	1.6612	1.0000	1.6612	0.4000	0.6645	2.49	✓
5	2:44 PM	6.000	0.6	0.950	0.6000	0.570	80	2.0933	1.0000	2.0933	0.4750	0.9943	3.73	✓
6	2:46 PM	6.500	0.6	1.190	0.6000	0.714	80	1.6456	1.0000	1.6456	0.5950	0.9791	3.67	✓
7	2:51 PM	7.000	0.6	1.190	0.6000	0.714	80	1.5163	1.0000	1.5163	0.5950	0.9022	3.38	✓
8	2:53 PM	7.500	0.6	1.150	0.6000	0.690	80	1.0157	1.0000	1.0157	0.5750	0.5841	2.19	✓
9	2:56 PM	8.000	0.6	1.300	0.6000	0.780	80	0.9793	1.0000	0.9793	0.6500	0.6365	2.38	✓
10	2:59 PM	8.500	0.6	1.400	0.6000	0.840	80	1.2484	1.0000	1.2484	0.7000	0.8739	3.27	✓
11	3:05 PM	9.000	0.6	1.550	0.6000	0.930	80	0.9389	1.0000	0.9389	0.7750	0.7276	2.73	✓
12	3:07 PM	9.500	0.6	1.300	0.6000	0.780	80	1.9933	1.0000	1.9933	0.6500	1.2956	4.85	✓
13	3:09 PM	10.000	0.6	1.500	0.6000	0.900	80	0.5612	1.0000	0.5612	0.7500	0.4209	1.58	✓
14	3:11 PM	10.500	0.6	1.450	0.6000	0.870	80	2.9406	1.0000	2.9406	0.7250	2.1320	7.99	✓
15	3:15 PM	11.000	0.6	1.250	0.6000	0.750	80	0.4727	1.0000	0.4727	0.6250	0.2954	1.11	✓
16	3:17 PM	11.500	0.6	1.200	0.6000	0.720	80	2.2894	1.0000	2.2894	0.6000	1.3737	5.15	✓
17	3:19 PM	12.000	0.6	1.300	0.6000	0.780	80	0.8573	1.0000	0.8573	0.6500	0.5572	2.09	✓
18	3:21 PM	12.500	0.6	1.300	0.6000	0.780	80	0.2752	1.0000	0.2752	0.6500	0.1789	0.67	✓
19	3:23 PM	13.000	0.6	1.050	0.6000	0.630	80	0.9134	1.0000	0.9134	0.5250	0.4795	1.80	✓
20	3:25 PM	13.500	0.6	1.100	0.6000	0.660	80	0.3298	1.0000	0.3298	0.5500	0.1814	0.68	✓
21	3:28 PM	14.000	0.6	1.100	0.6000	0.660	80	1.8233	1.0000	1.8233	0.5500	1.0028	3.76	✓
22	3:31 PM	14.500	0.6	1.000	0.6000	0.600	80	1.5558	1.0000	1.5558	0.5000	0.7779	2.91	✓
23	3:34 PM	15.000	0.6	1.000	0.6000	0.600	80	1.8714	1.0000	1.8714	0.5000	0.9357	3.51	✓
24	3:35 PM	15.500	0.6	1.350	0.6000	0.810	80	0.8120	1.0000	0.8120	0.6750	0.5481	2.05	✓
25	3:37 PM	16.000	0.6	0.950	0.6000	0.570	80	2.8007	1.0000	2.8007	0.4750	1.3303	4.98	✓
26	3:39 PM	16.500	0.6	1.350	0.6000	0.810	80	2.1226	1.0000	2.1226	0.6750	1.4327	5.37	✓
27	3:42 PM	17.000	0.6	1.250	0.6000	0.750	80	1.4657	1.0000	1.4657	0.6250	0.9161	3.43	✓
28	3:44 PM	17.500	0.6	1.000	0.6000	0.600	80	2.2664	1.0000	2.2664	0.7500	1.6998	6.37	✓
29	3:46 PM	18.500	0.6	1.100	0.6000	0.660	80	0.5566	1.0000	0.5566	1.1000	0.6122	2.29	✓
30	3:50 PM	19.500	0.6	1.400	0.6000	0.840	80	0.9328	1.0000	0.9328	1.4000	1.3059	4.89	✓
31	3:52 PM	20.500	0.6	1.450	0.6000	0.870	80	0.0324	1.0000	0.0324	1.4500	0.0470	0.18	✓
32	3:55 PM	21.500	None	1.650	0.0000	0.000	0	0.0000	1.0000	0.0324	0.8250	0.0267	0.10	✓

Discharge Measurement Summary

Site name	Derby
Site number	D5
Operator(s)	S.C
File name	Derby_20231009-155630.ft
Comment	

Quality Control Settings	
Maximum depth change	50.00%
Maximum spacing change	100.00%
SNR threshold	10 dB
Standard error threshold	0.0328 ft/s
Spike threshold	10.00%
Maximum velocity angle	20.0 deg
Maximum tilt angle	5.0 deg

Quality control warnings

St#	Time	Location (ft)	Method	Depth (ft)	%Depth	Measured Depth (ft)	Warnings
1	2:30 PM	4.000	0.6	0.490	0.6000	0.294	Standard Error > QC
2	2:35 PM	4.500	0.6	0.490	0.6000	0.294	Standard Error > QC
3	2:38 PM	5.000	0.6	0.700	0.6000	0.420	Standard Error > QC
4	2:41 PM	5.500	0.6	0.800	0.6000	0.480	Standard Error > QC
5	2:44 PM	6.000	0.6	0.950	0.6000	0.570	Standard Error > QC,Velocity Angle > QC
6	2:46 PM	6.500	0.6	1.190	0.6000	0.714	Standard Error > QC,Velocity Angle > QC
7	2:51 PM	7.000	0.6	1.190	0.6000	0.714	Standard Error > QC,Velocity Angle > QC
8	2:53 PM	7.500	0.6	1.150	0.6000	0.690	Standard Error > QC,Velocity Angle > QC
9	2:56 PM	8.000	0.6	1.300	0.6000	0.780	Standard Error > QC,Velocity Angle > QC
10	2:59 PM	8.500	0.6	1.400	0.6000	0.840	Standard Error > QC,Velocity Angle > QC,Rod Angle > QC
11	3:05 PM	9.000	0.6	1.550	0.6000	0.930	Standard Error > QC,Velocity Angle > QC
12	3:07 PM	9.500	0.6	1.300	0.6000	0.780	Standard Error > QC,Velocity Angle > QC
13	3:09 PM	10.000	0.6	1.500	0.6000	0.900	Large SNR Variation,Standard Error > QC,Rod Angle > QC
14	3:11 PM	10.500	0.6	1.450	0.6000	0.870	Standard Error > QC,Velocity Angle > QC,Rod Angle > QC
15	3:15 PM	11.000	0.6	1.250	0.6000	0.750	Standard Error > QC,Velocity Angle > QC,Rod Angle > QC
16	3:17 PM	11.500	0.6	1.200	0.6000	0.720	Standard Error > QC,Velocity Angle > QC,Rod Angle > QC
17	3:19 PM	12.000	0.6	1.300	0.6000	0.780	Standard Error > QC,Velocity Angle > QC,Rod Angle > QC
18	3:21 PM	12.500	0.6	1.300	0.6000	0.780	Standard Error > QC,Velocity Angle > QC,Rod Angle > QC
19	3:23 PM	13.000	0.6	1.050	0.6000	0.630	Standard Error > QC,Velocity Angle > QC
20	3:25 PM	13.500	0.6	1.100	0.6000	0.660	Standard Error > QC,Velocity Angle > QC,Rod Angle > QC
21	3:28 PM	14.000	0.6	1.100	0.6000	0.660	Standard Error > QC,Velocity Angle > QC,Rod Angle > QC
22	3:31 PM	14.500	0.6	1.000	0.6000	0.600	Standard Error > QC,Velocity Angle > QC,Rod Angle > QC
23	3:34 PM	15.000	0.6	1.000	0.6000	0.600	Standard Error > QC,Velocity Angle > QC,Rod Angle > QC
24	3:35 PM	15.500	0.6	1.350	0.6000	0.810	Standard Error > QC,Velocity Angle > QC,Rod Angle > QC
25	3:37 PM	16.000	0.6	0.950	0.6000	0.570	Standard Error > QC,Rod Angle > QC
26	3:39 PM	16.500	0.6	1.350	0.6000	0.810	Standard Error > QC,Rod Angle > QC
27	3:42 PM	17.000	0.6	1.250	0.6000	0.750	Standard Error > QC,Rod Angle > QC
28	3:44 PM	17.500	0.6	1.000	0.6000	0.600	Standard Error > QC,Velocity Angle > QC,Rod Angle > QC
29	3:46 PM	18.500	0.6	1.100	0.6000	0.660	Standard Error > QC,Velocity Angle > QC,Rod Angle > QC
30	3:50 PM	19.500	0.6	1.400	0.6000	0.840	Standard Error > QC,Velocity Angle > QC,Rod Angle > QC
31	3:52 PM	20.500	0.6	1.450	0.6000	0.870	Large SNR Variation,Standard Error > QC,High % Spikes,Rod Angle > QC

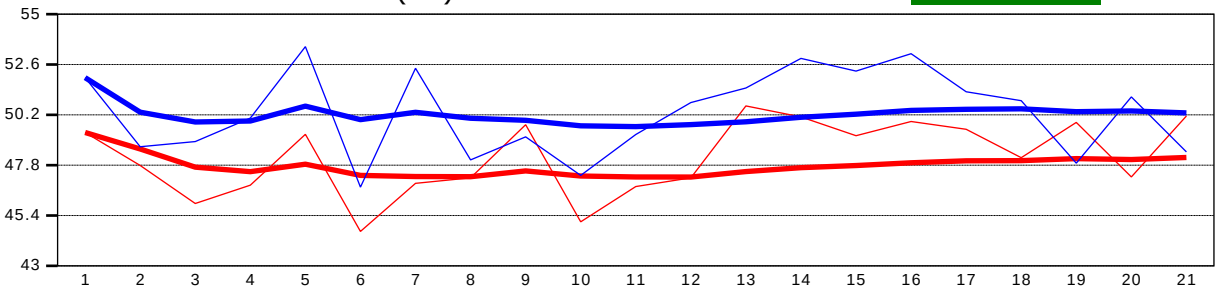
Discharge Measurement Summary

Site name	Derby
Site number	D5
Operator(s)	S.C
File name	Derby_20231009-155630.ft
Comment	

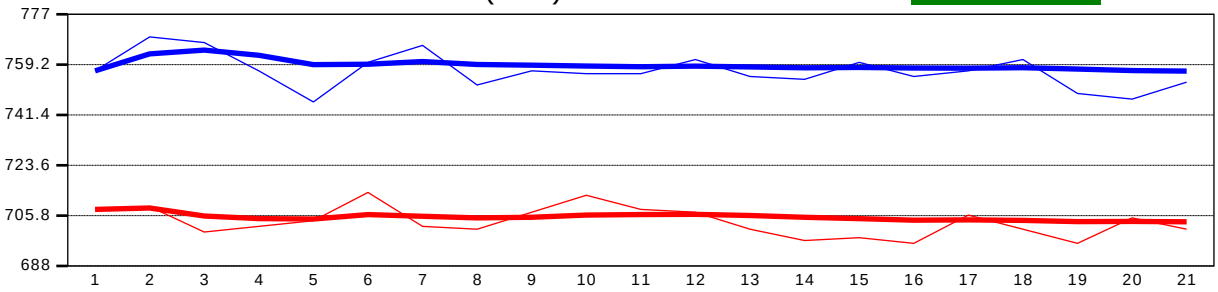
Beam 1	
Beam 2	

Automated beam check Start time 10/9/2023 2:29:58 PM

Automated beam check SNR(dB) PASS



Automated beam check Noise level(cnts) PASS



Automated beam check Quality control warnings

No quality control warnings

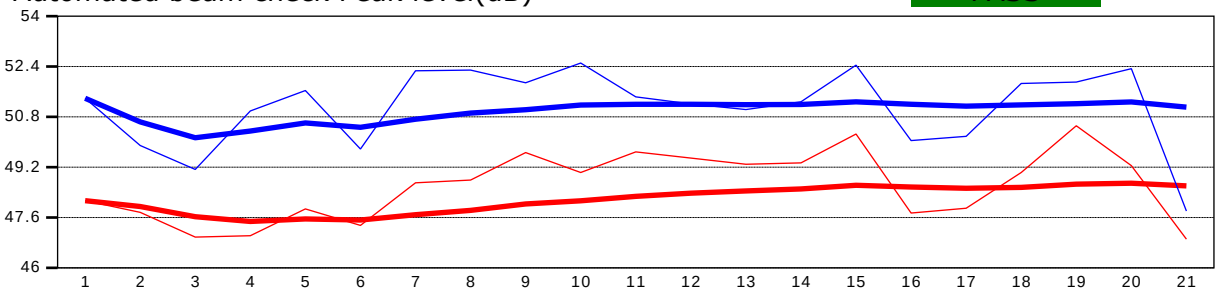
Discharge Measurement Summary

Site name	Derby
Site number	D5
Operator(s)	S.C
File name	Derby_20231009-155630.ft
Comment	

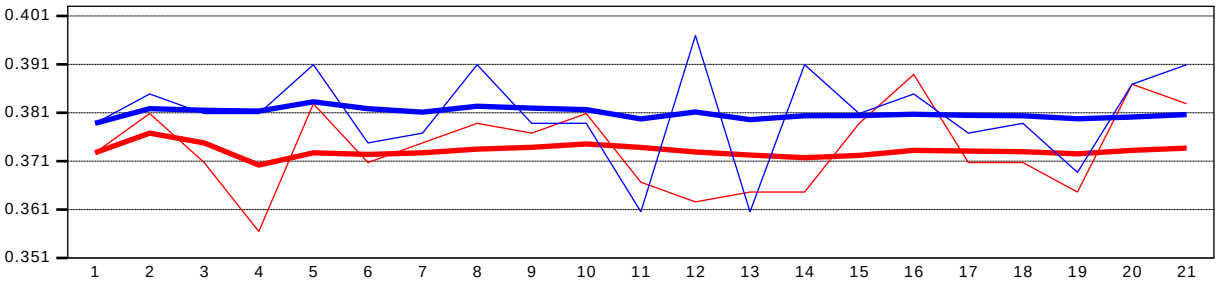
Beam 1	
Beam 2	

Automated beam check Start time 10/9/2023 2:29:58 PM

Automated beam check Peak level(dB) PASS



Automated beam check Peak position(ft) PASS



Automated beam check Quality control warnings

No quality control warnings

Discharge Measurement Summary

Site name	Derby
Site number	03272024
Operator(s)	SC
File name	Derby_20240327-143453.ft
Comment	

Start time	3/27/2024 1:49 PM
End time	3/27/2024 2:30 PM
Start location latitude	39.870
Start location longitude	-106.907
Calculations engine	FlowTracker2

Sensor type	Top Setting
Handheld serial number	FT2H2322005
Probe serial number	FT2P2317010
Probe firmware	1.30
Handheld software	1.7

# Stations	Avg interval (s)	Total discharge (ft³/s)
20 *[21]*	40	44.7044 *[]*

Total width (ft)	Total area (ft²)	Wetted Perimeter (ft)
19.500 *[]*	20.7450 *[]*	20.092 *[22.892]*

Mean SNR (dB)	Mean depth (ft)	Mean velocity (ft/s)
50 *[]*	1.064 *[]*	2.1549 *[]*

Mean temp (°F)	Max depth (ft)	Max velocity (ft/s)
37.343 *[]*	1.500 *[1.500]*	3.9409 *[3.9409]*

Discharge Uncertainty		
Category	**ISO**	**IVE**
Accuracy	1.0%	1.0%
Depth	0.1%	3.6%
Velocity	1.1%	7.9%
Width	0.1%	0.1%
Method	2.0%	
# Stations	2.5%	
Overall	**3.6%**	**8.8%**

Discharge equation	Mid Section
Discharge uncertainty	IVE
Discharge reference	Rated

Data Collection Settings	
Salinity	0.000 PSS-78
Temperature	-
Sound speed	-
Mounting correction	0.000 %

Summary overview

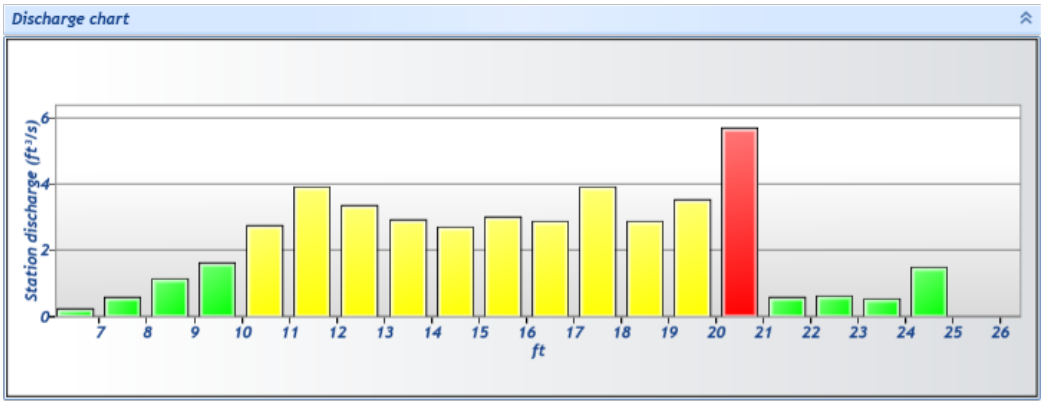
One measurement was removed
One measurement was edited
Quality control warnings

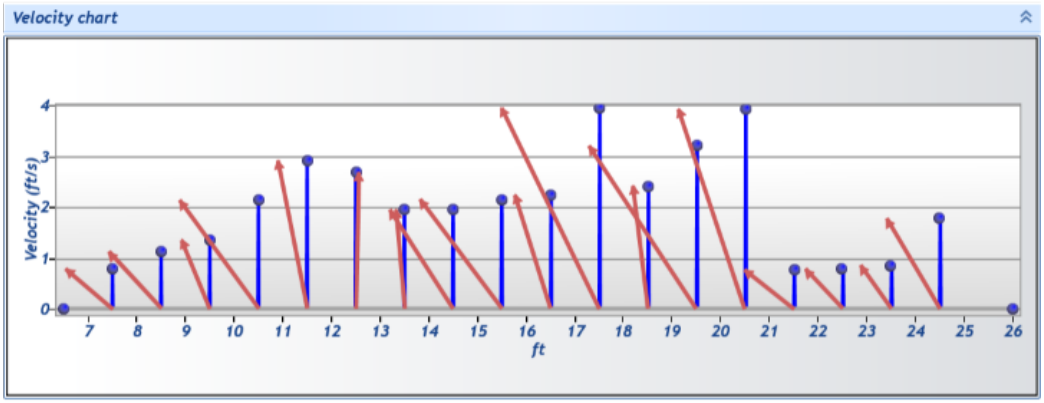
**The data in brackets [] are the original data before editing*

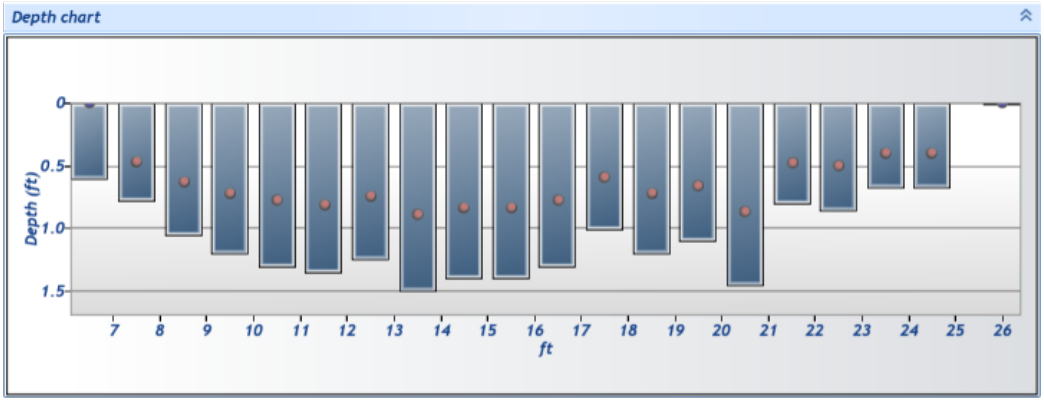
Discharge Measurement Summary

Site name	Derby
Site number	02272024
Operator(s)	SC
File name	Derby_20240327-143453.ft
Comment	

Station Warning Settings		
Station discharge OK	Station discharge < 5.00%	
Station discharge caution	5.00% >= Station discharge < 10.00%	
Station discharge warning	Station discharge >= 10.00%	







Discharge Measurement Summary

Site name	Derby
Site number	02272024
Operator(s)	SC
File name	Derby_20240327-143453.ft
Comment	

Measurement results

St#	Time	Location (ft)	Method	Depth (ft)	%Depth	Measured Depth (ft)	Samples	Velocity (ft/s)	Correction	Mean Velocity (ft/s)	Area (ft²)	Flow (ft³/s)	%Q	
20	2:30 PM	6.500	None	0.600	0.0000	0.000	0	0.0000	1.0000	0.7950	0.3000	0.2385	0.53	✓
19	2:28 PM	7.500	0.6	0.780	0.6000	0.468	62	0.7950	1.0000	0.7950	0.7800	0.6201	1.39	✓
18	2:26 PM	8.500	0.6	1.050	0.6000	0.630	63	1.1216	1.0000	1.1216	1.0500	1.1776	2.63	✓
17	2:25 PM	9.500	0.6	1.200	0.6000	0.720	63	1.3530	1.0000	1.3530	1.2000	1.6236	3.63	✓
16	2:23 PM	10.500	0.6	1.300	0.6000	0.780	62	2.1358	1.0000	2.1358	1.3000	2.7766	6.21	✓
15	2:21 PM	11.500	0.6	1.350	0.6000	0.810	60	2.9138	1.0000	2.9138	1.3500	3.9337	8.80	✓
14	2:19 PM	12.500	0.6	1.250	0.6000	0.750	62	2.6824	1.0000	2.6824	1.2500	3.3530	7.50	✓
13	2:17 PM	13.500	0.6	1.500	0.6000	0.900	62	1.9501	1.0000	1.9501	1.5000	2.9252	6.54	✓
12	2:15 PM	14.500	0.6	1.400	0.6000	0.840	62	1.9491	1.0000	1.9491	1.4000	2.7287	6.10	✓
11	2:12 PM	15.500	0.6	1.400	0.6000	0.840	63	2.1522	1.0000	2.1522	1.4000	3.0131	6.74	✓
10	2:10 PM	16.500	0.6	1.300	0.6000	0.780	63	2.2365	1.0000	2.2365	1.3000	2.9075	6.50	✓
9	2:07 PM	17.500	0.6	1.000	0.6000	0.600	65	3.9409	1.0000	3.9409	1.0000	3.9409	8.82	✓
8	2:05 PM	18.500	0.6	1.200	0.6000	0.720	61	2.4127	1.0000	2.4127	1.2000	2.8952	6.48	✓
7	2:03 PM	19.500	0.6	1.100	0.6000	0.660	60	3.2031	1.0000	3.2031	1.1000	3.5234	7.88	✓
6	1:59 PM	20.500	0.6	1.450	0.6000	0.870	64	3.9214	1.0000	3.9214	1.4500	5.6860	12.72	✓
5	1:58 PM	21.500	0.6	0.800	0.6000	0.480	62	0.7747	1.0000	0.7747	0.8000	0.6198	1.39	✓
4	1:56 PM	22.500	0.6	0.850	0.6000	0.510	66	0.7811	1.0000	0.7811	0.8500	0.6639	1.49	✓
3	1:53 PM	23.500	0.6	0.670	0.6000	0.402	64	0.8565	1.0000	0.8565	0.6700	0.5739	1.28	✓
2	1:51 PM	24.500	0.6	0.670	0.6000	0.402	63	1.7795	1.0000	1.7795	0.8375	1.4904	3.33	✓
1	*1:49 PM*	*26.000*	*None*	*0.010*	*0.0000*	*0.000*	*0*	*0.0000*	*1.0000*	*1.7795*	*0.0075*	*0.0133*	*0.03*	✓
~~*0*~~	~~*1:48 PM*~~	~~*28.800*~~	~~*None*~~	~~*0.010*~~	~~*0.0000*~~	~~*0.000*~~	~~*0*~~	~~*0.0000*~~	~~*1.0000*~~					✗

