

Tim Luke  
State of Id. Dept of Water Resources  
1301 No. Orchard St., PO Box 0098  
Boise, ID 83720-0098

RECEIVED  
NOV 14 2003  
Department of Water Resources

Dear Tim:

I am the manager of Marsh Valley Hydro-Electric facility on the Portneuf River. My main boss is Ted Sorenson, Sorenson Engineering, Idaho Falls. Local associates are Downey irrigators of Chesterfield Reservoir and McCammon irrigators. I pretty much manage this end of the Portneuf during non-irrigation season and work with Steve Hebdon, Portneuf River Water-master, during times of overlap (good water years) when I manage the sharing of water between the Hydro, Downey and McCammon.

I have noticed over the years that the Downey flume, close by the Topaz waterfalls, wasn't giving an accurate measurement of water. The Downey Flume = Hydro production (1 cfs = 7kw) + 10 cfs min. flow in Portneuf during generation + McCammon flume was supposed to approximately equal the Topaz gage. My suspicions were tested by scraping a few patches of hard water deposits from the bottom and sides of Downey and McCammon flumes down to gray concrete and finger-tip feeling the depth of same scraped patches. There was a discernable difference. I scraped clean the entire McCammon flume in an hour and registered 1.7 cfs less on their staff gage. The Arimo flume tested already clean.

Steve Hebdon gave me Brad VandeKamp's name as the USGS man who periodically surveyed the water flow at the Topaz gage. I asked Brad if he could survey a few more locations while in the area, which he did. Copies of Brad's report and my report are enclosed for your information. I hope you find this unsolicited information to be of some beneficial use.

Sincerely,



Ted Pulling  
Marsh Valley Hydro  
9158 Crystal Springs Rd.  
McCammon, ID 83250  
208-254-3615

Copies of USGS and Pulling reports to: Ted Sorenson, Downey Irrigators,  
McCammon Irrigators, Steve Hebdon



# United States Department of the Interior

GEOLOGICAL SURVEY



Water Resources Division  
366 D. Street  
P.O. Box 51099  
Idaho Falls, Idaho 83405-1099

Oct. 22, 2003

**TO:** Ted Pulling

**FROM:** Brad VandeKamp  
U.S. Geological Survey, Idaho Falls Field Office, 208-529-4287

**SUBJECT:** Discharge Measurements

Measurement Start Time		Measured CFS
0903	Portneuf River at Topaz (gage) (13-0730.00)	51.7
1059	Downey Flume	38.3
1230	Price Road Underpass	25.6
1333	Hydro Penstock	21.1

Please refer to this office if there are any questions. All measurements were made using a Price AA S-70. Standard USGS measuring procedures were used in all measurements.

Pulling Report on USGS Survey - 22 October 2003

All figures are cubic feet per second.

USGS*	Topaz Gage = 51.7
22 Oct. 03	Downey Flume = 37.8
* 5%	Price Rd. = 25.6
	Hydro Penstock Downstream = 21

Pulling  
22 Oct. 03

Downey = 49.5 Wrong per USGS, crusted.  
Subtract 11.7

McCammon, clean flume = 7  
Min. Flow = 10  
Arimo flume = 15  
Past Arimo = 3?

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A.		B.	
* Downey	37.8	Hydro	16.8
* -Penstock	21.0	+Min. Flo.	10.0
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Hydro	16.8	* In River	26.8
		* Price Rd.	25.6
C.		D.	
* Downey	37.8	* Price Rd.	25.6
McCammon	7.0	* Penstock	21.0
+Min. Flo.	10.0	+McCammon	7.0
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* System H2O	54.8	System H2O	53.6
* Topaz	51.7		

YP 31 Oct 03