

Memo

To: Tim Luke
From: Allen Merritt

Date: 6/14/2000

Subject: Water Measurement at Idaho Weir on Clear Creek

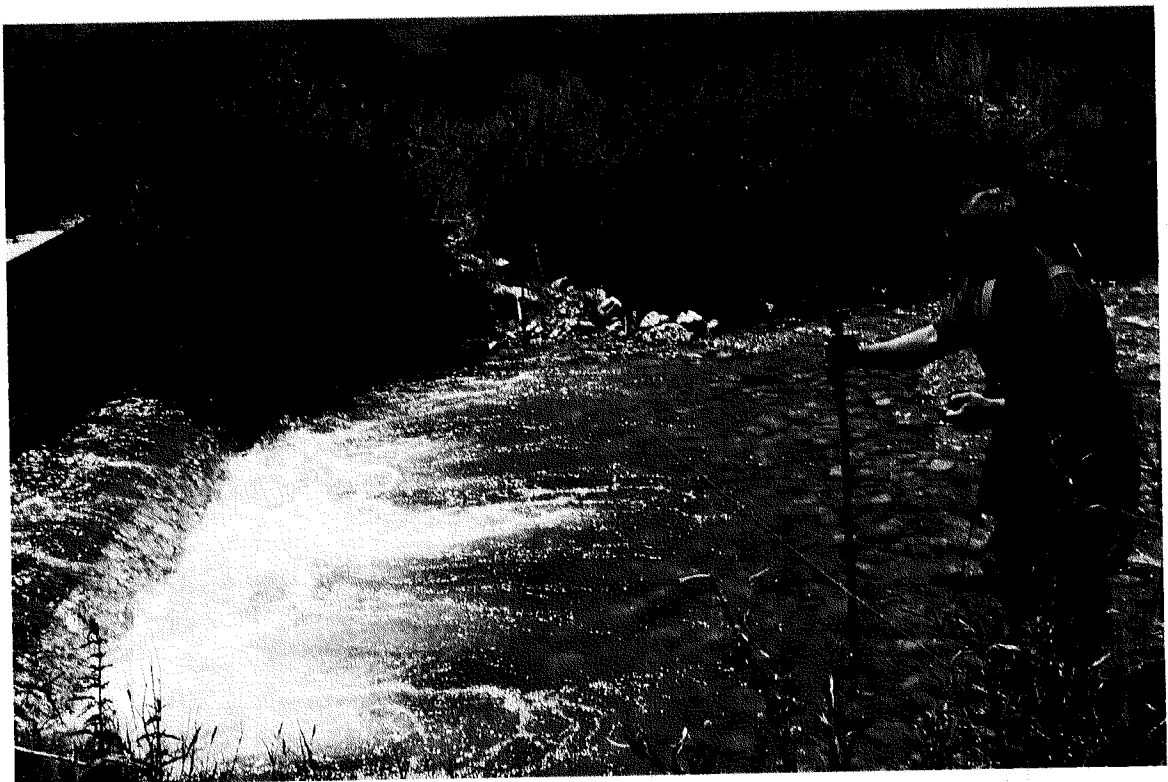
Yesterday at 2:00 p.m. John Freitag and I met Dave Sunberg, watermaster on Clear Creek at the Idaho weir. We were to me staff from UWR but they were not their yet. We observed water was being delivered to the Jones-Sessions ditch, water was flowing over the Idaho weir at a gage height of 0.49 feet and some water was leaking to the old Hoskins ditch but was not making it to the weir (estimate 0.1 cfs). We set about measuring the water and photographing the site.



This is the Jones and Sessions weir on their ditch. It is a 3' cipoletti weir. It was noted the weir plate crest was made out of metal but not sharp and the nap under the crest was not aerated. We measured the weir by placing a staff gage on the crest three times and they averaged 0.45 feet. Using a standard 3' cipoletti chart this yeilds 3.05 cfs. The watermaster indicated he was delivering 3.0 cfs.