Discharge Measurement Summary

Site name	Derby
Site number	02272024
Operator(s)	SC
File name	Derby_20240327-143453.ft
Comment	

Quality Control Settings	
Maximum depth change	50.00%
Maximum spacing change	100.00%
SNR threshold	10 dB
Standard error threshold	0.0328 ft/s
Spike threshold	10.00%
Maximum velocity angle	20.0 deg
Maximum tilt angle	5.0 deg

Quality control warnings

St#	Time	Location (ft)	Method	Depth (ft)	%Depth	Measured Depth (ft)	Warnings
19	2:28 PM	7.500	0.6	0.780	0.6000	0.468	Standard Error > QC,Velocity Angle > QC
18	2:26 PM	8.500	0.6	1.050	0.6000	0.630	Standard Error > QC,Velocity Angle > QC
17	2:25 PM	9.500	0.6	1.200	0.6000	0.720	Standard Error > QC,Velocity Angle > QC
16	2:23 PM	10.500	0.6	1.300	0.6000	0.780	Standard Error > QC,Velocity Angle > QC
15	2:21 PM	11.500	0.6	1.350	0.6000	0.810	Standard Error > QC
14	2:19 PM	12.500	0.6	1.250	0.6000	0.750	Standard Error > QC
13	2:17 PM	13.500	0.6	1.500	0.6000	0.900	Standard Error > QC
12	2:15 PM	14.500	0.6	1.400	0.6000	0.840	Standard Error > QC,Velocity Angle > QC
11	2:12 PM	15.500	0.6	1.400	0.6000	0.840	Standard Error > QC,Velocity Angle > QC
10	2:10 PM	16.500	0.6	1.300	0.6000	0.780	Standard Error > QC
9	2:07 PM	17.500	0.6	1.000	0.6000	0.600	Standard Error > QC,Velocity Angle > QC
8	2:05 PM	18.500	0.6	1.200	0.6000	0.720	Standard Error > QC
7	2:03 PM	19.500	0.6	1.100	0.6000	0.660	Standard Error > QC,High % Spikes,Velocity Angle > QC
6	1:59 PM	20.500	0.6	1.450	0.6000	0.870	Standard Error > QC,High Stn % Discharge
5	1:58 PM	21.500	0.6	0.800	0.6000	0.480	Standard Error > QC,Velocity Angle > QC
4	1:56 PM	22.500	0.6	0.850	0.6000	0.510	Standard Error > QC,Velocity Angle > QC
3	1:53 PM	23.500	0.6	0.670	0.6000	0.402	Standard Error > QC,Velocity Angle > QC
2	1:51 PM	24.500	0.6	0.670	0.6000	0.402	Standard Error > QC,Velocity Angle > QC
1	1:49 PM	26.000	None	0.010	0.0000	0.000	Water Depth > QC

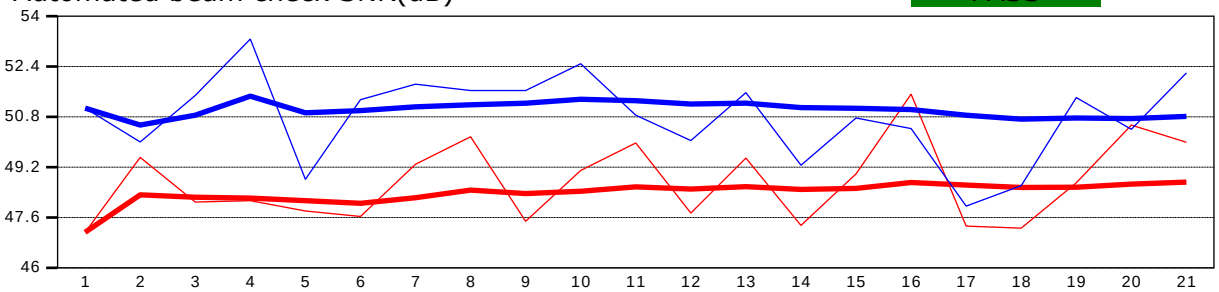
Discharge Measurement Summary

Site name	Derby
Site number	02272024
Operator(s)	SC
File name	Derby_20240327-143453.ft
Comment	

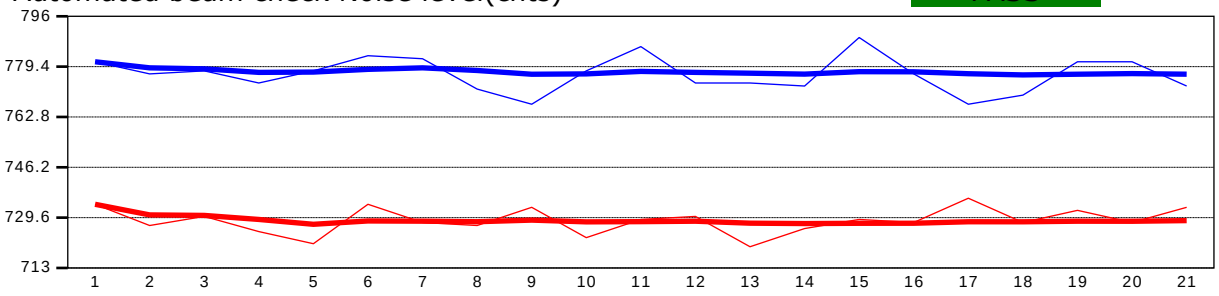
Beam 1	
Beam 2	

Automated beam check Start time 3/27/2024 1:48:18 PM

Automated beam check SNR(dB) PASS



Automated beam check Noise level(cnts) PASS



Automated beam check Quality control warnings

No quality control warnings

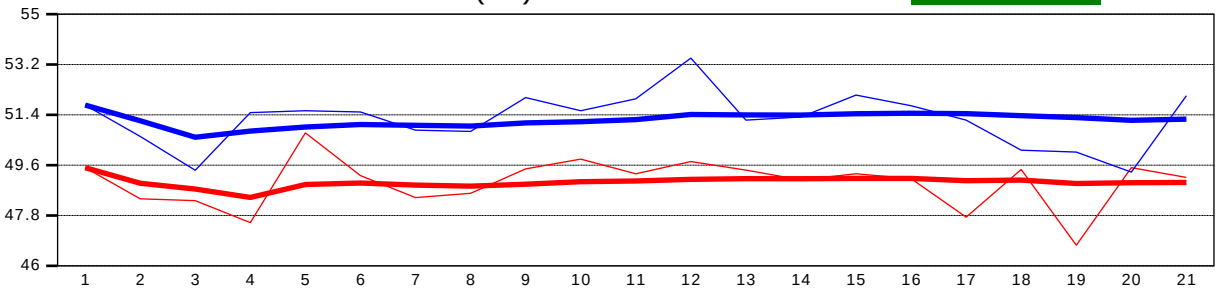
Discharge Measurement Summary

Site name	Derby
Site number	02272024
Operator(s)	SC
File name	Derby_20240327-143453.ft
Comment	

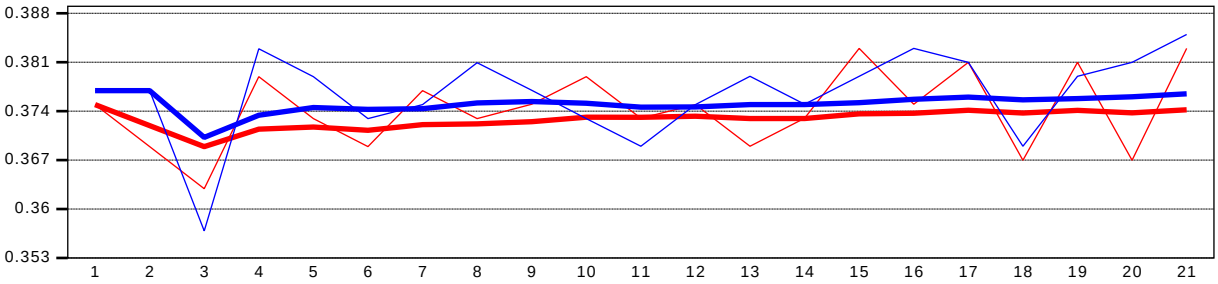
Beam 1	
Beam 2	

Automated beam check Start time 3/27/2024 1:48:18 PM

Automated beam check Peak level(dB) PASS



Automated beam check Peak position(ft) PASS



Automated beam check Quality control warnings

No quality control warnings

Discharge Measurement Summary

Site name	DRBYCRCO
Site number	DRBYCRCO
Operator(s)	WRH
File name	DRBYCRCO_20240522.ft
Comment	

Start time	5/22/2024 9:26 AM
End time	5/22/2024 10:19 AM
Start location latitude	39.869
Start location longitude	-106.905
Calculations engine	FlowTracker2

Sensor type	Top Setting
Handheld serial number	FT2H1724003
Probe serial number	FT2P1724014
Probe firmware	1.30
Handheld software	1.7

# Stations	Avg interval (s)	Total discharge (ft³/s)
35	40	57.2312

Total width (ft)	Total area (ft²)	Wetted Perimeter (ft)
26.100	20.5330	26.938

Mean SNR (dB)	Mean depth (ft)	Mean velocity (ft/s)
57	0.787	2.7873

Mean temp (°F)	Max depth (ft)	Max velocity (ft/s)
38.637	1.450	3.9262

Discharge Uncertainty		
Category	**ISO**	**IVE**
Accuracy	1.0%	1.0%
Depth	0.2%	2.4%
Velocity	0.4%	3.1%
Width	0.1%	0.1%
Method	1.4%	
# Stations	1.5%	
Overall	**2.3%**	**4.0%**

Discharge equation	Mid Section
Discharge uncertainty	IVE
Discharge reference	Rated

Data Collection Settings	
Salinity	0.000 PSS-78
Temperature	-
Sound speed	-
Mounting correction	0.000 %

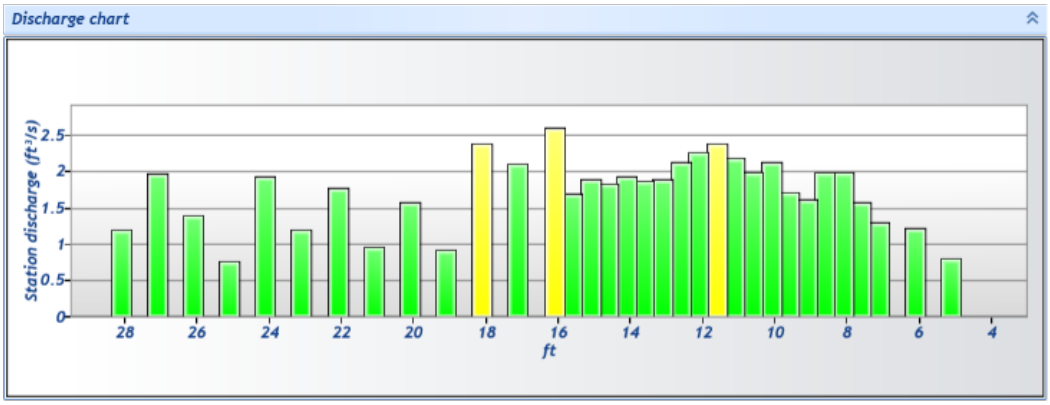
Summary overview

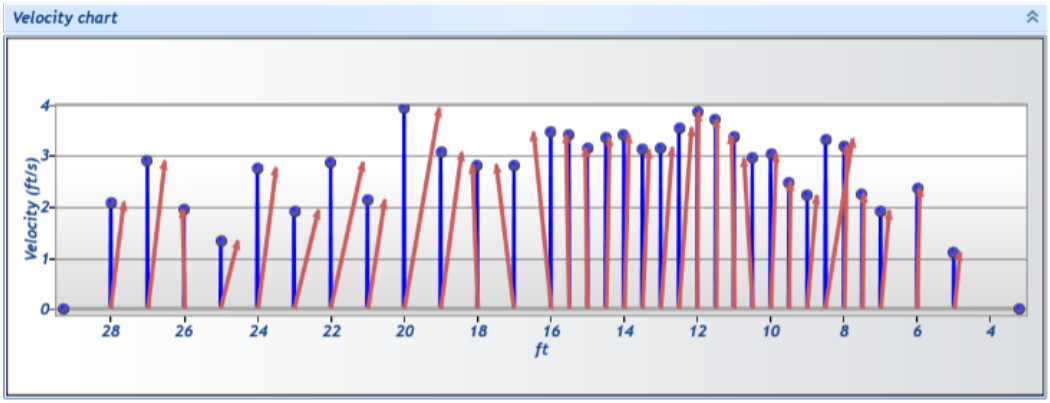
No changes were made to this file
Quality control warnings

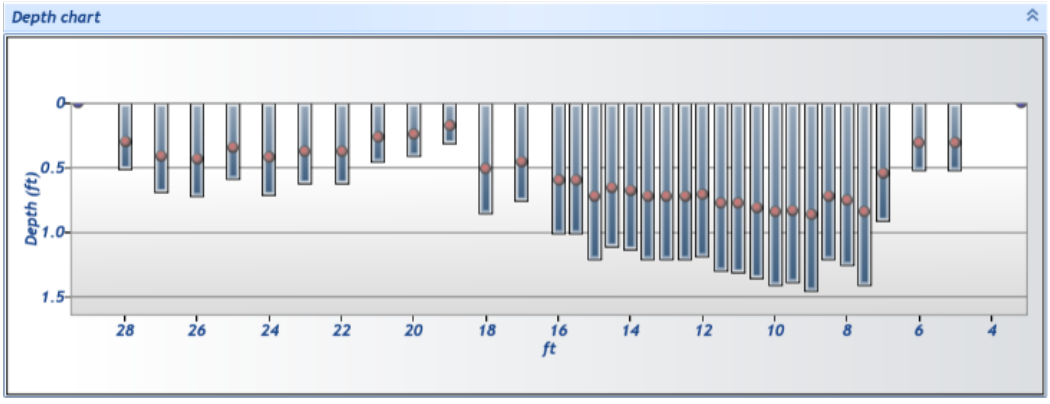
Discharge Measurement Summary

Site name	DRBYCRCO
Site number	DRBYCRCO
Operator(s)	WRH
File name	DRBYCRCO_20240522.ft
Comment	

Station Warning Settings	
Station discharge OK	Station discharge < 4.00%
Station discharge caution	4.00% >= Station discharge < 10.00%
Station discharge warning	Station discharge >= 10.00%







Discharge Measurement Summary

Site name	DRBYCRCO
Site number	DRBYCRCO
Operator(s)	WRH
File name	DRBYCRCO_20240522.ft
Comment	

Measurement results

St#	Time	Location (ft)	Method	Depth (ft)	%Depth	Measured Depth (ft)	Samples	Velocity (ft/s)	Correction	Mean Velocity (ft/s)	Area (ft²)	Flow (ft³/s)	%Q	
0	9:26 AM	3.200	None	0.000	0.0000	0.000	0	0.0000	1.0000	1.1134	0.0000	0.0000	0.00	✓
1	9:26 AM	5.000	0.6	0.520	0.6000	0.312	80	1.1134	1.0000	1.1134	0.7280	0.8105	1.42	✓
2	9:29 AM	6.000	0.6	0.520	0.6000	0.312	80	2.3562	1.0000	2.3562	0.5200	1.2252	2.14	✓
3	9:31 AM	7.000	0.6	0.900	0.6000	0.540	80	1.9273	1.0000	1.9273	0.6750	1.3009	2.27	✓
4	10:19 AM	7.500	0.6	1.400	0.6000	0.840	80	2.2444	1.0000	2.2444	0.7000	1.5711	2.75	✓
5	9:32 AM	8.000	0.6	1.250	0.6000	0.750	80	3.1829	1.0000	3.1829	0.6250	1.9893	3.48	✓
6	10:17 AM	8.500	0.6	1.200	0.6000	0.720	80	3.3296	1.0000	3.3296	0.6000	1.9978	3.49	✓
7	9:34 AM	9.000	0.6	1.450	0.6000	0.870	80	2.2192	1.0000	2.2192	0.7250	1.6089	2.81	✓
8	10:15 AM	9.500	0.6	1.380	0.6000	0.828	80	2.4804	1.0000	2.4804	0.6900	1.7115	2.99	✓
9	9:35 AM	10.000	0.6	1.400	0.6000	0.840	80	3.0333	1.0000	3.0333	0.7000	2.1233	3.71	✓
10	10:13 AM	10.500	0.6	1.350	0.6000	0.810	80	2.9408	1.0000	2.9408	0.6750	1.9850	3.47	✓
11	9:36 AM	11.000	0.6	1.300	0.6000	0.780	80	3.3828	1.0000	3.3828	0.6500	2.1988	3.84	✓
12	10:09 AM	11.500	0.6	1.290	0.6000	0.774	80	3.6991	1.0000	3.6991	0.6450	2.3859	4.17	✓
13	9:38 AM	12.000	0.6	1.180	0.6000	0.708	80	3.8466	1.0000	3.8466	0.5900	2.2695	3.97	✓
14	10:11 AM	12.500	0.6	1.200	0.6000	0.720	80	3.5434	1.0000	3.5434	0.6000	2.1261	3.71	✓
15	9:39 AM	13.000	0.6	1.200	0.6000	0.720	80	3.1616	1.0000	3.1616	0.6000	1.8969	3.31	✓
16	10:05 AM	13.500	0.6	1.200	0.6000	0.720	80	3.1099	1.0000	3.1099	0.6000	1.8660	3.26	✓
17	9:41 AM	14.000	0.6	1.130	0.6000	0.678	80	3.4093	1.0000	3.4093	0.5650	1.9263	3.37	✓
18	10:07 AM	14.500	0.6	1.100	0.6000	0.660	80	3.3459	1.0000	3.3459	0.5500	1.8402	3.22	✓
19	9:42 AM	15.000	0.6	1.200	0.6000	0.720	80	3.1558	1.0000	3.1558	0.6000	1.8935	3.31	✓
20	10:03 AM	15.500	0.6	1.000	0.6000	0.600	80	3.4017	1.0000	3.4017	0.5000	1.7009	2.97	✓
21	9:44 AM	16.000	0.6	1.000	0.6000	0.600	80	3.4626	1.0000	3.4626	0.7500	2.5970	4.54	✓
22	9:45 AM	17.000	0.6	0.750	0.6000	0.450	80	2.8250	1.0000	2.8250	0.7500	2.1188	3.70	✓
23	9:46 AM	18.000	0.6	0.850	0.6000	0.510	80	2.8132	1.0000	2.8132	0.8500	2.3913	4.18	✓
24	9:48 AM	19.000	0.6	0.300	0.6000	0.180	80	3.0595	1.0000	3.0595	0.3000	0.9178	1.60	✓
25	9:49 AM	20.000	0.6	0.400	0.6000	0.240	80	3.9262	1.0000	3.9262	0.4000	1.5705	2.74	✓
26	9:50 AM	21.000	0.6	0.450	0.6000	0.270	80	2.1393	1.0000	2.1393	0.4500	0.9627	1.68	✓
27	9:52 AM	22.000	0.6	0.620	0.6000	0.372	80	2.8701	1.0000	2.8701	0.6200	1.7794	3.11	✓
28	9:54 AM	23.000	0.6	0.620	0.6000	0.372	80	1.9261	1.0000	1.9261	0.6200	1.1942	2.09	✓
29	9:55 AM	24.000	0.6	0.700	0.6000	0.420	80	2.7606	1.0000	2.7606	0.7000	1.9324	3.38	✓
30	9:56 AM	25.000	0.6	0.580	0.6000	0.348	80	1.3245	1.0000	1.3245	0.5800	0.7682	1.34	✓
31	9:58 AM	26.000	0.6	0.720	0.6000	0.432	80	1.9456	1.0000	1.9456	0.7200	1.4009	2.45	✓
32	9:59 AM	27.000	0.6	0.680	0.6000	0.408	80	2.8943	1.0000	2.8943	0.6800	1.9681	3.44	✓
33	10:01 AM	28.000	0.6	0.500	0.6000	0.300	80	2.0911	1.0000	2.0911	0.5750	1.2024	2.10	✓
34	10:02 AM	29.300	None	0.000	0.0000	0.000	0	0.0000	1.0000	2.0911	0.0000	0.0000	0.00	✓

Discharge Measurement Summary

Site name	DRBYCRCO
Site number	DRBYCRCO
Operator(s)	WRH
File name	DRBYCRCO_20240522.ft
Comment	

Quality Control Settings	
Maximum depth change	50.00%
Maximum spacing change	100.00%
SNR threshold	10 dB
Standard error threshold	0.0328 ft/s
Spike threshold	10.00%
Maximum velocity angle	20.0 deg
Maximum tilt angle	5.0 deg

Quality control warnings

St#	Time	Location (ft)	Method	Depth (ft)	%Depth	Measured Depth (ft)	Warnings
1	9:26 AM	5.000	0.6	0.520	0.6000	0.312	Standard Error > QC
2	9:29 AM	6.000	0.6	0.520	0.6000	0.312	Standard Error > QC
3	9:31 AM	7.000	0.6	0.900	0.6000	0.540	Standard Error > QC
4	10:19 AM	7.500	0.6	1.400	0.6000	0.840	Standard Error > QC
5	9:32 AM	8.000	0.6	1.250	0.6000	0.750	Standard Error > QC
6	10:17 AM	8.500	0.6	1.200	0.6000	0.720	Standard Error > QC
7	9:34 AM	9.000	0.6	1.450	0.6000	0.870	Standard Error > QC
8	10:15 AM	9.500	0.6	1.380	0.6000	0.828	Standard Error > QC
9	9:35 AM	10.000	0.6	1.400	0.6000	0.840	Standard Error > QC
10	10:13 AM	10.500	0.6	1.350	0.6000	0.810	Standard Error > QC
11	9:36 AM	11.000	0.6	1.300	0.6000	0.780	Standard Error > QC
12	10:09 AM	11.500	0.6	1.290	0.6000	0.774	Standard Error > QC
13	9:38 AM	12.000	0.6	1.180	0.6000	0.708	Standard Error > QC
14	10:11 AM	12.500	0.6	1.200	0.6000	0.720	Standard Error > QC
15	9:39 AM	13.000	0.6	1.200	0.6000	0.720	Standard Error > QC
16	10:05 AM	13.500	0.6	1.200	0.6000	0.720	Standard Error > QC
17	9:41 AM	14.000	0.6	1.130	0.6000	0.678	Standard Error > QC
18	10:07 AM	14.500	0.6	1.100	0.6000	0.660	Standard Error > QC
19	9:42 AM	15.000	0.6	1.200	0.6000	0.720	Standard Error > QC
20	10:03 AM	15.500	0.6	1.000	0.6000	0.600	Standard Error > QC
21	9:44 AM	16.000	0.6	1.000	0.6000	0.600	Standard Error > QC
22	9:45 AM	17.000	0.6	0.750	0.6000	0.450	Standard Error > QC
23	9:46 AM	18.000	0.6	0.850	0.6000	0.510	Standard Error > QC
24	9:48 AM	19.000	0.6	0.300	0.6000	0.180	Standard Error > QC
25	9:49 AM	20.000	0.6	0.400	0.6000	0.240	Standard Error > QC
26	9:50 AM	21.000	0.6	0.450	0.6000	0.270	Standard Error > QC
27	9:52 AM	22.000	0.6	0.620	0.6000	0.372	Standard Error > QC
28	9:54 AM	23.000	0.6	0.620	0.6000	0.372	Standard Error > QC
29	9:55 AM	24.000	0.6	0.700	0.6000	0.420	Standard Error > QC
30	9:56 AM	25.000	0.6	0.580	0.6000	0.348	Standard Error > QC
31	9:58 AM	26.000	0.6	0.720	0.6000	0.432	Standard Error > QC
33	10:01 AM	28.000	0.6	0.500	0.6000	0.300	Standard Error > QC

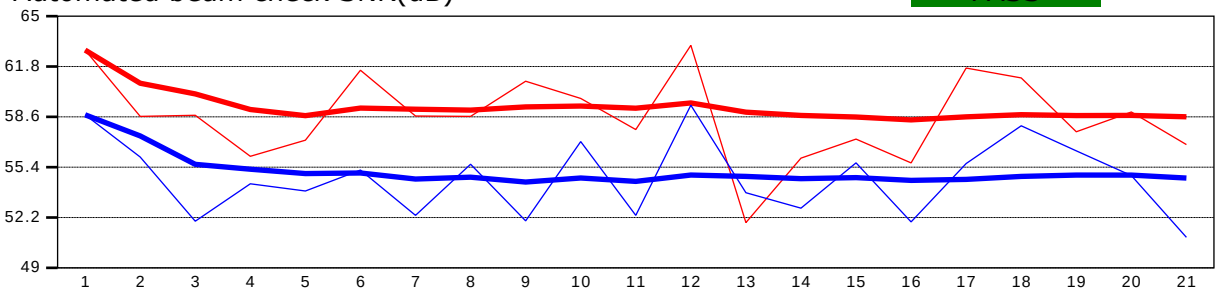
Discharge Measurement Summary

Site name	DRBYCRCO
Site number	DRBYCRCO
Operator(s)	WRH
File name	DRBYCRCO_20240522.ft
Comment	

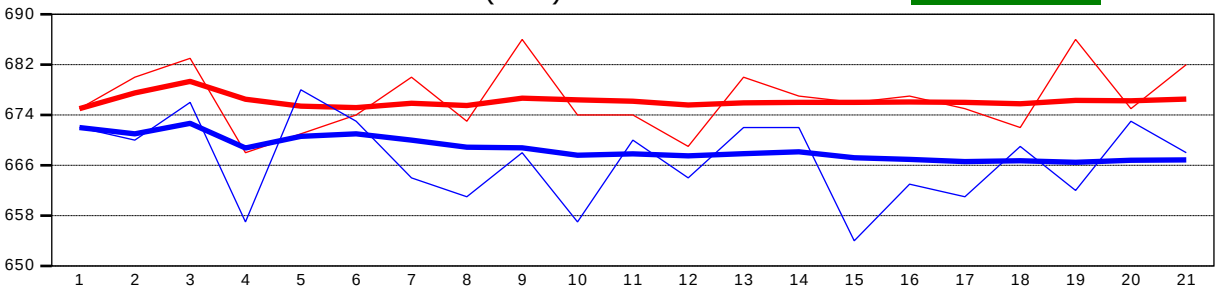
Beam 1	
Beam 2	

Automated beam check Start time 5/22/2024 9:25:48 AM

Automated beam check SNR(dB) PASS



Automated beam check Noise level(cnts) PASS



Automated beam check Quality control warnings

No quality control warnings

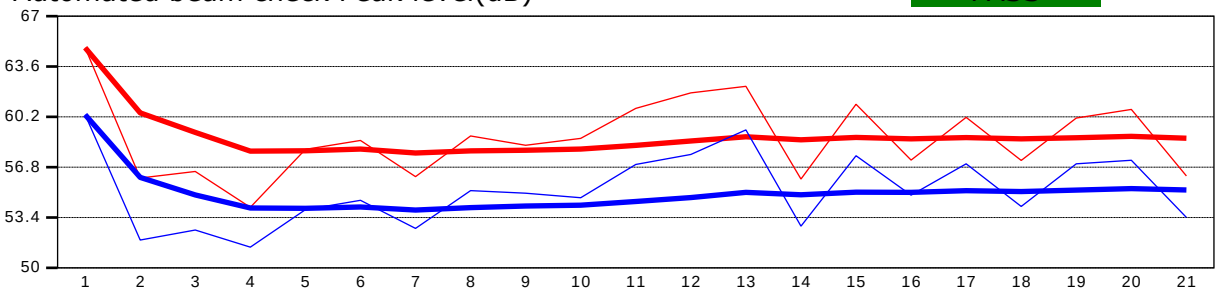
Discharge Measurement Summary

Site name	DRBYCRCO
Site number	DRBYCRCO
Operator(s)	WRH
File name	DRBYCRCO_20240522.ft
Comment	

Beam 1	
Beam 2	

Automated beam check Start time 5/22/2024 9:25:48 AM

Automated beam check Peak level(dB) PASS



Automated beam check Peak position(ft) PASS

Automated beam check Quality control warnings

No quality control warnings

Discharge Measurement Summary

Site name	DRBYCRCO
Site number	DRBYCRCO
Operator(s)	WRH
File name	DRBYCRCO_20240528.ft
Comment	

Start time	5/28/2024 9:30 AM
End time	5/28/2024 10:19 AM
Start location latitude	39.870
Start location longitude	-106.905
Calculations engine	FlowTracker2

Sensor type	Top Setting
Handheld serial number	FT2H1724003
Probe serial number	FT2P1724014
Probe firmware	1.30
Handheld software	1.7

# Stations	Avg interval (s)	Total discharge (ft³/s)
33	40	54.4093

Total width (ft)	Total area (ft²)	Wetted Perimeter (ft)
25.100	22.3443	26.202

Mean SNR (dB)	Mean depth (ft)	Mean velocity (ft/s)
58	0.890	2.4350

Mean temp (°F)	Max depth (ft)	Max velocity (ft/s)
45.006	1.450	3.6698

Discharge Uncertainty		
Category	**ISO**	**IVE**
Accuracy	1.0%	1.0%
Depth	0.2%	2.5%
Velocity	0.5%	5.4%
Width	0.1%	0.1%
Method	1.5%	
# Stations	1.6%	
Overall	**2.4%**	**6.0%**

Discharge equation	Mid Section
Discharge uncertainty	IVE
Discharge reference	Rated

Data Collection Settings	
Salinity	0.000 PSS-78
Temperature	-
Sound speed	-
Mounting correction	0.000 %

Summary overview

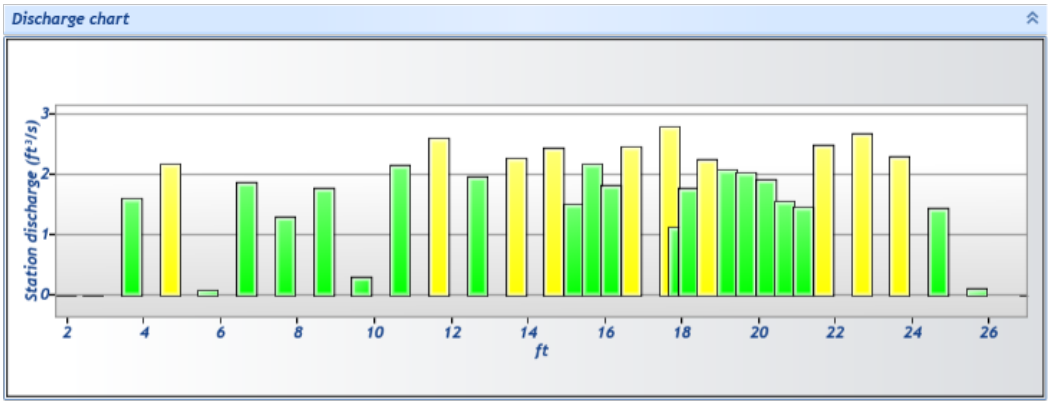
No changes were made to this file
Quality control warnings

Discharge Measurement Summary

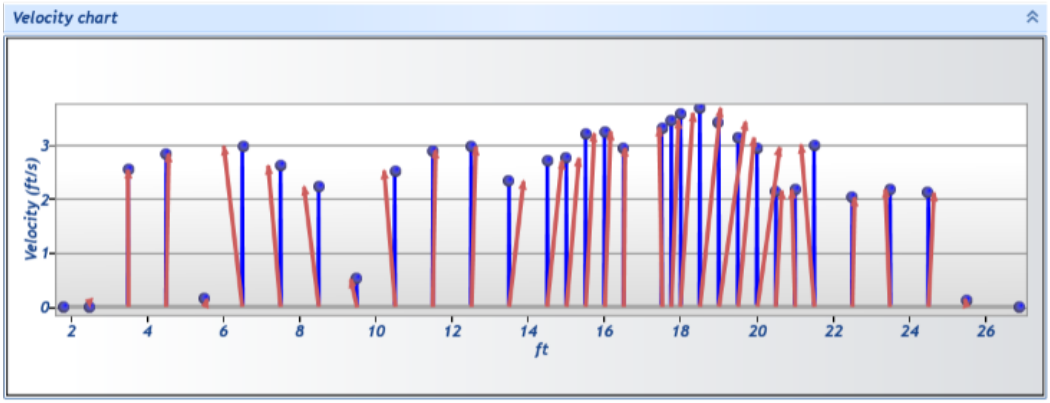
Site name	DRBYCRCO
Site number	DRBYCRCO
Operator(s)	WRH
File name	DRBYCRCO_20240528.ft
Comment	

Station Warning Settings	
Station discharge OK	Station discharge < 4.00%
Station discharge caution	4.00% >= Station discharge < 10.00%
Station discharge warning	Station discharge >= 10.00%

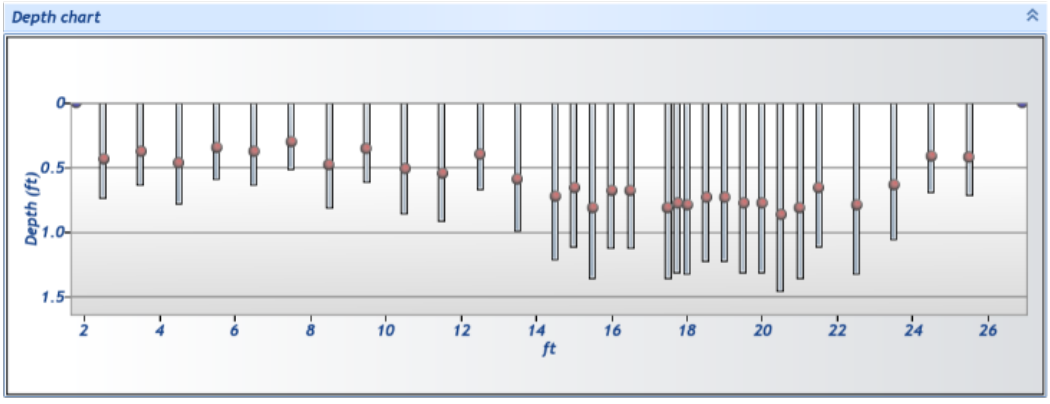
Discharge chart



Velocity chart



Depth chart



Discharge Measurement Summary

Site name	DRBYCRCO
Site number	DRBYCRCO
Operator(s)	WRH
File name	DRBYCRCO_20240528.ft
Comment	

Measurement results

St#	Time	Location (ft)	Method	Depth (ft)	%Depth	Measured Depth (ft)	Samples	Velocity (ft/s)	Correction	Mean Velocity (ft/s)	Area (ft²)	Flow (ft³/s)	%Q	
0	9:30 AM	1.800	None	0.000	0.0000	0.000	0	0.0000	1.0000	-0.0018	0.0000	0.0000	0.00	✓
1	9:31 AM	2.500	0.6	0.730	0.6000	0.438	80	-0.0018	1.0000	-0.0018	0.6205	-0.0011	0.00	✓
2	9:32 AM	3.500	0.6	0.630	0.6000	0.378	80	2.5327	1.0000	2.5327	0.6300	1.5956	2.93	✓
3	9:34 AM	4.500	0.6	0.770	0.6000	0.462	80	2.8290	1.0000	2.8290	0.7700	2.1783	4.00	✓
4	9:35 AM	5.500	0.6	0.580	0.6000	0.348	80	0.1527	1.0000	0.1527	0.5800	0.0885	0.16	✓
5	9:36 AM	6.500	0.6	0.630	0.6000	0.378	80	2.9683	1.0000	2.9683	0.6300	1.8700	3.44	✓
6	9:38 AM	7.500	0.6	0.500	0.6000	0.300	80	2.6095	1.0000	2.6095	0.5000	1.3048	2.40	✓
7	9:39 AM	8.500	0.6	0.800	0.6000	0.480	80	2.2171	1.0000	2.2171	0.8000	1.7737	3.26	✓
8	9:42 AM	9.500	0.6	0.600	0.6000	0.360	80	0.5188	1.0000	0.5188	0.6000	0.3113	0.57	✓
9	9:44 AM	10.500	0.6	0.850	0.6000	0.510	80	2.5164	1.0000	2.5164	0.8500	2.1389	3.93	✓
10	9:46 AM	11.500	0.6	0.900	0.6000	0.540	80	2.8915	1.0000	2.8915	0.9000	2.6023	4.78	✓
11	9:48 AM	12.500	0.6	0.660	0.6000	0.396	80	2.9622	1.0000	2.9622	0.6600	1.9551	3.59	✓
12	9:49 AM	13.500	0.6	0.980	0.6000	0.588	80	2.3186	1.0000	2.3186	0.9800	2.2722	4.18	✓
13	9:50 AM	14.500	0.6	1.200	0.6000	0.720	80	2.6891	1.0000	2.6891	0.9000	2.4202	4.45	✓
14	10:08 AM	15.000	0.6	1.100	0.6000	0.660	80	2.7495	1.0000	2.7495	0.5500	1.5122	2.78	✓
15	9:51 AM	15.500	0.6	1.350	0.6000	0.810	80	3.2035	1.0000	3.2035	0.6750	2.1623	3.97	✓
16	10:10 AM	16.000	0.6	1.120	0.6000	0.672	80	3.2407	1.0000	3.2407	0.5600	1.8148	3.34	✓
17	9:53 AM	16.500	0.6	1.120	0.6000	0.672	80	2.9283	1.0000	2.9283	0.8400	2.4598	4.52	✓
18	9:54 AM	17.500	0.6	1.350	0.6000	0.810	80	3.3098	1.0000	3.3098	0.8438	2.7926	5.13	✓
19	10:15 AM	17.750	0.6	1.300	0.6000	0.780	80	3.4515	1.0000	3.4515	0.3250	1.1217	2.06	✓
20	10:12 AM	18.000	0.6	1.320	0.6000	0.792	80	3.5789	1.0000	3.5789	0.4950	1.7715	3.26	✓
21	9:55 AM	18.500	0.6	1.220	0.6000	0.732	80	3.6698	1.0000	3.6698	0.6100	2.2386	4.11	✓
22	10:13 AM	19.000	0.6	1.220	0.6000	0.732	80	3.4154	1.0000	3.4154	0.6100	2.0834	3.83	✓
23	9:57 AM	19.500	0.6	1.300	0.6000	0.780	80	3.1272	1.0000	3.1272	0.6500	2.0327	3.74	✓
24	10:19 AM	20.000	0.6	1.300	0.6000	0.780	80	2.9431	1.0000	2.9431	0.6500	1.9130	3.52	✓
25	9:58 AM	20.500	0.6	1.450	0.6000	0.870	80	2.1453	1.0000	2.1453	0.7250	1.5554	2.86	✓
26	10:17 AM	21.000	0.6	1.350	0.6000	0.810	80	2.1629	1.0000	2.1629	0.6750	1.4599	2.68	✓
27	10:00 AM	21.500	0.6	1.100	0.6000	0.660	80	2.9975	1.0000	2.9975	0.8250	2.4730	4.55	✓
28	10:02 AM	22.500	0.6	1.320	0.6000	0.792	80	2.0259	1.0000	2.0259	1.3200	2.6742	4.92	✓
29	10:03 AM	23.500	0.6	1.050	0.6000	0.630	80	2.1719	1.0000	2.1719	1.0500	2.2805	4.19	✓
30	10:04 AM	24.500	0.6	0.680	0.6000	0.408	80	2.1051	1.0000	2.1051	0.6800	1.4315	2.63	✓
31	10:06 AM	25.500	0.6	0.700	0.6000	0.420	80	0.1456	1.0000	0.1456	0.8400	0.1223	0.22	✓
32	10:07 AM	26.900	None	0.000	0.0000	0.000	0	0.0000	1.0000	0.1456	0.0000	0.0000	0.00	✓

Discharge Measurement Summary

Site name	DRBYCRCO
Site number	DRBYCRCO
Operator(s)	WRH
File name	DRBYCRCO_20240528.ft
Comment	

Quality Control Settings	
Maximum depth change	50.00%
Maximum spacing change	100.00%
SNR threshold	10 dB
Standard error threshold	0.0328 ft/s
Spike threshold	10.00%
Maximum velocity angle	20.0 deg
Maximum tilt angle	5.0 deg

Quality control warnings

St#	Time	Location (ft)	Method	Depth (ft)	%Depth	Measured Depth (ft)	Warnings
3	9:34 AM	4.500	0.6	0.770	0.6000	0.462	Standard Error > QC
4	9:35 AM	5.500	0.6	0.580	0.6000	0.348	Standard Error > QC
5	9:36 AM	6.500	0.6	0.630	0.6000	0.378	Standard Error > QC
6	9:38 AM	7.500	0.6	0.500	0.6000	0.300	Standard Error > QC
7	9:39 AM	8.500	0.6	0.800	0.6000	0.480	Standard Error > QC
8	9:42 AM	9.500	0.6	0.600	0.6000	0.360	Standard Error > QC
9	9:44 AM	10.500	0.6	0.850	0.6000	0.510	Standard Error > QC
10	9:46 AM	11.500	0.6	0.900	0.6000	0.540	Standard Error > QC
11	9:48 AM	12.500	0.6	0.660	0.6000	0.396	Standard Error > QC
12	9:49 AM	13.500	0.6	0.980	0.6000	0.588	Standard Error > QC
13	9:50 AM	14.500	0.6	1.200	0.6000	0.720	Standard Error > QC
14	10:08 AM	15.000	0.6	1.100	0.6000	0.660	Standard Error > QC
15	9:51 AM	15.500	0.6	1.350	0.6000	0.810	Standard Error > QC
16	10:10 AM	16.000	0.6	1.120	0.6000	0.672	Standard Error > QC
17	9:53 AM	16.500	0.6	1.120	0.6000	0.672	Standard Error > QC
18	9:54 AM	17.500	0.6	1.350	0.6000	0.810	Standard Error > QC
19	10:15 AM	17.750	0.6	1.300	0.6000	0.780	Standard Error > QC
20	10:12 AM	18.000	0.6	1.320	0.6000	0.792	Stn Spacing > QC,Standard Error > QC
21	9:55 AM	18.500	0.6	1.220	0.6000	0.732	Standard Error > QC
22	10:13 AM	19.000	0.6	1.220	0.6000	0.732	Standard Error > QC
23	9:57 AM	19.500	0.6	1.300	0.6000	0.780	Standard Error > QC
24	10:19 AM	20.000	0.6	1.300	0.6000	0.780	Standard Error > QC
25	9:58 AM	20.500	0.6	1.450	0.6000	0.870	Standard Error > QC
26	10:17 AM	21.000	0.6	1.350	0.6000	0.810	Standard Error > QC
27	10:00 AM	21.500	0.6	1.100	0.6000	0.660	Standard Error > QC
28	10:02 AM	22.500	0.6	1.320	0.6000	0.792	Standard Error > QC
29	10:03 AM	23.500	0.6	1.050	0.6000	0.630	Standard Error > QC
30	10:04 AM	24.500	0.6	0.680	0.6000	0.408	Standard Error > QC
32	10:07 AM	26.900	None	0.000	0.0000	0.000	Water Depth > QC

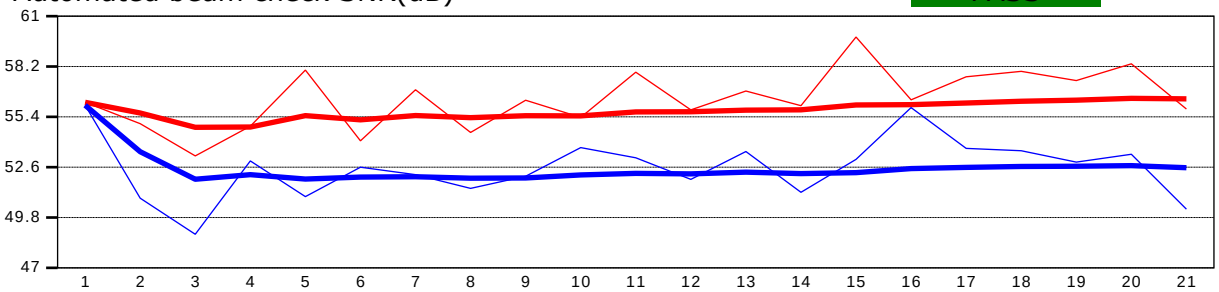
Discharge Measurement Summary

Site name	DRBYCRCO
Site number	DRBYCRCO
Operator(s)	WRH
File name	DRBYCRCO_20240528.ft
Comment	