This is the Hoskins headgate with approximately 0.1 cfs coming under the board and through the rocks.



The previous picture is where we measured the flow below the 10' cipoletti weir. The weir crest is wooden and it was not aerated. There is a staff gage on the right or east concrete wall of the structure which the watermaster uses. He indicated that he read 0.50' in the morning and was delivering 11.9 cfs. We read the gage at that time and it was 0.49' as best as we could tell. The watermaster indicated that that would be 11.54 cfs. We placed a staff gage along the crest and measured (0.44' left, 0.56' middle, 0.54' right). By averaging these it would yields 12.27 cfs.

We took the following discharge measurements using a swoffer meter. Our measurement was 13.13 cfs. The site cross sectioned was not exactly ideal with the large cobble rocks in the creek but the flow lines were straight.

Clear
Creek
flow
measure
ment:
6/13/00
By John
Freitag
and
Allen
Merritt
10'
below
Idaho
Weir

	station	width	Depth	area	v1	v2	vel	flow (Qi)
REW	1.0		0					
	2.0	1	0.25	0.25	0	0	0.00	0.00
	3.0	1	0.51	0.51	0.62	0.49	0.56	0.28
	4.0	1	0.53	0.53	1.11	1.1	1.11	0.59
	5.0	1	0.73	0.73	1.16	1.14	1.15	0.84
	6.0	1	0.88	0.88	0.79	0.78	0.79	0.69
	7.0	1	0.8	0.8	0.57	0.55	0.56	0.45
	8.0	1	0.65	0.65	0.65	0.56	0.61	0.39
	9.0	1	0.89	0.89	0.53	0.59	0.56	0.50
	10.0	1	0.92	0.92	0.35	0.47	0.41	0.38
	11.0	1	0.95	0.95	0.88	0.85	0.87	0.82
	12.0	1	0.91	0.91	1.45	1.01	1.23	1.12
	13.0	1	1.05	1.05	0.67	0.68	0.68	0.71
	14.0	1	1.12	1.12	0.59	0.45	0.52	0.58
	15.0	1	0.95	0.95	0.55	0.55	0.55	0.52
	16.0	1	0.82	0.82	0.41	0.56	0.49	0.40
	17.0	1	0.83	0.83	0.7	0.63	0.67	0.55
	18.0	1	0.64	0.64	1.13	1.15	1.14	0.73

	19.0	1	0.65	0.65	1.54	1.55	1.55	1.00
	20.0	1	0.66	0.66	1.83	1.88	1.86	1.22
	21.0	1	0.62	0.62	1.54	1.58	1.56	0.97
	22.0	1	0.4	0.4	0.9	0.88	0.89	0.36
	23.0	1	0.27	0.27	0.09	0.09	0.09	0.02
	24.0	0.75	0.17	0.1275	0	0	0.00	0.00
LEW	24.5	0	0	0				
					Total flow across section (cfs) =			13.13

After completing our measurements Mr. Fotheringham and Mr. Clark from UWR showed up a little after 3:00 p.m. They had just arrived and had not yet taken any measurements on Clear Creek. We shared with them what we had done and discussed possibly measuring the Jones Session ditch but it was decided not to since both watermasters used the weir as it was with no dispute. We agreed to fax notes to each other the next day. (Their fax 435-752-0062) They proceeded up to the Utah gage and we visited with Sunberg a little longer then returned to the office. I understand Sunberg was going to go up and watch the UWR folk. I told Sunberg I would provide him with our report and the information we get faxed from UWR.



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 DEPARTMENT OF NATURAL RESOURCES
 DIVISION OF WATER RIGHTS

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FAX COVER SHEET

Date 6/14/00

TO:

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FROM:

Name Scott Clark

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Number of pages transmitted including cover sheet 2

Comments: Current meter measurement on Clear Creek approx 100 ft down stream from old G.S. gage house. Measured flow 03.34 cfs