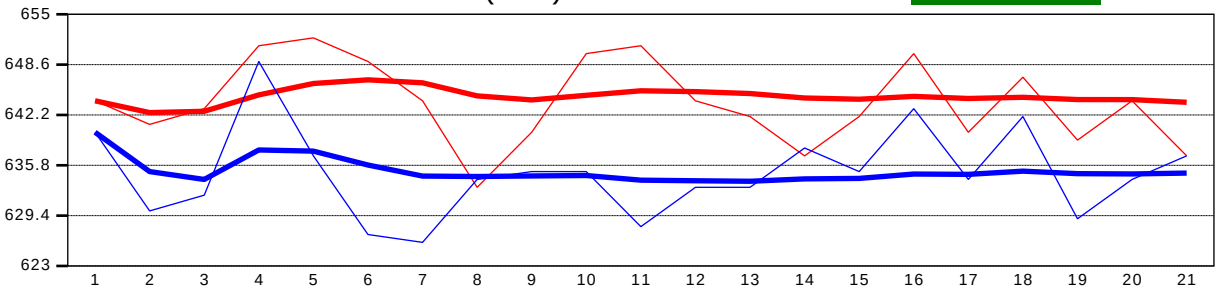
Beam 1	
Beam 2	

Automated beam check Start time 5/28/2024 9:29:34 AM

Automated beam check SNR(dB) PASS



Automated beam check Noise level(cnts) PASS



Automated beam check Quality control warnings

No quality control warnings

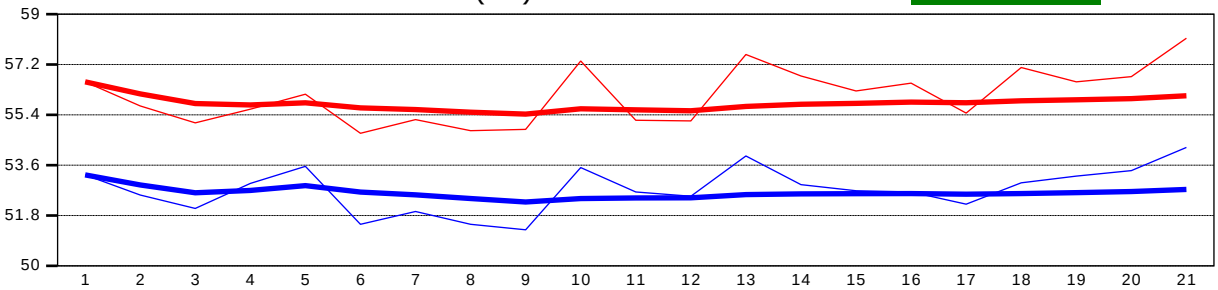
Discharge Measurement Summary

Site name	DRBYCRCO
Site number	DRBYCRCO
Operator(s)	WRH
File name	DRBYCRCO_20240528.ft
Comment	

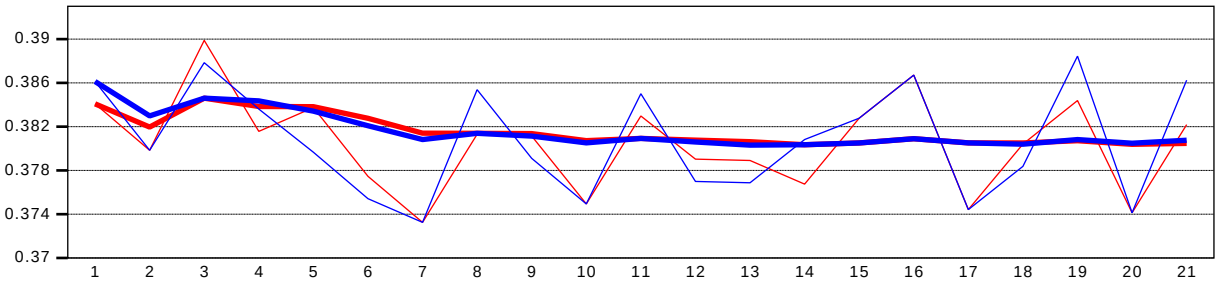
Beam 1	
Beam 2	

Automated beam check Start time 5/28/2024 9:29:34 AM

Automated beam check Peak level(dB) PASS



Automated beam check Peak position(ft) PASS



Automated beam check Quality control warnings

No quality control warnings

6/20/2024 4:06:09 PM

Discharge Measurement Summary

Site name	DRBYCRCO
Site number	DRBYCRCO
Operator(s)	WRH
File name	DRBYCRCO_20240603.ft
Comment	

Start time	6/3/2024 8:51 AM
End time	6/3/2024 9:46 AM
Start location latitude	39.870
Start location longitude	-106.905
Calculations engine	FlowTracker2

Sensor type	Top Setting
Handheld serial number	FT2H1724003
Probe serial number	FT2P1724014
Probe firmware	1.30
Handheld software	1.7

# Stations	Avg interval (s)	Total discharge (ft³/s)
31	40	93.0404

Total width (ft)	Total area (ft²)	Wetted Perimeter (ft)
26.600	28.7050	27.618

Mean SNR (dB)	Mean depth (ft)	Mean velocity (ft/s)
60	1.079	3.2413

Mean temp (°F)	Max depth (ft)	Max velocity (ft/s)
45.081	1.700	4.9053

Discharge Uncertainty		
Category	**ISO**	**IVE**
Accuracy	1.0%	1.0%
Depth	0.1%	2.0%
Velocity	0.5%	2.8%
Width	0.1%	0.1%
Method	1.4%	
# Stations	1.7%	
Overall	**2.4%**	**3.5%**

Discharge equation	Mid Section
Discharge uncertainty	IVE
Discharge reference	Rated

Data Collection Settings	
Salinity	0.000 PSS-78
Temperature	-
Sound speed	-
Mounting correction	0.000 %

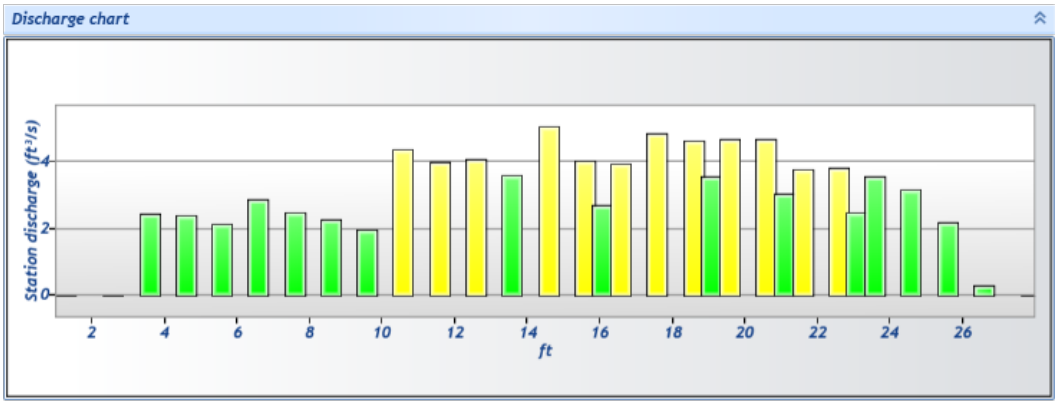
Summary overview

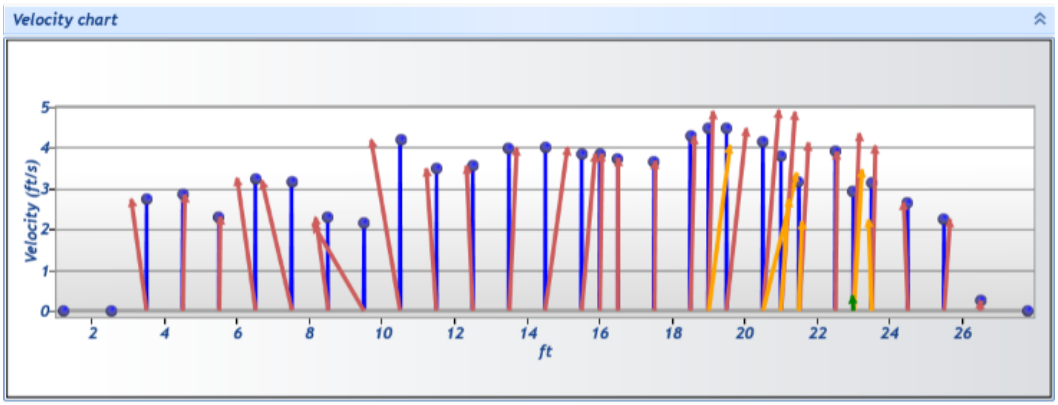
No changes were made to this file
Quality control warnings

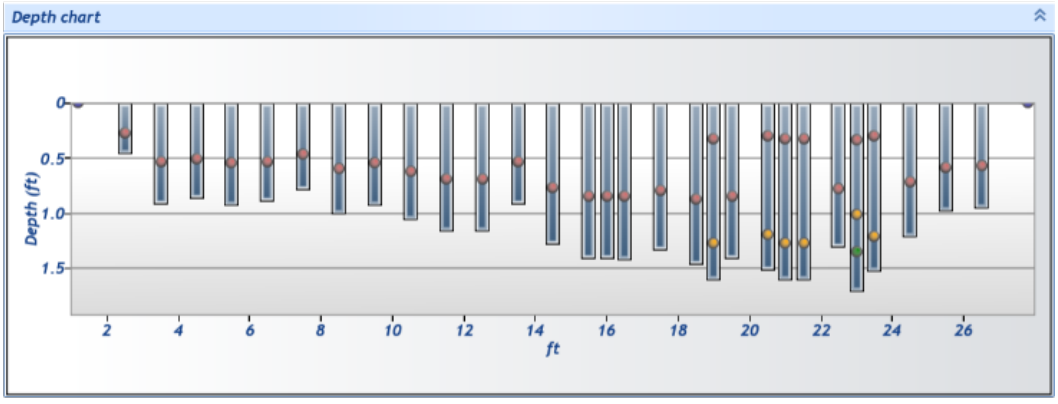
Discharge Measurement Summary

Site name	DRBYCRCO
Site number	DRBYCRCO
Operator(s)	WRH
File name	DRBYCRCO_20240603.ft
Comment	

Station Warning Settings	
Station discharge OK	Station discharge < 4.00%
Station discharge caution	4.00% >= Station discharge < 10.00%
Station discharge warning	Station discharge >= 10.00%







Discharge Measurement Summary

Site name	DRBYCRCO
Site number	DRBYCRCO
Operator(s)	WRH
File name	DRBYCRCO_20240603.ft
Comment	

Measurement results

St#	Time	Location (ft)	Method	Depth (ft)	%Depth	Measured Depth (ft)	Samples	Velocity (ft/s)	Correction	Mean Velocity (ft/s)	Area (ft²)	Flow (ft³/s)	%Q	
0	8:51 AM	1.200	None	0.000	0.0000	0.000	0	0.0000	1.0000	-0.0005	0.0000	0.0000	0.00	✓
1	8:52 AM	2.500	0.6	0.450	0.6000	0.270	80	-0.0005	1.0000	-0.0005	0.5175	-0.0003	0.00	✓
2	8:54 AM	3.500	0.6	0.900	0.6000	0.540	80	2.7285	1.0000	2.7285	0.9000	2.4557	2.64	✓
3	8:56 AM	4.500	0.6	0.850	0.6000	0.510	80	2.8395	1.0000	2.8395	0.8500	2.4136	2.59	✓
4	8:58 AM	5.500	0.6	0.920	0.6000	0.552	80	2.3026	1.0000	2.3026	0.9200	2.1184	2.28	✓
5	8:59 AM	6.500	0.6	0.880	0.6000	0.528	80	3.2382	1.0000	3.2382	0.8800	2.8496	3.06	✓
6	9:00 AM	7.500	0.6	0.780	0.6000	0.468	80	3.1762	1.0000	3.1762	0.7800	2.4774	2.66	✓
7	9:02 AM	8.500	0.6	1.000	0.6000	0.600	80	2.2784	1.0000	2.2784	1.0000	2.2784	2.45	✓
8	9:05 AM	9.500	0.6	0.920	0.6000	0.552	80	2.1290	1.0000	2.1290	0.9200	1.9587	2.11	✓
9	9:06 AM	10.500	0.6	1.050	0.6000	0.630	80	4.1774	1.0000	4.1774	1.0500	4.3863	4.71	✓
10	9:08 AM	11.500	0.6	1.150	0.6000	0.690	80	3.4824	1.0000	3.4824	1.1500	4.0048	4.30	✓
11	9:09 AM	12.500	0.6	1.150	0.6000	0.690	80	3.5474	1.0000	3.5474	1.1500	4.0795	4.38	✓
12	9:11 AM	13.500	0.6	0.900	0.6000	0.540	80	3.9805	1.0000	3.9805	0.9000	3.5824	3.85	✓
13	9:12 AM	14.500	0.6	1.270	0.6000	0.762	80	3.9924	1.0000	3.9924	1.2700	5.0703	5.45	✓
14	9:13 AM	15.500	0.6	1.400	0.6000	0.840	80	3.8395	1.0000	3.8395	1.0500	4.0315	4.33	✓
15	9:46 AM	16.000	0.6	1.400	0.6000	0.840	80	3.8448	1.0000	3.8448	0.7000	2.6914	2.89	✓
16	9:15 AM	16.500	0.6	1.410	0.6000	0.846	80	3.7342	1.0000	3.7342	1.0575	3.9489	4.24	✓
17	9:16 AM	17.500	0.6	1.320	0.6000	0.792	80	3.6626	1.0000	3.6626	1.3200	4.8346	5.20	✓
18	9:18 AM	18.500	0.6	1.450	0.6000	0.870	80	4.2721	1.0000	4.2721	1.0875	4.6459	4.99	✓
19	9:43 AM	19.000	0.2/0.8	1.600	0.2000	0.320	80	4.8814	1.0000	4.4643	0.8000	3.5715	3.84	✓
19	9:43 AM	19.000	0.2/0.8	1.600	0.8000	1.280	80	4.0472	1.0000	4.4643	0.8000	3.5715	3.84	✓
20	9:19 AM	19.500	0.6	1.400	0.6000	0.840	80	4.4633	1.0000	4.4633	1.0500	4.6865	5.04	✓
21	9:20 AM	20.500	0.2/0.8	1.500	0.2000	0.300	80	4.9053	1.0000	4.1404	1.1250	4.6580	5.01	✓
21	9:20 AM	20.500	0.2/0.8	1.500	0.8000	1.200	80	3.3756	1.0000	4.1404	1.1250	4.6580	5.01	✓
22	9:40 AM	21.000	0.2/0.8	1.600	0.2000	0.320	80	4.8598	1.0000	3.7947	0.8000	3.0358	3.26	✓
22	9:40 AM	21.000	0.2/0.8	1.600	0.8000	1.280	80	2.7296	1.0000	3.7947	0.8000	3.0358	3.26	✓
23	9:23 AM	21.500	0.2/0.8	1.600	0.2000	0.320	80	4.1148	1.0000	3.1546	1.2000	3.7855	4.07	✓
23	9:23 AM	21.500	0.2/0.8	1.600	0.8000	1.280	80	2.1943	1.0000	3.1546	1.2000	3.7855	4.07	✓
24	9:25 AM	22.500	0.6	1.300	0.6000	0.780	80	3.8948	1.0000	3.8948	0.9750	3.7974	4.08	✓
25	9:35 AM	23.000	0.2/0.6/0.8	1.700	0.2000	0.340	80	4.3367	1.0000	2.9030	0.8500	2.4675	2.65	✓
25	9:35 AM	23.000	0.2/0.6/0.8	1.700	0.6000	1.020	80	3.4519	1.0000	2.9030	0.8500	2.4675	2.65	✓
25	9:35 AM	23.000	0.2/0.6/0.8	1.700	0.8000	1.360	80	0.3714	1.0000	2.9030	0.8500	2.4675	2.65	✓
26	9:26 AM	23.500	0.2/0.8	1.520	0.2000	0.304	80	4.0376	1.0000	3.1343	1.1400	3.5731	3.84	✓
26	9:26 AM	23.500	0.2/0.8	1.520	0.8000	1.216	80	2.2310	1.0000	3.1343	1.1400	3.5731	3.84	✓
27	9:29 AM	24.500	0.6	1.200	0.6000	0.720	80	2.6486	1.0000	2.6486	1.2000	3.1783	3.42	✓
28	9:30 AM	25.500	0.6	0.970	0.6000	0.582	80	2.2475	1.0000	2.2475	0.9700	2.1801	2.34	✓
29	9:32 AM	26.500	0.6	0.950	0.6000	0.570	80	0.2560	1.0000	0.2560	1.0925	0.2797	0.30	✓
30	9:34 AM	27.800	None	0.000	0.0000	0.000	0	0.0000	1.0000	0.2560	0.0000	0.0000	0.00	✓

Discharge Measurement Summary

Site name	DRBYCRCO
Site number	DRBYCRCO
Operator(s)	WRH
File name	DRBYCRCO_20240603.ft
Comment	

Quality Control Settings	
Maximum depth change	50.00%
Maximum spacing change	100.00%
SNR threshold	10 dB
Standard error threshold	0.0328 ft/s
Spike threshold	10.00%
Maximum velocity angle	20.0 deg
Maximum tilt angle	5.0 deg

Quality control warnings

St#	Time	Location (ft)	Method	Depth (ft)	%Depth	Measured Depth (ft)	Warnings
1	8:52 AM	2.500	0.6	0.450	0.6000	0.270	SNR Threshold Variation
3	8:56 AM	4.500	0.6	0.850	0.6000	0.510	Standard Error > QC
4	8:58 AM	5.500	0.6	0.920	0.6000	0.552	Standard Error > QC
5	8:59 AM	6.500	0.6	0.880	0.6000	0.528	Standard Error > QC
6	9:00 AM	7.500	0.6	0.780	0.6000	0.468	Standard Error > QC
7	9:02 AM	8.500	0.6	1.000	0.6000	0.600	Beam SNRs Not Similar,SNR Threshold Variation,Standard Error > QC
8	9:05 AM	9.500	0.6	0.920	0.6000	0.552	Standard Error > QC,Velocity Angle > QC
9	9:06 AM	10.500	0.6	1.050	0.6000	0.630	Standard Error > QC
10	9:08 AM	11.500	0.6	1.150	0.6000	0.690	Standard Error > QC
11	9:09 AM	12.500	0.6	1.150	0.6000	0.690	Standard Error > QC
12	9:11 AM	13.500	0.6	0.900	0.6000	0.540	Standard Error > QC
13	9:12 AM	14.500	0.6	1.270	0.6000	0.762	Standard Error > QC
14	9:13 AM	15.500	0.6	1.400	0.6000	0.840	Standard Error > QC
15	9:46 AM	16.000	0.6	1.400	0.6000	0.840	Standard Error > QC
16	9:15 AM	16.500	0.6	1.410	0.6000	0.846	Standard Error > QC
17	9:16 AM	17.500	0.6	1.320	0.6000	0.792	Standard Error > QC
18	9:18 AM	18.500	0.6	1.450	0.6000	0.870	Standard Error > QC
19	9:43 AM	19.000	0.2/0.8	1.600	0.2000	0.320	Standard Error > QC
19	9:43 AM	19.000	0.2/0.8	1.600	0.8000	1.280	Standard Error > QC
20	9:19 AM	19.500	0.6	1.400	0.6000	0.840	Standard Error > QC
21	9:20 AM	20.500	0.2/0.8	1.500	0.2000	0.300	Standard Error > QC
21	9:20 AM	20.500	0.2/0.8	1.500	0.8000	1.200	Standard Error > QC
22	9:40 AM	21.000	0.2/0.8	1.600	0.2000	0.320	Standard Error > QC
22	9:40 AM	21.000	0.2/0.8	1.600	0.8000	1.280	Standard Error > QC
23	9:23 AM	21.500	0.2/0.8	1.600	0.2000	0.320	Standard Error > QC
23	9:23 AM	21.500	0.2/0.8	1.600	0.8000	1.280	Standard Error > QC
24	9:25 AM	22.500	0.6	1.300	0.6000	0.780	Standard Error > QC
25	9:35 AM	23.000	0.2/0.6/0.8	1.700	0.2000	0.340	Boundary Interference,SNR Threshold Variation,Standard Error > QC
25	9:35 AM	23.000	0.2/0.6/0.8	1.700	0.6000	1.020	Boundary Interference,SNR Threshold Variation,Standard Error > QC
25	9:35 AM	23.000	0.2/0.6/0.8	1.700	0.8000	1.360	Boundary Interference,SNR Threshold Variation,Standard Error > QC
26	9:26 AM	23.500	0.2/0.8	1.520	0.2000	0.304	Standard Error > QC
26	9:26 AM	23.500	0.2/0.8	1.520	0.8000	1.216	Standard Error > QC
27	9:29 AM	24.500	0.6	1.200	0.6000	0.720	Standard Error > QC
28	9:30 AM	25.500	0.6	0.970	0.6000	0.582	Standard Error > QC
29	9:32 AM	26.500	0.6	0.950	0.6000	0.570	Standard Error > QC
30	9:34 AM	27.800	None	0.000	0.0000	0.000	Water Depth > QC

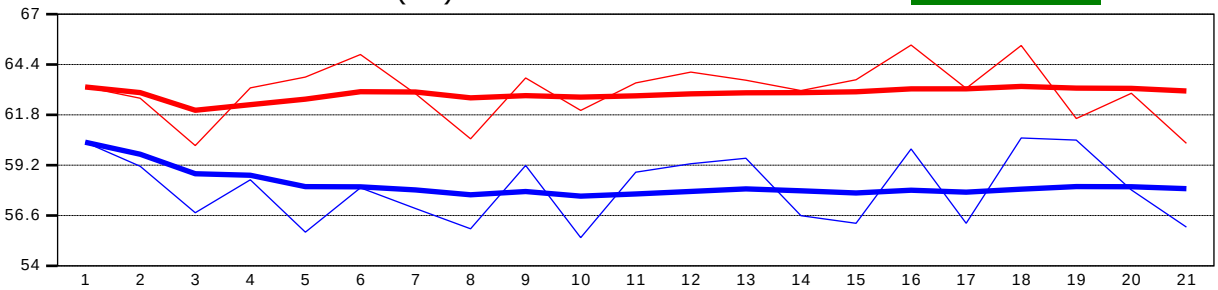
Discharge Measurement Summary

Site name	DRBYCRCO
Site number	DRBYCRCO
Operator(s)	WRH
File name	DRBYCRCO_20240603.ft
Comment	

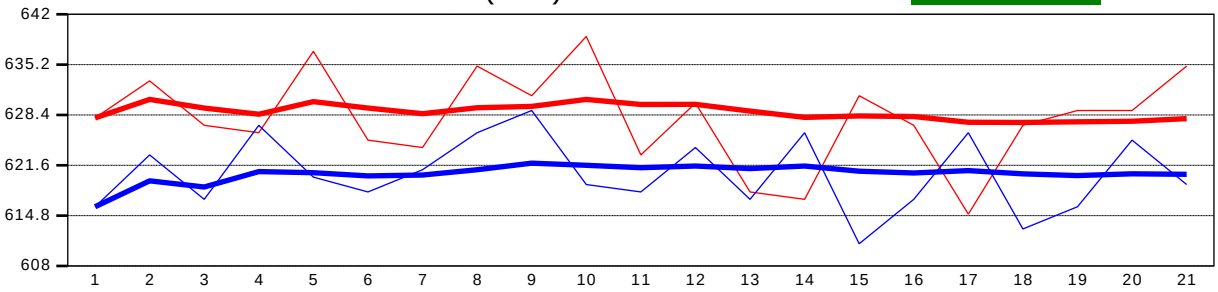
Beam 1	
Beam 2	

Automated beam check Start time 6/3/2024 8:51:09 AM

Automated beam check SNR(dB) PASS



Automated beam check Noise level(cnts) PASS



Automated beam check Quality control warnings

No quality control warnings

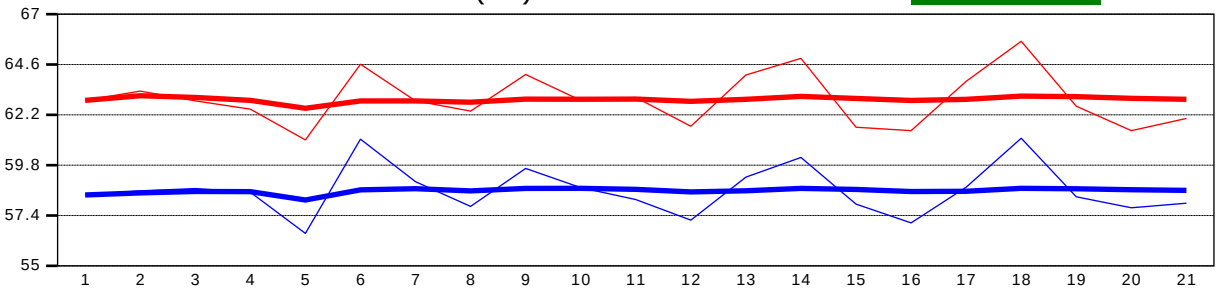
Discharge Measurement Summary

Site name	DRBYCRCO
Site number	DRBYCRCO
Operator(s)	WRH
File name	DRBYCRCO_20240603.ft
Comment	

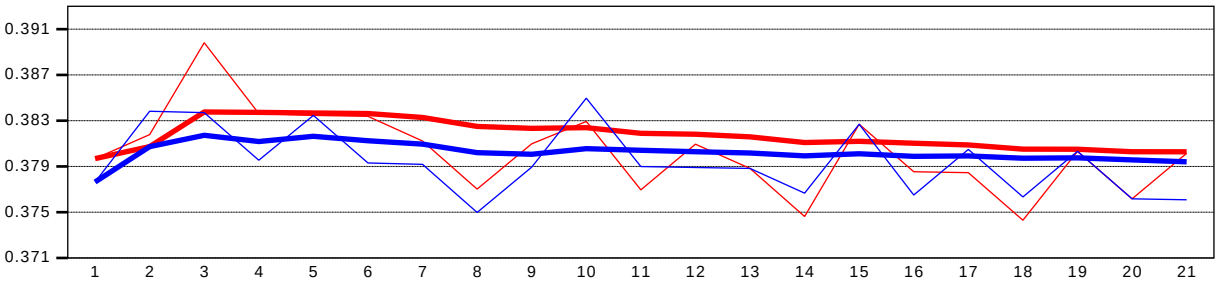
Beam 1	
Beam 2	

Automated beam check Start time 6/3/2024 8:51:09 AM

Automated beam check Peak level(dB) PASS



Automated beam check Peak position(ft) PASS



Automated beam check Quality control warnings

No quality control warnings

Discharge Measurement Summary

Site name	DRBYCRCO
Site number	DRBYCRCO
Operator(s)	WRH
File name	DRBYCRCO_20240614.ft
Comment	

Start time	6/14/2024 12:59 PM
End time	6/14/2024 2:01 PM
Start location latitude	39.870
Start location longitude	-106.905
Calculations engine	FlowTracker2

Sensor type	Top Setting
Handheld serial number	FT2H1724003
Probe serial number	FT2P1724014
Probe firmware	1.30
Handheld software	1.7

# Stations	Avg interval (s)	Total discharge (ft³/s)
27	40	160.1121

Total width (ft)	Total area (ft²)	Wetted Perimeter (ft)
31.200	49.3770	32.448

Mean SNR (dB)	Mean depth (ft)	Mean velocity (ft/s)
61	1.583	3.2426

Mean temp (°F)	Max depth (ft)	Max velocity (ft/s)
47.133	2.500	6.9531

Discharge Uncertainty		
Category	**ISO**	**IVE**
Accuracy	1.0%	1.0%
Depth	0.1%	2.2%
Velocity	0.4%	2.1%
Width	0.1%	0.1%
Method	0.8%	
# Stations	1.9%	
Overall	**2.3%**	**3.2%**

Discharge equation	Mid Section
Discharge uncertainty	IVE
Discharge reference	Rated

Data Collection Settings	
Salinity	0.000 PSS-78
Temperature	-
Sound speed	-
Mounting correction	0.000 %

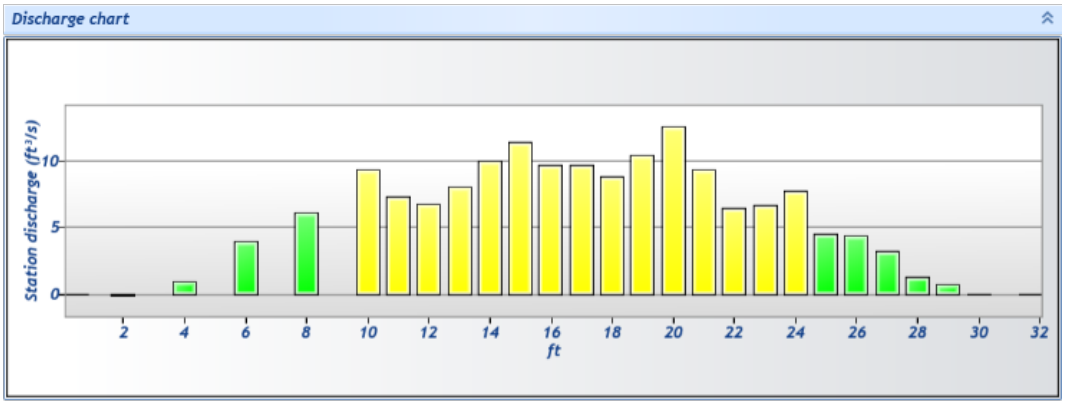
Summary overview

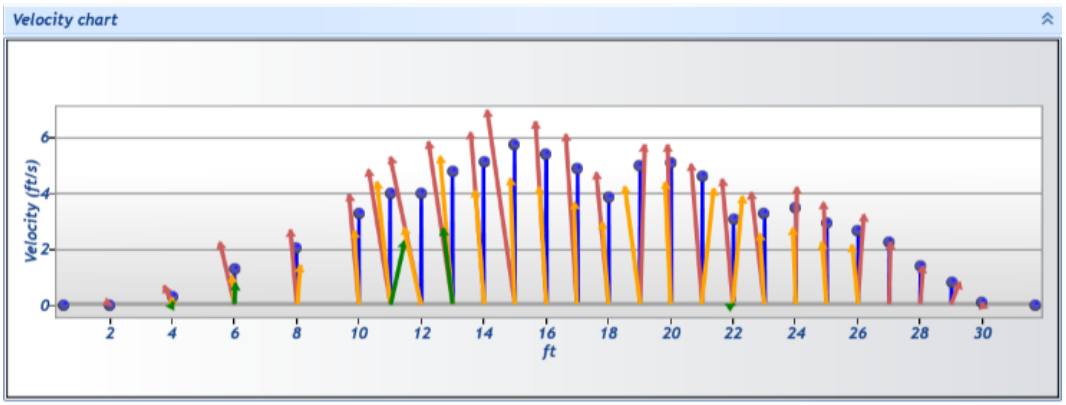
No changes were made to this file
Quality control warnings

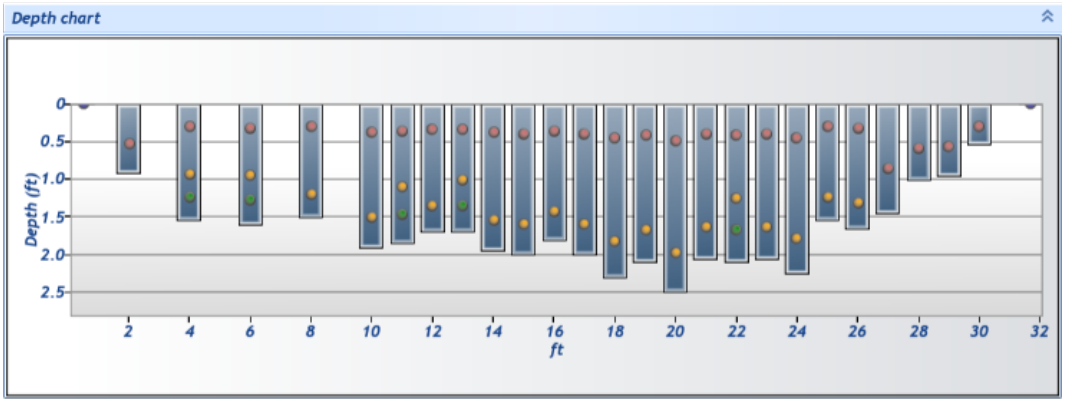
Discharge Measurement Summary

Site name	DRBYCRCO
Site number	DRBYCRCO
Operator(s)	WRH
File name	DRBYCRCO_20240614.ft
Comment	

Station Warning Settings	
Station discharge OK	Station discharge < 4.00%
Station discharge caution	4.00% >= Station discharge < 10.00%
Station discharge warning	Station discharge >= 10.00%







Discharge Measurement Summary

Site name	DRBYCRCO
Site number	DRBYCRCO
Operator(s)	WRH
File name	DRBYCRCO_20240614.ft
Comment	

Measurement results

St#	Time	Location (ft)	Method	Depth (ft)	%Depth	Measured Depth (ft)	Samples	Velocity (ft/s)	Correction	Mean Velocity (ft/s)	Area (ft²)	Flow (ft³/s)	%Q	
0	12:59 PM	0.500	None	0.000	0.0000	0.000	0	0.0000	1.0000	-0.0208	0.0000	0.0000	0.00	✓
1	12:59 PM	2.000	0.6	0.900	0.6000	0.540	80	-0.0208	1.0000	-0.0208	1.5750	-0.0328	-0.02	✓
2	1:01 PM	4.000	0.2/0.6/0.8	1.550	0.2000	0.310	80	0.6689	1.0000	0.3128	3.1000	0.9696	0.61	✓
2	1:01 PM	4.000	0.2/0.6/0.8	1.550	0.6000	0.930	80	0.2471	1.0000	0.3128	3.1000	0.9696	0.61	✓
2	1:01 PM	4.000	0.2/0.6/0.8	1.550	0.8000	1.240	80	0.0879	1.0000	0.3128	3.1000	0.9696	0.61	✓
3	1:04 PM	6.000	0.2/0.6/0.8	1.600	0.2000	0.320	80	2.2333	1.0000	1.2561	3.2000	4.0196	2.51	✓
3	1:04 PM	6.000	0.2/0.6/0.8	1.600	0.6000	0.960	80	1.0235	1.0000	1.2561	3.2000	4.0196	2.51	✓
3	1:04 PM	6.000	0.2/0.6/0.8	1.600	0.8000	1.280	80	0.7441	1.0000	1.2561	3.2000	4.0196	2.51	✓
4	1:07 PM	8.000	0.2/0.8	1.500	0.2000	0.300	80	2.6615	1.0000	2.0353	3.0000	6.1059	3.81	✓
4	1:07 PM	8.000	0.2/0.8	1.500	0.8000	1.200	80	1.4091	1.0000	2.0353	3.0000	6.1059	3.81	✓
5	1:10 PM	10.000	0.2/0.8	1.900	0.2000	0.380	80	3.9370	1.0000	3.2852	2.8500	9.3627	5.85	✓
5	1:10 PM	10.000	0.2/0.8	1.900	0.8000	1.520	80	2.6333	1.0000	3.2852	2.8500	9.3627	5.85	✓
6	1:12 PM	11.000	0.2/0.6/0.8	1.850	0.2000	0.370	80	4.8169	1.0000	3.9713	1.8500	7.3469	4.59	✓
6	1:12 PM	11.000	0.2/0.6/0.8	1.850	0.6000	1.110	80	4.3927	1.0000	3.9713	1.8500	7.3469	4.59	✓
6	1:12 PM	11.000	0.2/0.6/0.8	1.850	0.8000	1.480	80	2.2830	1.0000	3.9713	1.8500	7.3469	4.59	✓
7	1:16 PM	12.000	0.2/0.8	1.700	0.2000	0.340	80	5.2722	1.0000	4.0043	1.7000	6.8073	4.25	✓
7	1:16 PM	12.000	0.2/0.8	1.700	0.8000	1.360	80	2.7364	1.0000	4.0043	1.7000	6.8073	4.25	✓
8	1:18 PM	13.000	0.2/0.6/0.8	1.700	0.2000	0.340	80	5.8291	1.0000	4.7839	1.7000	8.1327	5.08	✓
8	1:18 PM	13.000	0.2/0.6/0.8	1.700	0.6000	1.020	80	5.2969	1.0000	4.7839	1.7000	8.1327	5.08	✓
8	1:18 PM	13.000	0.2/0.6/0.8	1.700	0.8000	1.360	80	2.7129	1.0000	4.7839	1.7000	8.1327	5.08	✓
9	1:22 PM	14.000	0.2/0.8	1.950	0.2000	0.390	80	6.1550	1.0000	5.1163	1.9500	9.9768	6.23	✓
9	1:22 PM	14.000	0.2/0.8	1.950	0.8000	1.560	80	4.0776	1.0000	5.1163	1.9500	9.9768	6.23	✓
10	1:24 PM	15.000	0.2/0.8	2.000	0.2000	0.400	80	6.9531	1.0000	5.7290	2.0000	11.4581	7.16	✓
10	1:24 PM	15.000	0.2/0.8	2.000	0.8000	1.600	80	4.5049	1.0000	5.7290	2.0000	11.4581	7.16	✓
11	1:28 PM	16.000	0.2/0.8	1.800	0.2000	0.360	80	6.5516	1.0000	5.3723	1.8000	9.6702	6.04	✓
11	1:28 PM	16.000	0.2/0.8	1.800	0.8000	1.440	80	4.1931	1.0000	5.3723	1.8000	9.6702	6.04	✓
12	1:31 PM	17.000	0.2/0.8	2.000	0.2000	0.400	80	6.0899	1.0000	4.8680	2.0000	9.7359	6.08	✓
12	1:31 PM	17.000	0.2/0.8	2.000	0.8000	1.600	80	3.6460	1.0000	4.8680	2.0000	9.7359	6.08	✓
13	1:33 PM	18.000	0.2/0.8	2.300	0.2000	0.460	80	4.7176	1.0000	3.8294	2.3000	8.8076	5.50	✓
13	1:33 PM	18.000	0.2/0.8	2.300	0.8000	1.840	80	2.9412	1.0000	3.8294	2.3000	8.8076	5.50	✓
14	1:35 PM	19.000	0.2/0.8	2.100	0.2000	0.420	80	5.7248	1.0000	4.9773	2.1000	10.4524	6.53	✓
14	1:35 PM	19.000	0.2/0.8	2.100	0.8000	1.680	80	4.2298	1.0000	4.9773	2.1000	10.4524	6.53	✓
15	1:38 PM	20.000	0.2/0.8	2.500	0.2000	0.500	80	5.7203	1.0000	5.0450	2.5000	12.6126	7.88	✓
15	1:38 PM	20.000	0.2/0.8	2.500	0.8000	2.000	80	4.3698	1.0000	5.0450	2.5000	12.6126	7.88	✓
16	1:40 PM	21.000	0.2/0.8	2.050	0.2000	0.410	80	5.0163	1.0000	4.5813	2.0500	9.3917	5.87	✓
16	1:40 PM	21.000	0.2/0.8	2.050	0.8000	1.640	80	4.1464	1.0000	4.5813	2.0500	9.3917	5.87	✓
17	1:43 PM	22.000	0.2/0.6/0.8	2.100	0.2000	0.420	80	4.4863	1.0000	3.0622	2.1000	6.4306	4.02	✓
17	1:43 PM	22.000	0.2/0.6/0.8	2.100	0.6000	1.260	80	3.8687	1.0000	3.0622	2.1000	6.4306	4.02	✓
17	1:43 PM	22.000	0.2/0.6/0.8	2.100	0.8000	1.680	80	0.0250	1.0000	3.0622	2.1000	6.4306	4.02	✓
18	1:46 PM	23.000	0.2/0.8	2.050	0.2000	0.410	80	4.0219	1.0000	3.2731	2.0500	6.7099	4.19	✓
18	1:46 PM	23.000	0.2/0.8	2.050	0.8000	1.640	80	2.5243	1.0000	3.2731	2.0500	6.7099	4.19	✓
19	1:49 PM	24.000	0.2/0.8	2.250	0.2000	0.450	80	4.1907	1.0000	3.4618	2.2500	7.7890	4.86	✓
19	1:49 PM	24.000	0.2/0.8	2.250	0.8000	1.800	80	2.7328	1.0000	3.4618	2.2500	7.7890	4.86	✓
20	1:51 PM	25.000	0.2/0.8	1.550	0.2000	0.310	80	3.6423	1.0000	2.9380	1.5500	4.5539	2.84	✓
20	1:51 PM	25.000	0.2/0.8	1.550	0.8000	1.240	80	2.2337	1.0000	2.9380	1.5500	4.5539	2.84	✓
21	1:53 PM	26.000	0.2/0.8	1.650	0.2000	0.330	80	3.2124	1.0000	2.6717	1.6500	4.4082	2.75	✓
21	1:53 PM	26.000	0.2/0.8	1.650	0.8000	1.320	80	2.1309	1.0000	2.6717	1.6500	4.4082	2.75	✓
22	1:56 PM	27.000	0.6	1.450	0.6000	0.870	80	2.2357	1.0000	2.2357	1.4500	3.2418	2.02	✓
23	1:57 PM	28.000	0.6	1.000	0.6000	0.600	80	1.3597	1.0000	1.3597	1.0000	1.3597	0.85	✓
24	1:58 PM	29.000	0.6	0.950	0.6000	0.570	80	0.7906	1.0000	0.7906	0.9500	0.7511	0.47	✓
25	1:59 PM	30.000	0.6	0.520	0.6000	0.312	80	0.0720	1.0000	0.0720	0.7020	0.0505	0.03	✓
26	2:01 PM	31.700	None	0.000	0.0000	0.000	0	0.0000	1.0000	0.0720	0.0000	0.0000	0.00	✓

Discharge Measurement Summary

Site name	DRBYCRCO
Site number	DRBYCRCO
Operator(s)	WRH
File name	DRBYCRCO_20240614.ft
Comment	

Quality Control Settings	
Maximum depth change	50.00%
Maximum spacing change	100.00%
SNR threshold	10 dB
Standard error threshold	0.0328 ft/s
Spike threshold	10.00%
Maximum velocity angle	20.0 deg
Maximum tilt angle	5.0 deg

Quality control warnings

St#	Time	Location (ft)	Method	Depth (ft)	%Depth	Measured Depth (ft)	Warnings
1	12:59 PM	2.000	0.6	0.900	0.6000	0.540	Standard Error > QC
2	1:01 PM	4.000	0.2/0.6/0.8	1.550	0.2000	0.310	Standard Error > QC,Velocity Angle > QC
2	1:01 PM	4.000	0.2/0.6/0.8	1.550	0.6000	0.930	Standard Error > QC,Velocity Angle > QC
2	1:01 PM	4.000	0.2/0.6/0.8	1.550	0.8000	1.240	Standard Error > QC,Velocity Angle > QC
3	1:04 PM	6.000	0.2/0.6/0.8	1.600	0.2000	0.320	Standard Error > QC
3	1:04 PM	6.000	0.2/0.6/0.8	1.600	0.6000	0.960	Standard Error > QC
3	1:04 PM	6.000	0.2/0.6/0.8	1.600	0.8000	1.280	Standard Error > QC
4	1:07 PM	8.000	0.2/0.8	1.500	0.2000	0.300	Standard Error > QC
4	1:07 PM	8.000	0.2/0.8	1.500	0.8000	1.200	Standard Error > QC
5	1:10 PM	10.000	0.2/0.8	1.900	0.2000	0.380	Large SNR Variation,Standard Error > QC
5	1:10 PM	10.000	0.2/0.8	1.900	0.8000	1.520	Large SNR Variation,Standard Error > QC
6	1:12 PM	11.000	0.2/0.6/0.8	1.850	0.2000	0.370	Large SNR Variation,Standard Error > QC,Rod Angle > QC
6	1:12 PM	11.000	0.2/0.6/0.8	1.850	0.6000	1.110	Large SNR Variation,Standard Error > QC,Rod Angle > QC
6	1:12 PM	11.000	0.2/0.6/0.8	1.850	0.8000	1.480	Large SNR Variation,Standard Error > QC,Rod Angle > QC
7	1:16 PM	12.000	0.2/0.8	1.700	0.2000	0.340	Standard Error > QC
7	1:16 PM	12.000	0.2/0.8	1.700	0.8000	1.360	Standard Error > QC
8	1:18 PM	13.000	0.2/0.6/0.8	1.700	0.2000	0.340	Standard Error > QC,Rod Angle > QC
8	1:18 PM	13.000	0.2/0.6/0.8	1.700	0.6000	1.020	Standard Error > QC,Rod Angle > QC
8	1:18 PM	13.000	0.2/0.6/0.8	1.700	0.8000	1.360	Standard Error > QC,Rod Angle > QC
9	1:22 PM	14.000	0.2/0.8	1.950	0.2000	0.390	Standard Error > QC,Rod Angle > QC
9	1:22 PM	14.000	0.2/0.8	1.950	0.8000	1.560	Standard Error > QC,Rod Angle > QC
10	1:24 PM	15.000	0.2/0.8	2.000	0.2000	0.400	Standard Error > QC,Rod Angle > QC
10	1:24 PM	15.000	0.2/0.8	2.000	0.8000	1.600	Standard Error > QC,Rod Angle > QC
11	1:28 PM	16.000	0.2/0.8	1.800	0.2000	0.360	Standard Error > QC
11	1:28 PM	16.000	0.2/0.8	1.800	0.8000	1.440	Standard Error > QC
12	1:31 PM	17.000	0.2/0.8	2.000	0.2000	0.400	Standard Error > QC,Rod Angle > QC
12	1:31 PM	17.000	0.2/0.8	2.000	0.8000	1.600	Standard Error > QC,Rod Angle > QC
13	1:33 PM	18.000	0.2/0.8	2.300	0.2000	0.460	Standard Error > QC,Rod Angle > QC
13	1:33 PM	18.000	0.2/0.8	2.300	0.8000	1.840	Standard Error > QC,Rod Angle > QC
14	1:35 PM	19.000	0.2/0.8	2.100	0.2000	0.420	Standard Error > QC,Rod Angle > QC
14	1:35 PM	19.000	0.2/0.8	2.100	0.8000	1.680	Standard Error > QC,Rod Angle > QC
15	1:38 PM	20.000	0.2/0.8	2.500	0.2000	0.500	Standard Error > QC
15	1:38 PM	20.000	0.2/0.8	2.500	0.8000	2.000	Standard Error > QC
16	1:40 PM	21.000	0.2/0.8	2.050	0.2000	0.410	Standard Error > QC
16	1:40 PM	21.000	0.2/0.8	2.050	0.8000	1.640	Standard Error > QC
17	1:43 PM	22.000	0.2/0.6/0.8	2.100	0.2000	0.420	Standard Error > QC,Rod Angle > QC
17	1:43 PM	22.000	0.2/0.6/0.8	2.100	0.6000	1.260	Standard Error > QC,Rod Angle > QC
17	1:43 PM	22.000	0.2/0.6/0.8	2.100	0.8000	1.680	Standard Error > QC,Rod Angle > QC
18	1:46 PM	23.000	0.2/0.8	2.050	0.2000	0.410	Standard Error > QC,Rod Angle > QC
18	1:46 PM	23.000	0.2/0.8	2.050	0.8000	1.640	Standard Error > QC,Rod Angle > QC
19	1:49 PM	24.000	0.2/0.8	2.250	0.2000	0.450	Standard Error > QC
19	1:49 PM	24.000	0.2/0.8	2.250	0.8000	1.800	Standard Error > QC
20	1:51 PM	25.000	0.2/0.8	1.550	0.2000	0.310	Standard Error > QC
20	1:51 PM	25.000	0.2/0.8	1.550	0.8000	1.240	Standard Error > QC
21	1:53 PM	26.000	0.2/0.8	1.650	0.2000	0.330	Standard Error > QC
21	1:53 PM	26.000	0.2/0.8	1.650	0.8000	1.320	Standard Error > QC
22	1:56 PM	27.000	0.6	1.450	0.6000	0.870	Standard Error > QC
23	1:57 PM	28.000	0.6	1.000	0.6000	0.600	Standard Error > QC
24	1:58 PM	29.000	0.6	0.950	0.6000	0.570	Standard Error > QC

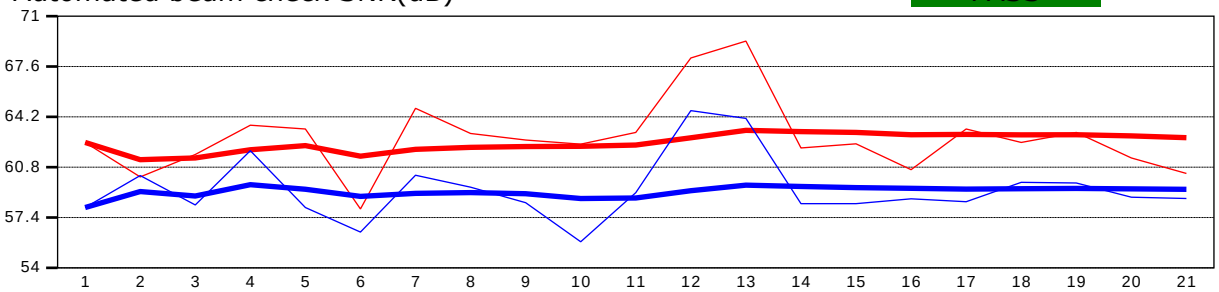
Discharge Measurement Summary

Site name	DRBYCRCO
Site number	DRBYCRCO
Operator(s)	WRH
File name	DRBYCRCO_20240614.ft
Comment	

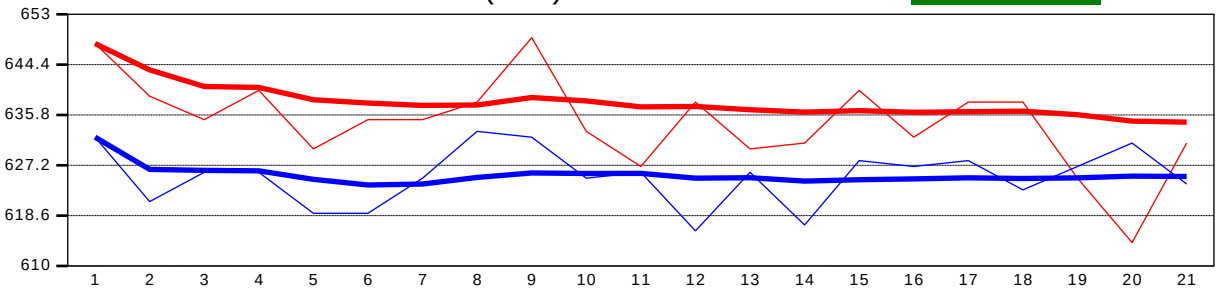
Beam 1	
Beam 2	

Automated beam check Start time 6/14/2024 12:59:03 PM

Automated beam check SNR(dB) PASS



Automated beam check Noise level(cnts) PASS



Automated beam check Quality control warnings

No quality control warnings

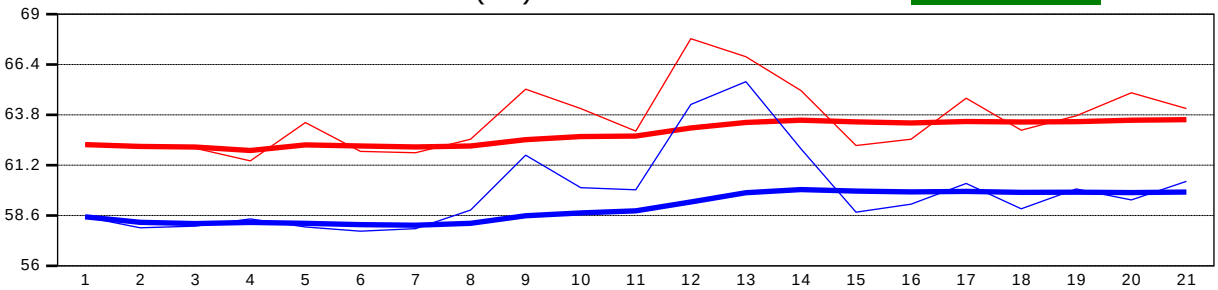
Discharge Measurement Summary

Site name	DRBYCRCO
Site number	DRBYCRCO
Operator(s)	WRH
File name	DRBYCRCO_20240614.ft
Comment	

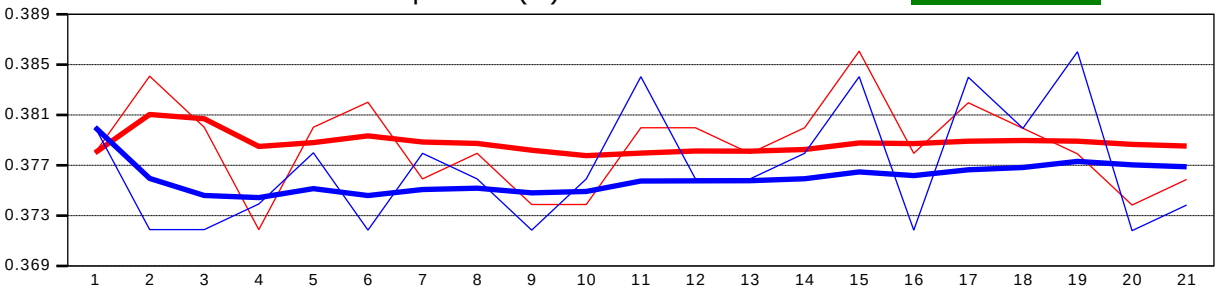
Beam 1	
Beam 2	

Automated beam check Start time 6/14/2024 12:59:03 PM

Automated beam check Peak level(dB) PASS



Automated beam check Peak position(ft) PASS



Automated beam check Quality control warnings

No quality control warnings

Discharge Measurement Summary

Site name	Derbycr nr colorado riv
Site number	06262024
Operator(s)	Lfsc
File name	20240626-103458_Derbycr nr colorado riv.ft
Comment	

Start time	6/26/2024 10:06 AM
End time	6/26/2024 10:32 AM
Start location latitude	-
Start location longitude	-
Calculations engine	FlowTracker2

Sensor type	Top Setting
Handheld serial number	FT2H2322006
Probe serial number	FT2P2319001
Probe firmware	1.30
Handheld software	1.7

# Stations	Avg interval (s)	Total discharge (ft³/s)
27	40	62.6165

Total width (ft)	Total area (ft²)	Wetted Perimeter (ft)
22.700	24.6523	24.373

Mean SNR (dB)	Mean depth (ft)	Mean velocity (ft/s)
56	1.086	2.5400

Mean temp (°F)	Max depth (ft)	Max velocity (ft/s)
52.280	2.300	4.7446

Discharge Uncertainty		
Category	**ISO**	**IVE**
Accuracy	1.0%	1.0%
Depth	0.1%	3.2%
Velocity	1.4%	3.8%
Width	0.1%	0.1%
Method	1.5%	
# Stations	1.9%	
Overall	**2.9%**	**5.1%**

Discharge equation	Mid Section
Discharge uncertainty	IVE
Discharge reference	Rated

Data Collection Settings	
Salinity	0.000 PSS-78
Temperature	-
Sound speed	-
Mounting correction	0.000 %

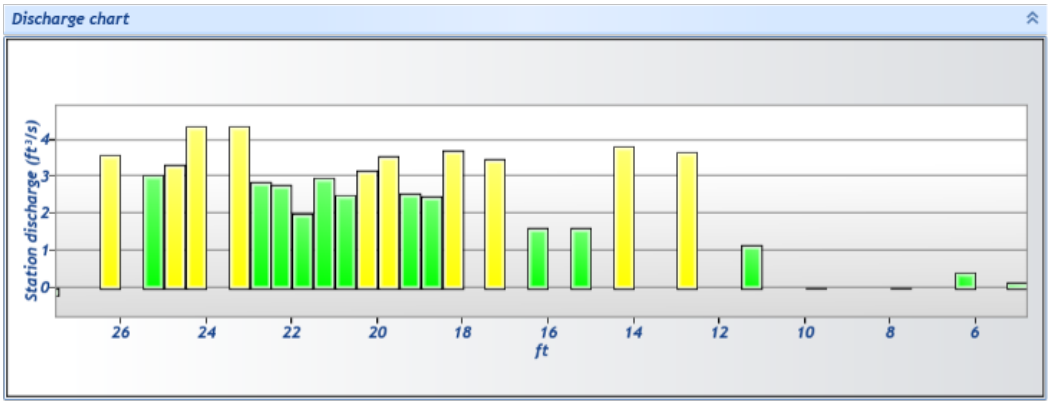
Summary overview

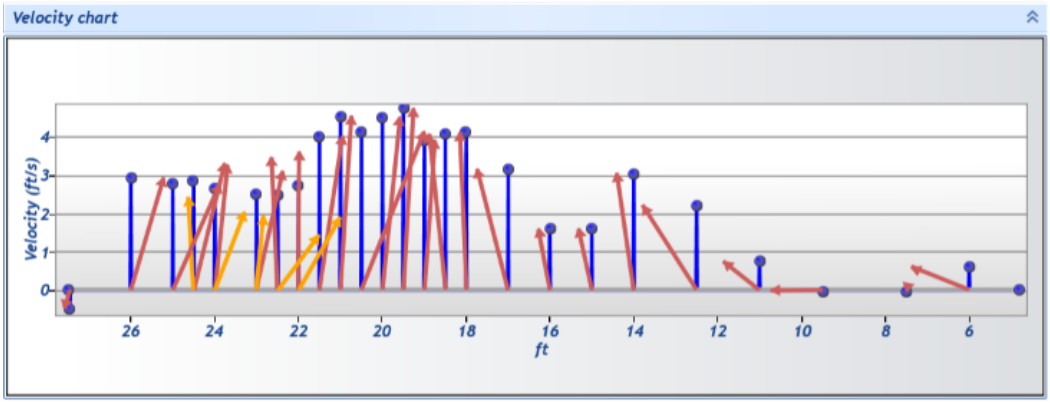
No changes were made to this file
Quality control warnings

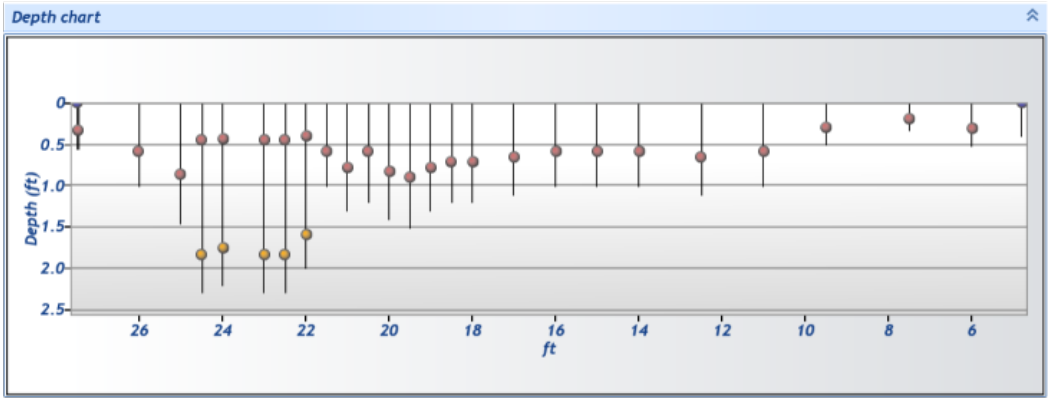
Discharge Measurement Summary

Site name	Derbycr nr colorado riv
Site number	06262024
Operator(s)	Lfsc
File name	20240626-103458_Derbycr nr colorado riv.ft
Comment	

Station Warning Settings	
Station discharge OK	Station discharge < 5.00%
Station discharge caution	5.00% >= Station discharge < 10.00%
Station discharge warning	Station discharge >= 10.00%







Discharge Measurement Summary

Site name	Derbycr nr colorado riv
Site number	06262024
Operator(s)	Lfsc
File name	20240626-103458_Derbycr nr colorado riv.ft
Comment	

Measurement results

St#	Time	Location (ft)	Method	Depth (ft)	%Depth	Measured Depth (ft)	Samples	Velocity (ft/s)	Correction	Mean Velocity (ft/s)	Area (ft²)	Flow (ft³/s)	%Q	
26	10:32 AM	4.800	None	0.400	0.0000	0.000	0	0.0000	1.0000	0.6093	0.2400	0.1462	0.23	✓
25	10:30 AM	6.000	0.6	0.510	0.6000	0.306	15	0.6093	1.0000	0.6093	0.6885	0.4195	0.67	✓
24	10:30 AM	7.500	0.6	0.330	0.6000	0.198	14	-0.0307	1.0000	-0.0307	0.5775	-0.0177	-0.03	✓
23	10:29 AM	9.500	0.6	0.500	0.6000	0.300	14	-0.0149	1.0000	-0.0149	0.8750	-0.0130	-0.02	✓
22	10:28 AM	11.000	0.6	1.000	0.6000	0.600	17	0.7527	1.0000	0.7527	1.5000	1.1291	1.80	✓
21	10:28 AM	12.500	0.6	1.100	0.6000	0.660	11	2.2124	1.0000	2.2124	1.6500	3.6504	5.83	✓
20	10:27 AM	14.000	0.6	1.000	0.6000	0.600	15	3.0501	1.0000	3.0501	1.2500	3.8126	6.09	✓
19	10:27 AM	15.000	0.6	1.000	0.6000	0.600	15	1.6027	1.0000	1.6027	1.0000	1.6027	2.56	✓
18	10:26 AM	16.000	0.6	1.000	0.6000	0.600	12	1.5958	1.0000	1.5958	1.0000	1.5958	2.55	✓
17	10:25 AM	17.000	0.6	1.100	0.6000	0.660	13	3.1587	1.0000	3.1587	1.1000	3.4746	5.55	✓
16	10:24 AM	18.000	0.6	1.200	0.6000	0.720	12	4.1154	1.0000	4.1154	0.9000	3.7039	5.92	✓
15	10:24 AM	18.500	0.6	1.200	0.6000	0.720	15	4.0715	1.0000	4.0715	0.6000	2.4429	3.90	✓
14	10:23 AM	19.000	0.6	1.300	0.6000	0.780	25	3.9066	1.0000	3.9066	0.6500	2.5393	4.06	✓
13	10:22 AM	19.500	0.6	1.500	0.6000	0.900	21	4.7446	1.0000	4.7446	0.7500	3.5584	5.68	✓
12	10:22 AM	20.000	0.6	1.400	0.6000	0.840	30	4.5065	1.0000	4.5065	0.7000	3.1545	5.04	✓
11	10:20 AM	20.500	0.6	1.200	0.6000	0.600	32	4.1329	1.0000	4.1329	0.6000	2.4797	3.96	✓
10	10:20 AM	21.000	0.6	1.300	0.6000	0.780	17	4.5458	1.0000	4.5458	0.6500	2.9548	4.72	✓
9	10:19 AM	21.500	0.6	1.000	0.6000	0.600	15	4.0113	1.0000	4.0113	0.5000	2.0057	3.20	✓
8	10:18 AM	22.000	0.2/0.8	2.000	0.2000	0.400	14	3.6058	1.0000	2.7506	1.0000	2.7506	4.39	✓
8	10:18 AM	22.000	0.2/0.8	2.000	0.8000	1.600	21	1.8953	1.0000	2.7506	1.0000	2.7506	4.39	✓
7	10:16 AM	22.500	0.2/0.8	2.300	0.2000	0.460	20	3.4619	1.0000	2.4587	1.1500	2.8275	4.52	✓
7	10:16 AM	22.500	0.2/0.8	2.300	0.8000	1.840	32	1.4555	1.0000	2.4587	1.1500	2.8275	4.52	✓
6	10:14 AM	23.000	0.2/0.8	2.300	0.2000	0.460	23	3.1017	1.0000	2.5147	1.7250	4.3379	6.93	✓
6	10:14 AM	23.000	0.2/0.8	2.300	0.8000	1.840	18	1.9278	1.0000	2.5147	1.7250	4.3379	6.93	✓
5	10:11 AM	24.000	0.2/0.8	2.200	0.2000	0.440	22	3.2623	1.0000	2.6435	1.6500	4.3617	6.97	✓
5	10:11 AM	24.000	0.2/0.8	2.200	0.8000	1.760	16	2.0246	1.0000	2.6435	1.6500	4.3617	6.97	✓
4	10:13 AM	24.500	0.2/0.8	2.300	0.2000	0.460	19	3.3072	1.0000	2.8658	1.1500	3.2957	5.26	✓
4	10:13 AM	24.500	0.2/0.8	2.300	0.8000	1.840	15	2.4245	1.0000	2.8658	1.1500	3.2957	5.26	✓
3	10:10 AM	25.000	0.6	1.460	0.6000	0.876	18	2.7658	1.0000	2.7658	1.0950	3.0285	4.84	✓
2	10:10 AM	26.000	0.6	1.000	0.6000	0.600	11	2.9255	1.0000	2.9255	1.2250	3.5837	5.72	✓
1	10:06 AM	27.450	0.6	0.550	0.6000	0.330	59	-0.4889	1.0000	-0.4889	0.4125	-0.2017	-0.32	✓
0	10:06 AM	27.500	None	0.550	0.0000	0.000	0	0.0000	1.0000	-0.4889	0.0138	-0.0067	-0.01	✓

Discharge Measurement Summary

Site name	Derbycr nr colorado riv
Site number	06262024
Operator(s)	Lfsc
File name	20240626-103458_Derbycr nr colorado riv.ft
Comment	

Quality Control Settings	
Maximum depth change	50.00%
Maximum spacing change	100.00%
SNR threshold	10 dB
Standard error threshold	0.0328 ft/s
Spike threshold	10.00%
Maximum velocity angle	20.0 deg
Maximum tilt angle	5.0 deg

Quality control warnings

St#	Time	Location (ft)	Method	Depth (ft)	%Depth	Measured Depth (ft)	Warnings
25	10:30 AM	6.000	0.6	0.510	0.6000	0.306	Standard Error > QC,Velocity Angle > QC
24	10:30 AM	7.500	0.6	0.330	0.6000	0.198	Boundary Interference,Beam SNRs Not Similar,SNR Threshold Variation
23	10:29 AM	9.500	0.6	0.500	0.6000	0.300	Standard Error > QC
22	10:28 AM	11.000	0.6	1.000	0.6000	0.600	Standard Error > QC,Velocity Angle > QC
21	10:28 AM	12.500	0.6	1.100	0.6000	0.660	Standard Error > QC,Velocity Angle > QC
20	10:27 AM	14.000	0.6	1.000	0.6000	0.600	Standard Error > QC
19	10:27 AM	15.000	0.6	1.000	0.6000	0.600	Standard Error > QC
18	10:26 AM	16.000	0.6	1.000	0.6000	0.600	Standard Error > QC
17	10:25 AM	17.000	0.6	1.100	0.6000	0.660	Standard Error > QC
16	10:24 AM	18.000	0.6	1.200	0.6000	0.720	Standard Error > QC
15	10:24 AM	18.500	0.6	1.200	0.6000	0.720	Standard Error > QC
14	10:23 AM	19.000	0.6	1.300	0.6000	0.780	Standard Error > QC
13	10:22 AM	19.500	0.6	1.500	0.6000	0.900	Standard Error > QC
12	10:22 AM	20.000	0.6	1.400	0.6000	0.840	Standard Error > QC
11	10:20 AM	20.500	0.6	1.200	0.6000	0.600	Standard Error > QC
10	10:20 AM	21.000	0.6	1.300	0.6000	0.780	Standard Error > QC
9	10:19 AM	21.500	0.6	1.000	0.6000	0.600	Standard Error > QC
8	10:18 AM	22.000	0.2/0.8	2.000	0.2000	0.400	Standard Error > QC,Velocity Angle > QC
8	10:18 AM	22.000	0.2/0.8	2.000	0.8000	1.600	Standard Error > QC,Velocity Angle > QC
7	10:16 AM	22.500	0.2/0.8	2.300	0.2000	0.460	Standard Error > QC,Velocity Angle > QC
7	10:16 AM	22.500	0.2/0.8	2.300	0.8000	1.840	Standard Error > QC,Velocity Angle > QC
6	10:14 AM	23.000	0.2/0.8	2.300	0.2000	0.460	Standard Error > QC
6	10:14 AM	23.000	0.2/0.8	2.300	0.8000	1.840	Standard Error > QC
5	10:11 AM	24.000	0.2/0.8	2.200	0.2000	0.440	Standard Error > QC
5	10:11 AM	24.000	0.2/0.8	2.200	0.8000	1.760	Standard Error > QC
4	10:13 AM	24.500	0.2/0.8	2.300	0.2000	0.460	Standard Error > QC
4	10:13 AM	24.500	0.2/0.8	2.300	0.8000	1.840	Standard Error > QC
3	10:10 AM	25.000	0.6	1.460	0.6000	0.876	Standard Error > QC,Velocity Angle > QC
2	10:10 AM	26.000	0.6	1.000	0.6000	0.600	Standard Error > QC
1	10:06 AM	27.450	0.6	0.550	0.6000	0.330	Boundary Interference,Standard Error > QC,Velocity Angle > QC

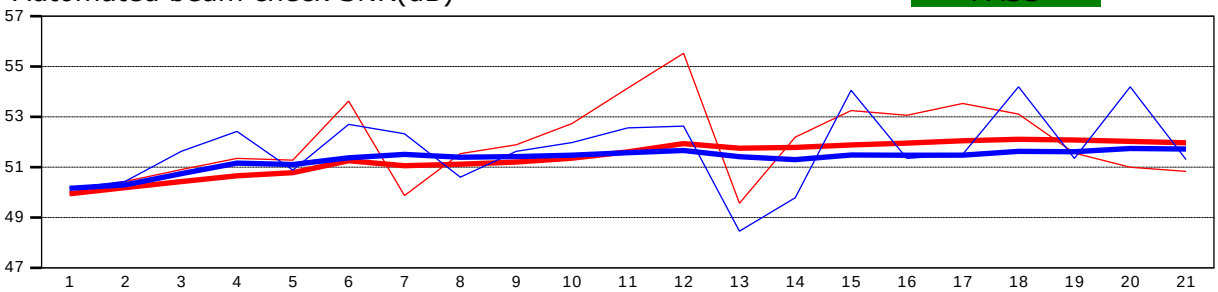
Discharge Measurement Summary

Site name	Derbycr nr colorado riv
Site number	06262024
Operator(s)	Lfsc
File name	20240626-103458_Derbycr nr colorado riv.ft
Comment	

Beam 1	
Beam 2	

Automated beam check Start time 6/26/2024 10:04:52 AM

Automated beam check SNR(dB) PASS



Automated beam check Noise level(cnts) PASS

Automated beam check Quality control warnings

No quality control warnings

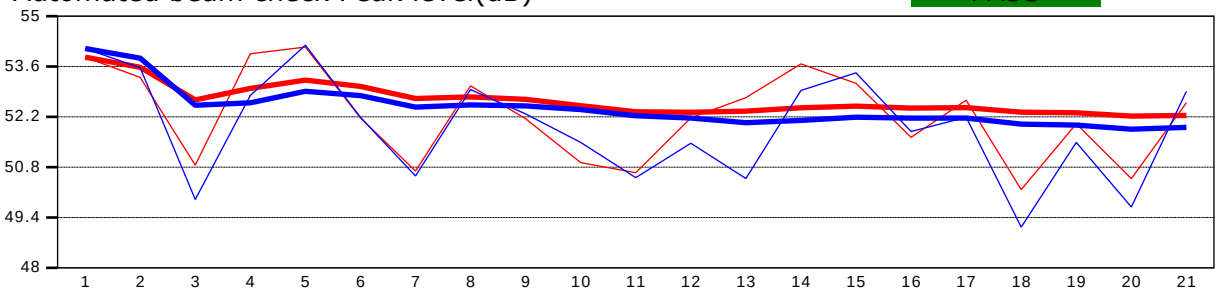
Discharge Measurement Summary

Site name	Derbycr nr colorado riv
Site number	06262024
Operator(s)	Lfsc
File name	20240626-103458_Derbycr nr colorado riv.ft
Comment	

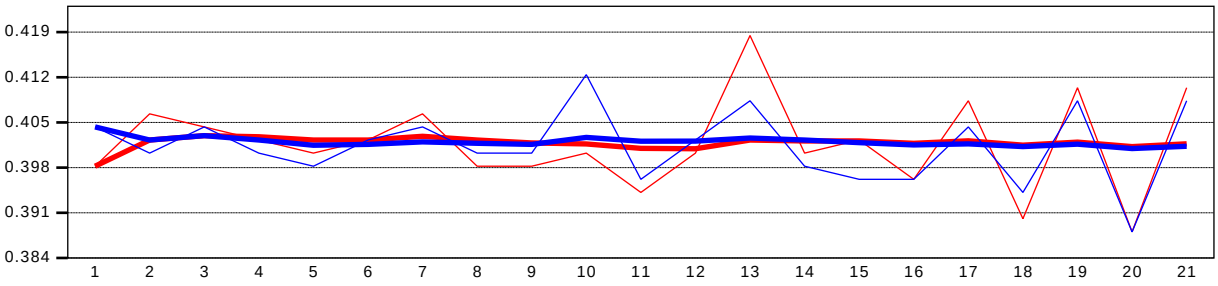
Beam 1	
Beam 2	

Automated beam check Start time 6/26/2024 10:04:52 AM

Automated beam check Peak level(dB) PASS



Automated beam check Peak position(ft) PASS



Automated beam check Quality control warnings

No quality control warnings

Discharge Measurement Summary

Site name	Derby abv colorado r
Site number	852024
Operator(s)	Lfsc
File name	20240805-113603_Derby abv colorado r.ft
Comment	

Start time	8/5/2024 11:09 AM
End time	8/5/2024 11:35 AM
Start location latitude	39.870
Start location longitude	-106.907
Calculations engine	FlowTracker2

Sensor type	Top Setting
Handheld serial number	FT2H2322006
Probe serial number	FT2P2319001
Probe firmware	1.30
Handheld software	1.7

# Stations	Avg interval (s)	Total discharge (ft³/s)
32	40	12.5939

Total width (ft)	Total area (ft²)	Wetted Perimeter (ft)
24.450	14.4698	27.309

Mean SNR (dB)	Mean depth (ft)	Mean velocity (ft/s)
48	0.592	0.8704

Mean temp (°F)	Max depth (ft)	Max velocity (ft/s)
61.221	1.500	1.9150

Discharge Uncertainty		
Category	**ISO**	**IVE**
Accuracy	1.0%	1.0%
Depth	0.4%	4.6%
Velocity	2.3%	9.9%
Width	0.1%	0.1%
Method	1.9%	
# Stations	1.7%	
Overall	**3.6%**	**10.9%**

Discharge equation	Mid Section
Discharge uncertainty	IVE
Discharge reference	Rated

Data Collection Settings	
Salinity	0.000 PSS-78
Temperature	-
Sound speed	-
Mounting correction	0.000 %

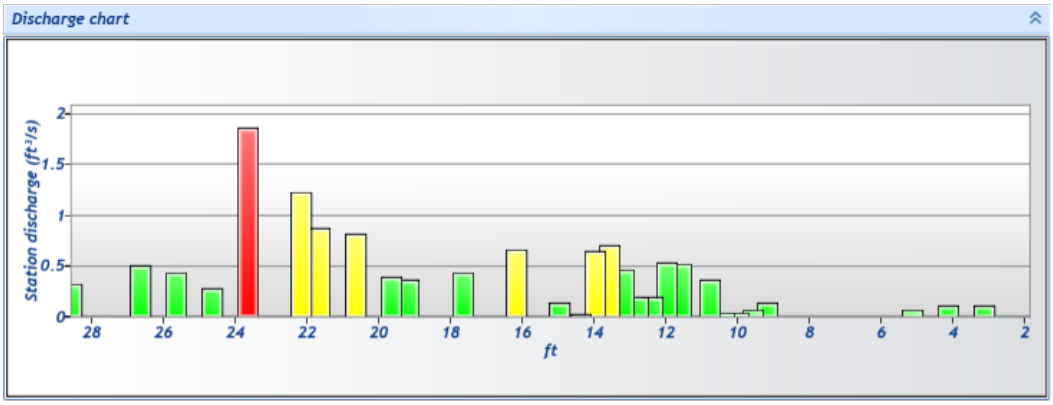
Summary overview

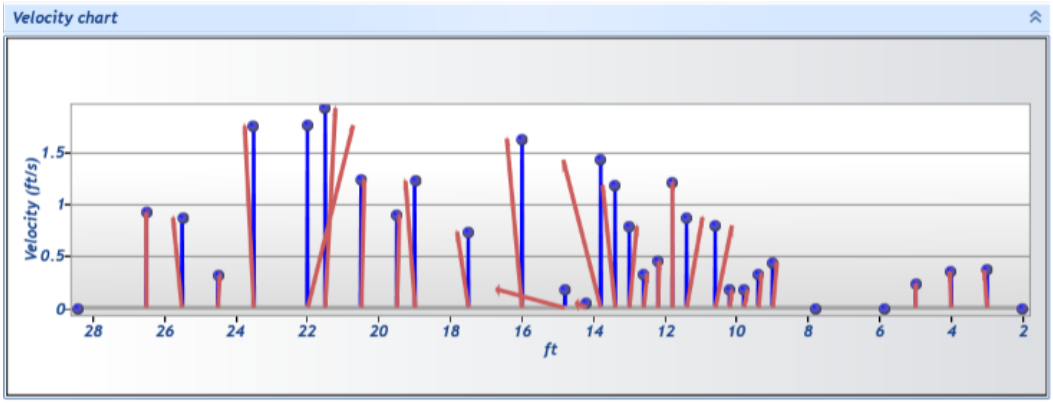
No changes were made to this file
Quality control warnings

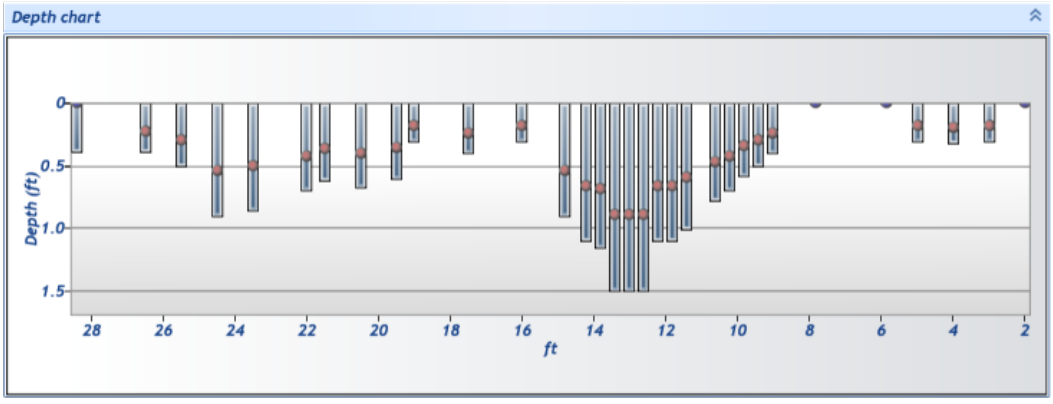
Discharge Measurement Summary

Site name	Derby abv colorado r
Site number	852024
Operator(s)	Lfsc
File name	20240805-113603_Derby abv colorado r.ft
Comment	

Station Warning Settings		
Station discharge OK	Station discharge < 5.00%	
Station discharge caution	5.00% >= Station discharge < 10.00%	
Station discharge warning	Station discharge >= 10.00%	







Discharge Measurement Summary

Site name	Derby abv colorado r
Site number	852024
Operator(s)	Lfsc
File name	20240805-113603_Derby abv colorado r.ft
Comment	

Measurement results

St#	Time	Location (ft)	Method	Depth (ft)	%Depth	Measured Depth (ft)	Samples	Velocity (ft/s)	Correction	Mean Velocity (ft/s)	Area (ft²)	Flow (ft³/s)	%Q	
0	11:09 AM	2.000	None	0.010	0.0000	0.000	0	0.0000	1.0000	0.3613	0.0050	0.0018	0.01	✓
1	11:09 AM	3.000	0.6	0.300	0.6000	0.180	28	0.3613	1.0000	0.3613	0.3000	0.1084	0.86	✓
2	11:10 AM	4.000	0.6	0.320	0.6000	0.192	22	0.3470	1.0000	0.3470	0.3200	0.1110	0.88	✓
3	11:11 AM	5.000	0.6	0.300	0.6000	0.180	14	0.2339	1.0000	0.2339	0.2775	0.0649	0.52	✓
4	11:11 AM	5.850	None	0.010	0.0000	0.000	0	0.0000	1.0000	0.2339	0.0043	0.0010	0.01	✓
5	11:12 AM	7.800	None	0.010	0.0000	0.000	0	0.0000	1.0000	0.4371	0.0060	0.0026	0.02	✓
6	11:12 AM	9.000	0.6	0.400	0.6000	0.240	29	0.4371	1.0000	0.4371	0.3200	0.1399	1.11	✓
7	11:13 AM	9.400	0.6	0.500	0.6000	0.300	26	0.3301	1.0000	0.3301	0.2000	0.0660	0.52	✓
8	11:14 AM	9.800	0.6	0.580	0.6000	0.348	24	0.1755	1.0000	0.1755	0.2320	0.0407	0.32	✓
9	11:15 AM	10.200	0.6	0.700	0.6000	0.420	33	0.1697	1.0000	0.1697	0.2800	0.0475	0.38	✓
10	11:16 AM	10.600	0.6	0.780	0.6000	0.468	21	0.7880	1.0000	0.7880	0.4680	0.3688	2.93	✓
11	11:17 AM	11.400	0.6	1.000	0.6000	0.600	24	0.8666	1.0000	0.8666	0.6000	0.5200	4.13	✓
12	11:18 AM	11.800	0.6	1.100	0.6000	0.660	35	1.2083	1.0000	1.2083	0.4400	0.5317	4.22	✓
13	11:19 AM	12.200	0.6	1.100	0.6000	0.660	31	0.4484	1.0000	0.4484	0.4400	0.1973	1.57	✓
14	11:20 AM	12.600	0.6	1.500	0.6000	0.900	29	0.3288	1.0000	0.3288	0.6000	0.1973	1.57	✓
15	11:20 AM	13.000	0.6	1.500	0.6000	0.900	33	0.7820	1.0000	0.7820	0.6000	0.4692	3.73	✓
16	11:21 AM	13.400	0.6	1.500	0.6000	0.900	46	1.1752	1.0000	1.1752	0.6000	0.7051	5.60	✓
17	11:23 AM	13.800	0.6	1.150	0.6000	0.690	44	1.4197	1.0000	1.4197	0.4600	0.6531	5.19	✓
18	11:24 AM	14.200	0.6	1.100	0.6000	0.660	34	0.0533	1.0000	0.0533	0.5500	0.0293	0.23	✓
19	11:25 AM	14.800	0.6	0.900	0.6000	0.540	29	0.1802	1.0000	0.1802	0.8100	0.1460	1.16	✓
20	11:26 AM	16.000	0.6	0.300	0.6000	0.180	23	1.6220	1.0000	1.6220	0.4050	0.6569	5.22	✓
21	11:27 AM	17.500	0.6	0.400	0.6000	0.240	18	0.7275	1.0000	0.7275	0.6000	0.4365	3.47	✓
22	11:28 AM	19.000	0.6	0.300	0.6000	0.180	16	1.2187	1.0000	1.2187	0.3000	0.3656	2.90	✓
23	11:28 AM	19.500	0.6	0.600	0.6000	0.360	14	0.8912	1.0000	0.8912	0.4500	0.4010	3.18	✓
24	11:29 AM	20.500	0.6	0.670	0.6000	0.402	19	1.2287	1.0000	1.2287	0.6700	0.8232	6.54	✓
25	11:30 AM	21.500	0.6	0.610	0.6000	0.366	26	1.9150	1.0000	1.9150	0.4575	0.8761	6.96	✓
26	11:31 AM	22.000	0.6	0.700	0.6000	0.420	21	1.7508	1.0000	1.7508	0.7000	1.2255	9.73	✓
27	11:32 AM	23.500	0.6	0.850	0.6000	0.510	15	1.7465	1.0000	1.7465	1.0625	1.8557	14.73	✓
28	11:32 AM	24.500	0.6	0.900	0.6000	0.540	20	0.3151	1.0000	0.3151	0.9000	0.2836	2.25	✓
29	11:33 AM	25.500	0.6	0.500	0.6000	0.300	19	0.8659	1.0000	0.8659	0.5000	0.4330	3.44	✓
30	11:34 AM	26.500	0.6	0.380	0.6000	0.228	22	0.9157	1.0000	0.9157	0.5510	0.5046	4.01	✓
31	11:35 AM	28.400	None	0.380	0.0000	0.000	0	0.0000	1.0000	0.9157	0.3610	0.3306	2.62	✓

Discharge Measurement Summary

Site name	Derby abv colorado r
Site number	852024
Operator(s)	Lfsc
File name	20240805-113603_Derby abv colorado r.ft
Comment	

Quality Control Settings	
Maximum depth change	50.00%
Maximum spacing change	100.00%
SNR threshold	10 dB
Standard error threshold	0.0328 ft/s
Spike threshold	10.00%
Maximum velocity angle	20.0 deg
Maximum tilt angle	5.0 deg

Quality control warnings

St#	Time	Location (ft)	Method	Depth (ft)	%Depth	Measured Depth (ft)	Warnings
3	11:11 AM	5.000	0.6	0.300	0.6000	0.180	Boundary Interference
6	11:12 AM	9.000	0.6	0.400	0.6000	0.240	Standard Error > QC
7	11:13 AM	9.400	0.6	0.500	0.6000	0.300	Standard Error > QC
8	11:14 AM	9.800	0.6	0.580	0.6000	0.348	Stn Spacing > QC,Standard Error > QC,Velocity Angle > QC
9	11:15 AM	10.200	0.6	0.700	0.6000	0.420	Standard Error > QC
10	11:16 AM	10.600	0.6	0.780	0.6000	0.468	Standard Error > QC,Velocity Angle > QC
11	11:17 AM	11.400	0.6	1.000	0.6000	0.600	Standard Error > QC,Velocity Angle > QC
12	11:18 AM	11.800	0.6	1.100	0.6000	0.660	Standard Error > QC
13	11:19 AM	12.200	0.6	1.100	0.6000	0.660	Standard Error > QC
14	11:20 AM	12.600	0.6	1.500	0.6000	0.900	Standard Error > QC
15	11:20 AM	13.000	0.6	1.500	0.6000	0.900	Standard Error > QC
16	11:21 AM	13.400	0.6	1.500	0.6000	0.900	Standard Error > QC
17	11:23 AM	13.800	0.6	1.150	0.6000	0.690	Standard Error > QC,Velocity Angle > QC
18	11:24 AM	14.200	0.6	1.100	0.6000	0.660	Standard Error > QC
19	11:25 AM	14.800	0.6	0.900	0.6000	0.540	Standard Error > QC,High % Spikes,Velocity Angle > QC
20	11:26 AM	16.000	0.6	0.300	0.6000	0.180	Standard Error > QC
21	11:27 AM	17.500	0.6	0.400	0.6000	0.240	Standard Error > QC,High % Spikes,Velocity Angle > QC
22	11:28 AM	19.000	0.6	0.300	0.6000	0.180	Standard Error > QC
23	11:28 AM	19.500	0.6	0.600	0.6000	0.360	Standard Error > QC
24	11:29 AM	20.500	0.6	0.670	0.6000	0.402	Standard Error > QC
25	11:30 AM	21.500	0.6	0.610	0.6000	0.366	Standard Error > QC
26	11:31 AM	22.000	0.6	0.700	0.6000	0.420	Standard Error > QC,Velocity Angle > QC
27	11:32 AM	23.500	0.6	0.850	0.6000	0.510	Standard Error > QC,High Stn % Discharge
28	11:32 AM	24.500	0.6	0.900	0.6000	0.540	Standard Error > QC
29	11:33 AM	25.500	0.6	0.500	0.6000	0.300	Standard Error > QC
30	11:34 AM	26.500	0.6	0.380	0.6000	0.228	Standard Error > QC

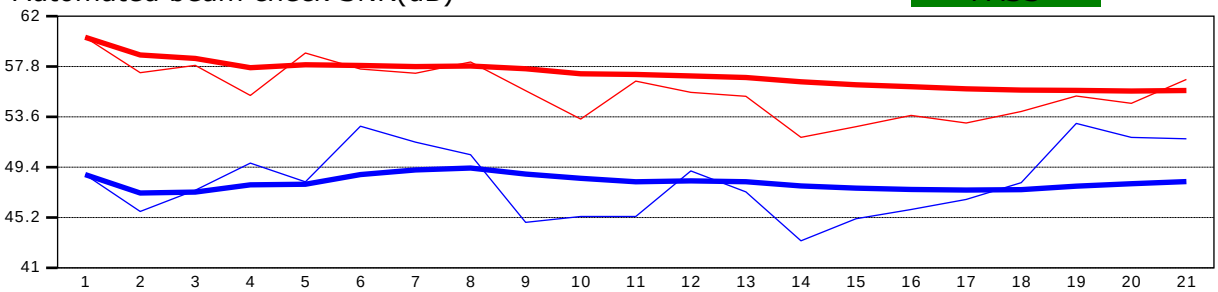
Discharge Measurement Summary

Site name	Derby abv colorado r
Site number	852024
Operator(s)	Lfsc
File name	20240805-113603_Derby abv colorado r.ft
Comment	

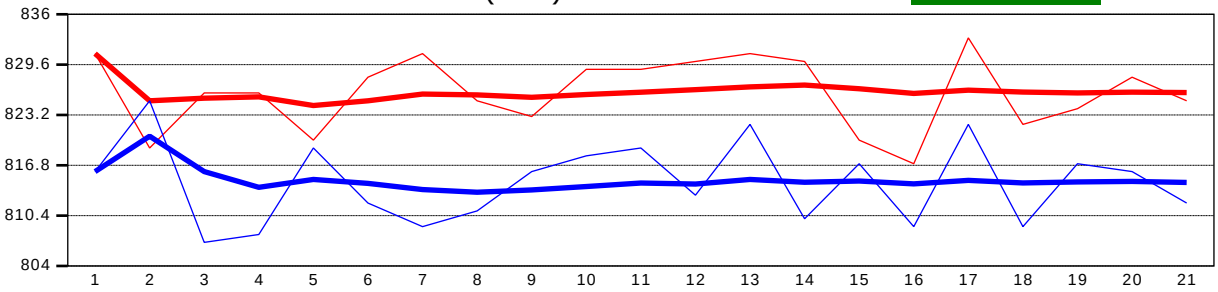
Beam 1	
Beam 2	

Automated beam check Start time 8/5/2024 11:08:45 AM

Automated beam check SNR(dB) PASS



Automated beam check Noise level(cnts) PASS



Automated beam check Quality control warnings

No quality control warnings

8/6/2024 7:09:02 PM

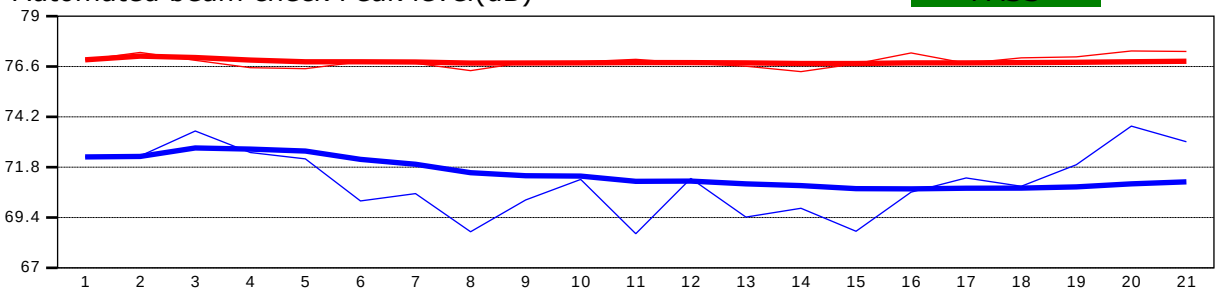
Discharge Measurement Summary

Site name	Derby abv colorado r
Site number	852024
Operator(s)	Lfsc
File name	20240805-113603_Derby abv colorado r.ft
Comment	

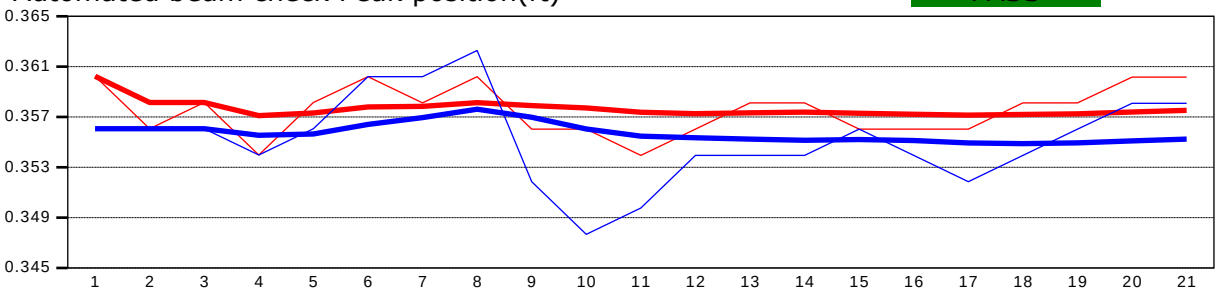
Beam 1	
Beam 2	

Automated beam check Start time 8/5/2024 11:08:45 AM

Automated beam check Peak level(dB) PASS



Automated beam check Peak position(ft) PASS



Automated beam check Quality control warnings

No quality control warnings

Discharge Measurement Summary

Site name	Derbycr nr state bridge
Site number	10072024
Operator(s)	Lfsc
File name	20241007-163452_Derbycr nr state bridge.ft
Comment	

Start time	10/7/2024 3:57 PM
End time	10/7/2024 4:28 PM
Start location latitude	39.870
Start location longitude	-106.907
Calculations engine	FlowTracker2

Sensor type	Top Setting
Handheld serial number	FT2H2322006
Probe serial number	FT2P2319001
Probe firmware	1.30
Handheld software	1.7

# Stations	Avg interval (s)	Total discharge (ft³/s)
36	40	19.6942

Total width (ft)	Total area (ft²)	Wetted Perimeter (ft)
22.100	11.6690	23.305

Mean SNR (dB)	Mean depth (ft)	Mean velocity (ft/s)
48	0.528	1.6877

Mean temp (°F)	Max depth (ft)	Max velocity (ft/s)
47.646	1.100	4.6881

Discharge Uncertainty		
Category	**ISO**	**IVE**
Accuracy	1.0%	1.0%
Depth	0.3%	3.7%
Velocity	2.2%	10.4%
Width	0.1%	0.1%
Method	1.6%	
# Stations	1.4%	
Overall	**3.2%**	**11.1%**

Discharge equation	Mid Section
Discharge uncertainty	IVE
Discharge reference	Rated

Data Collection Settings	
Salinity	0.000 PSS-78
Temperature	-
Sound speed	-
Mounting correction	0.000 %

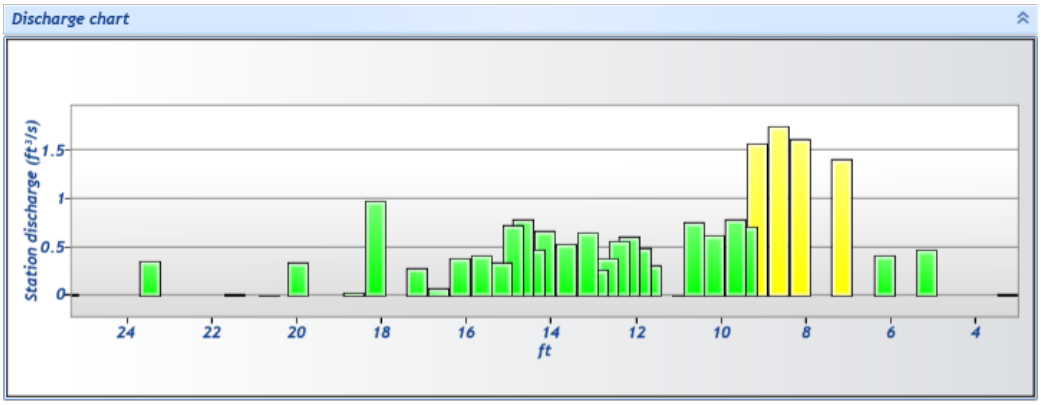
Summary overview

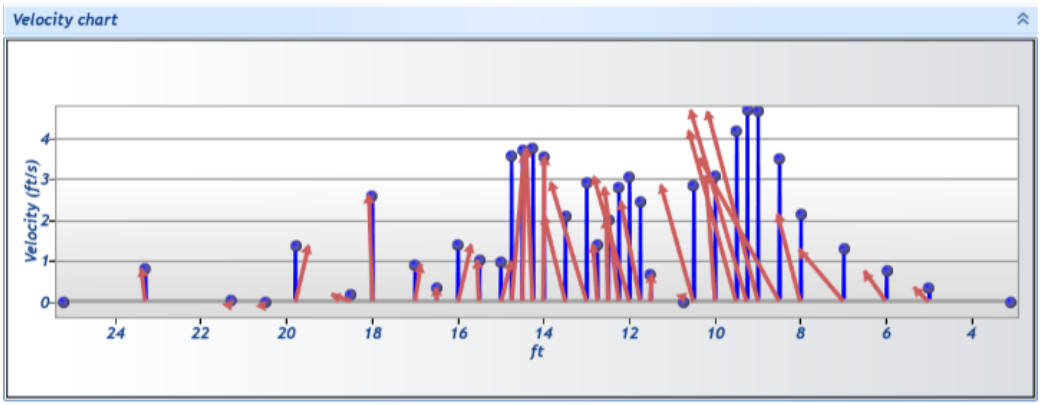
No changes were made to this file
Quality control warnings

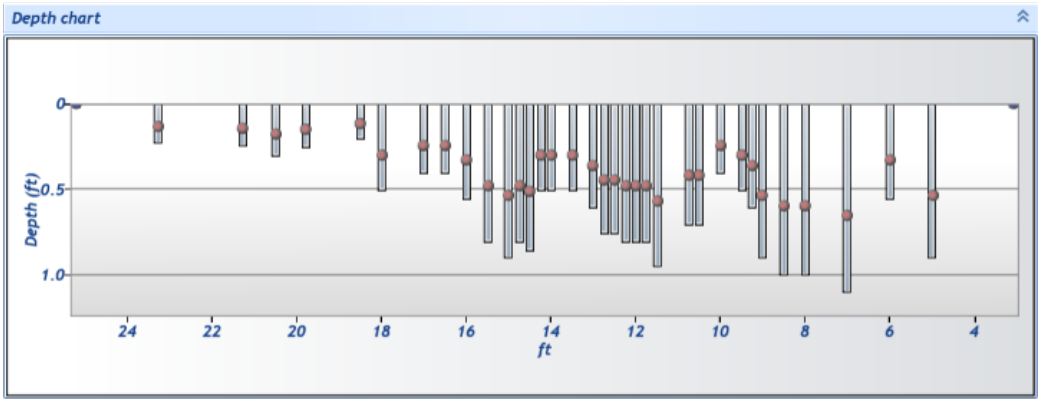
Discharge Measurement Summary

Site name	Derbycr nr state bridge
Site number	10072024
Operator(s)	Lfsc
File name	20241007-163452_Derbycr nr state bridge.ft
Comment	

Station Warning Settings		
Station discharge OK	Station discharge < 5.00%	
Station discharge caution	5.00% >= Station discharge < 10.00%	
Station discharge warning	Station discharge >= 10.00%	







Discharge Measurement Summary

Site name	Derbycr nr state bridge
Site number	10072024
Operator(s)	Lfsc
File name	20241007-163452_Derbycr nr state bridge.ft
Comment	

Measurement results

St#	Time	Location (ft)	Method	Depth (ft)	%Depth	Measured Depth (ft)	Samples	Velocity (ft/s)	Correction	Mean Velocity (ft/s)	Area (ft²)	Flow (ft³/s)	%Q	
35	4:28 PM	3.100	None	0.010	0.0000	0.000	0	0.0000	1.0000	0.3578	0.0095	0.0034	0.02	✓
34	4:27 PM	5.000	0.6	0.900	0.6000	0.540	14	0.3578	1.0000	0.3578	1.3050	0.4669	2.37	✓
33	4:28 PM	6.000	0.6	0.550	0.6000	0.330	15	0.7452	1.0000	0.7452	0.5500	0.4099	2.08	✓
32	4:26 PM	7.000	0.6	1.100	0.6000	0.660	21	1.2753	1.0000	1.2753	1.1000	1.4028	7.12	✓
31	4:26 PM	8.000	0.6	1.000	0.6000	0.600	23	2.1496	1.0000	2.1496	0.7500	1.6122	8.19	✓
30	4:25 PM	8.500	0.6	1.000	0.6000	0.600	26	3.5115	1.0000	3.5115	0.5000	1.7558	8.92	✓
29	4:24 PM	9.000	0.6	0.900	0.6000	0.540	18	4.6520	1.0000	4.6520	0.3375	1.5700	7.97	✓
28	4:24 PM	9.250	0.6	0.600	0.6000	0.360	20	4.6881	1.0000	4.6881	0.1500	0.7032	3.57	✓
27	4:23 PM	9.500	0.6	0.500	0.6000	0.300	48	4.1835	1.0000	4.1835	0.1875	0.7844	3.98	✓
26	4:22 PM	10.000	0.6	0.400	0.6000	0.240	42	3.0887	1.0000	3.0887	0.2000	0.6177	3.14	✓
25	4:21 PM	10.500	0.6	0.700	0.6000	0.420	47	2.8519	1.0000	2.8519	0.2625	0.7486	3.80	✓
24	4:20 PM	10.750	0.6	0.700	0.6000	0.420	27	-0.0045	1.0000	-0.0045	0.3500	-0.0016	-0.01	✓
23	4:19 PM	11.500	0.6	0.950	0.6000	0.570	26	0.6564	1.0000	0.6564	0.4750	0.3118	1.58	✓
22	4:18 PM	11.750	0.6	0.800	0.6000	0.480	26	2.4584	1.0000	2.4584	0.2000	0.4917	2.50	✓
21	4:18 PM	12.000	0.6	0.800	0.6000	0.480	23	3.0562	1.0000	3.0562	0.2000	0.6112	3.10	✓
20	4:17 PM	12.250	0.6	0.800	0.6000	0.480	62	2.7984	1.0000	2.7984	0.2000	0.5597	2.84	✓
19	4:16 PM	12.500	0.6	0.750	0.6000	0.450	59	1.9987	1.0000	1.9987	0.1875	0.3748	1.90	✓
18	4:15 PM	12.750	0.6	0.750	0.6000	0.450	42	1.4005	1.0000	1.4005	0.1875	0.2626	1.33	✓
17	4:14 PM	13.000	0.6	0.600	0.6000	0.360	28	2.9160	1.0000	2.9160	0.2250	0.6561	3.33	✓
16	4:13 PM	13.500	0.6	0.500	0.6000	0.300	61	2.1025	1.0000	2.1025	0.2500	0.5256	2.67	✓
15	4:12 PM	14.000	0.6	0.500	0.6000	0.300	57	3.5520	1.0000	3.5520	0.1875	0.6660	3.38	✓
14	4:12 PM	14.250	0.6	0.500	0.6000	0.300	43	3.7532	1.0000	3.7532	0.1250	0.4692	2.38	✓
13	4:11 PM	14.500	0.6	0.850	0.6000	0.510	33	3.7182	1.0000	3.7182	0.2125	0.7901	4.01	✓
12	4:09 PM	14.750	0.6	0.800	0.6000	0.480	46	3.5900	1.0000	3.5900	0.2000	0.7180	3.65	✓
11	4:08 PM	15.000	0.6	0.900	0.6000	0.540	41	0.9831	1.0000	0.9831	0.3375	0.3318	1.68	✓
10	4:07 PM	15.500	0.6	0.800	0.6000	0.480	44	1.0252	1.0000	1.0252	0.4000	0.4101	2.08	✓
9	4:07 PM	16.000	0.6	0.550	0.6000	0.330	29	1.3996	1.0000	1.3996	0.2750	0.3849	1.95	✓
8	4:06 PM	16.500	0.6	0.400	0.6000	0.240	51	0.3367	1.0000	0.3367	0.2000	0.0673	0.34	✓
7	4:05 PM	17.000	0.6	0.400	0.6000	0.240	44	0.9152	1.0000	0.9152	0.3000	0.2746	1.39	✓
6	4:03 PM	18.000	0.6	0.500	0.6000	0.300	63	2.6046	1.0000	2.6046	0.3750	0.9767	4.96	✓
5	4:02 PM	18.500	0.6	0.200	0.6000	0.120	34	0.1739	1.0000	0.1739	0.1800	0.0313	0.16	✓
4	4:02 PM	19.800	0.6	0.250	0.6000	0.150	34	1.3701	1.0000	1.3701	0.2500	0.3425	1.74	✓
3	4:00 PM	20.500	0.6	0.300	0.6000	0.180	22	0.0054	1.0000	0.0054	0.2250	0.0012	0.01	✓
2	3:59 PM	21.300	0.6	0.240	0.6000	0.144	39	0.0282	1.0000	0.0282	0.3360	0.0095	0.05	✓
1	3:58 PM	23.300	0.6	0.220	0.6000	0.132	54	0.8077	1.0000	0.8077	0.4290	0.3465	1.76	✓
0	3:57 PM	25.200	None	0.010	0.0000	0.000	0	0.0000	1.0000	0.8077	0.0095	0.0077	0.04	✓

Discharge Measurement Summary

Site name	Derbycr nr state bridge
Site number	10072024
Operator(s)	Lfsc
File name	20241007-163452_Derbycr nr state bridge.ft
Comment	

Quality Control Settings	
Maximum depth change	50.00%
Maximum spacing change	100.00%
SNR threshold	10 dB
Standard error threshold	0.0328 ft/s
Spike threshold	10.00%
Maximum velocity angle	20.0 deg
Maximum tilt angle	5.0 deg

Quality control warnings

St#	Time	Location (ft)	Method	Depth (ft)	%Depth	Measured Depth (ft)	Warnings
34	4:27 PM	5.000	0.6	0.900	0.6000	0.540	Standard Error > QC,Velocity Angle > QC
33	4:28 PM	6.000	0.6	0.550	0.6000	0.330	Standard Error > QC,Velocity Angle > QC
32	4:26 PM	7.000	0.6	1.100	0.6000	0.660	Standard Error > QC,Velocity Angle > QC
31	4:26 PM	8.000	0.6	1.000	0.6000	0.600	Standard Error > QC
30	4:25 PM	8.500	0.6	1.000	0.6000	0.600	Standard Error > QC,High % Spikes,Velocity Angle > QC
29	4:24 PM	9.000	0.6	0.900	0.6000	0.540	Large SNR Variation,Standard Error > QC
28	4:24 PM	9.250	0.6	0.600	0.6000	0.360	Standard Error > QC,High % Spikes
27	4:23 PM	9.500	0.6	0.500	0.6000	0.300	Standard Error > QC
26	4:22 PM	10.000	0.6	0.400	0.6000	0.240	Standard Error > QC
25	4:21 PM	10.500	0.6	0.700	0.6000	0.420	Standard Error > QC
24	4:20 PM	10.750	0.6	0.700	0.6000	0.420	SNR Threshold Variation,High % Spikes
23	4:19 PM	11.500	0.6	0.950	0.6000	0.570	Standard Error > QC
22	4:18 PM	11.750	0.6	0.800	0.6000	0.480	Standard Error > QC
21	4:18 PM	12.000	0.6	0.800	0.6000	0.480	Stn Spacing > QC,Standard Error > QC
20	4:17 PM	12.250	0.6	0.800	0.6000	0.480	Standard Error > QC
19	4:16 PM	12.500	0.6	0.750	0.6000	0.450	Standard Error > QC
18	4:15 PM	12.750	0.6	0.750	0.6000	0.450	Standard Error > QC
17	4:14 PM	13.000	0.6	0.600	0.6000	0.360	Standard Error > QC
16	4:13 PM	13.500	0.6	0.500	0.6000	0.300	Standard Error > QC
15	4:12 PM	14.000	0.6	0.500	0.6000	0.300	Standard Error > QC
14	4:12 PM	14.250	0.6	0.500	0.6000	0.300	Standard Error > QC
13	4:11 PM	14.500	0.6	0.850	0.6000	0.510	Standard Error > QC
12	4:09 PM	14.750	0.6	0.800	0.6000	0.480	Standard Error > QC
11	4:08 PM	15.000	0.6	0.900	0.6000	0.540	Standard Error > QC
10	4:07 PM	15.500	0.6	0.800	0.6000	0.480	Standard Error > QC
9	4:07 PM	16.000	0.6	0.550	0.6000	0.330	Standard Error > QC
8	4:06 PM	16.500	0.6	0.400	0.6000	0.240	Standard Error > QC
7	4:05 PM	17.000	0.6	0.400	0.6000	0.240	Standard Error > QC
6	4:03 PM	18.000	0.6	0.500	0.6000	0.300	Standard Error > QC
5	4:02 PM	18.500	0.6	0.200	0.6000	0.120	Standard Error > QC,Velocity Angle > QC
4	4:02 PM	19.800	0.6	0.250	0.6000	0.150	Standard Error > QC

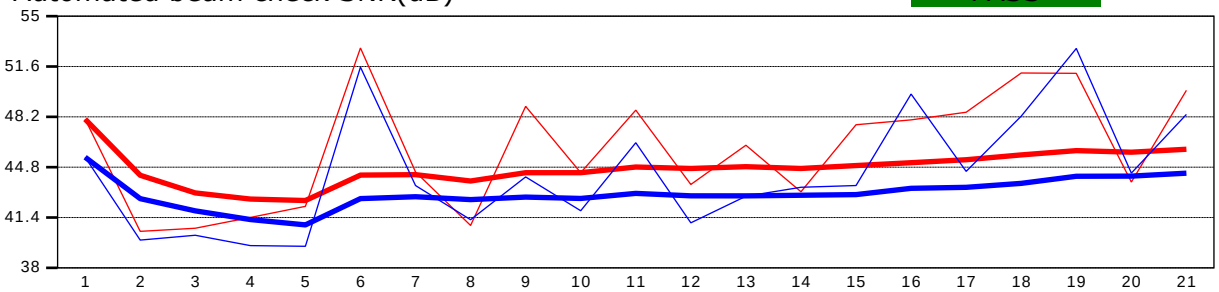
Discharge Measurement Summary

Site name	Derbycr nr state bridge
Site number	10072024
Operator(s)	Lfsc
File name	20241007-163452_Derbycr nr state bridge.ft
Comment	

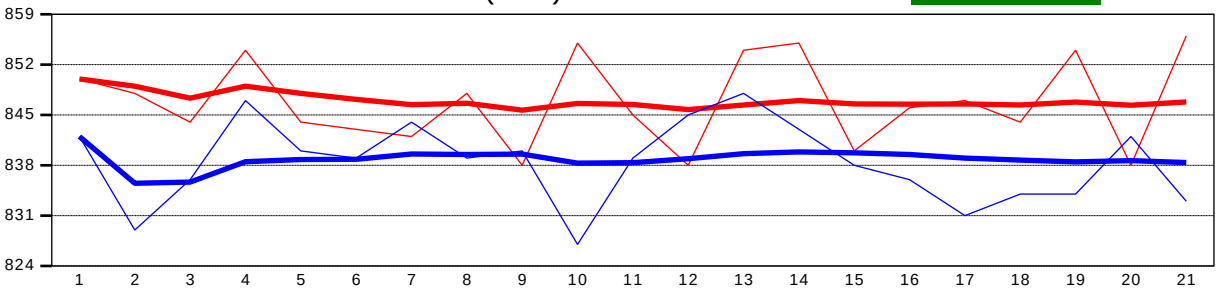
Beam 1	
Beam 2	

Automated beam check Start time 10/7/2024 3:57:21 PM

Automated beam check SNR(dB) PASS



Automated beam check Noise level(cnts) PASS



Automated beam check Quality control warnings

No quality control warnings

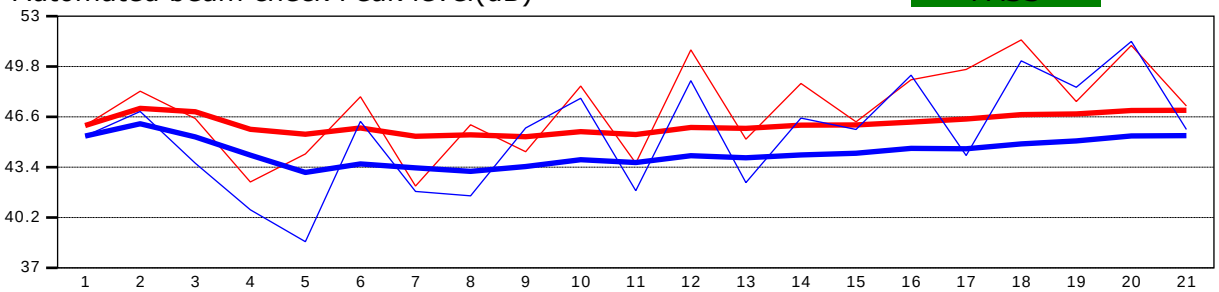
Discharge Measurement Summary

Site name	Derbycr nr state bridge
Site number	10072024
Operator(s)	Lfsc
File name	20241007-163452_Derbycr nr state bridge.ft
Comment	

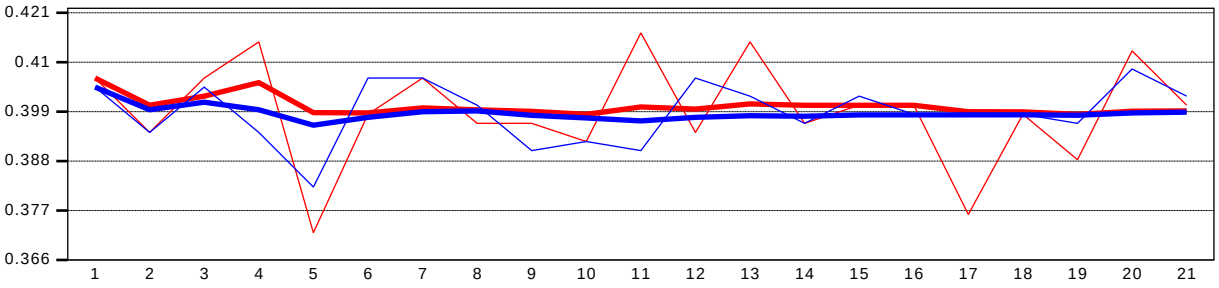
Beam 1	
Beam 2	

Automated beam check Start time 10/7/2024 3:57:21 PM

Automated beam check Peak level(dB) PASS



Automated beam check Peak position(ft) PASS



Automated beam check Quality control warnings

No quality control warnings

COLORADO
Colorado Water Conservation Board
Department of Natural Resources

1313 Sherman Street, Room 718
Denver, CO 80203

Derby Creek near State Bridge Temporary Streamgage

Location: 13N 336889 4415106

Installation Date: September 6, 2023

Equipment: Onset HOBO MX2001 water level logger, and staff gage.

Description: The streamgage consists of a datalogger and a pressure transducer protected in a 2 inch width PVC pipe, secured to the bank with fence post. The pressure transducer measured water level and temperature on a 15 minute intervals in a pool formed by boulders in a small break between two riffles. A co-located staff gage and reference marks were used to calibrate the water level measured by the pressure transducer.