STANLELY LAKE CREEK
WATER USERS ASSOCIATION

David K Bennion, Secretary
SLCWUA
2212 Ridge Point Way
Boise Idaho, 83712

Telephone (208) 345-9056

May 27, 2007

Mr. Nick Miller
Idaho Department of Water Resources
322 East Front Street
Boise, Idaho

Subject: Compliance IDWR February 20, 2007 Order Requiring Measuring Devices and Head gates in Water District 170, for SLWUA at SLC1

Dear Mr. Miller:

Thank you for meeting with Dean Boyle and myself on April 3. This meeting and the discussions from the Measurement and Control Workshop held in Stanley on Friday, April 6, were very helpful to us in understanding what was involved in complying with the IDWR Order Requiring Measuring Devices and Head gates in Water District 170.

This letter is intended as a formal compliance letter or notification of compliance for the Stanley Lake Creek Water Users Association, "SLCWUA", Diversion on Stanley Lake Creek (SLC1 Water District 170) to Idaho Department of Water Resources of the February 20 Order Requiring Measuring Devices and Controlling Works on Diversions in Water District 170.

It is my understanding that IDWR personnel have visited the SLC1 Diversion control and measurement devices and approve of the installation and compliance with the Order. It is my understanding based on the discussion at the workshop on April 6 that we should send a letter by June 1, 2007 describing our compliance.

The following is a brief description of the facilities for SLC1:

- Measurement Device: SLCWUA worked with the Idaho Fish and Game to incorporate a Rectangular Contracted Weir for flow measurement in the Fish Screen Facility. The Fish Screen Facility is located approximately 300 feet downstream of the diversion. The rectangular weir is located immediately downstream of the fish screen drum in the approach to the flume portion of the Fish Screen. The staff gauge for measuring the depth of flow over the weir is located well upstream in the stilling basin between the screen drum and the flume entrance. The weir width is 22 inches. The measuring device was installed by the SLCWUA in the spring of 2003.

- Control Device: The SLCWUA diversions structure consists of a concrete diversion structure in a minor fork of Stanley Lake Creek. The creek splits into two forks or arms around an island. The diversion structure allows the users to use check boards to raise the stream water level during the late summer for diversion through a head works controlled by a canal type slide gate. The head works structure and diversion gate allow for diversion of the SLCWUA water right without repeated disturbance and erosion of the stream bed. The head works structure consists of a concrete head wall with CMU pipe and canal gate with a cast iron slide gate with machined seating faces and wheel type lifting mechanism. The gate has a chain lock for securing a position. The head works gate was installed prior to 1973 and the diversion structure prior to 1989.

I am forwarding a draft of the Flow Table we have prepared for measuring and recording the flow at the SLCWUA diversion. The flow measurements were calculated following the same approach used in the University of Idaho Bulletin No.552, "Water Measurement"' by Dorrell C. Larsen. The flow conditions immediately upstream of the weir are not exactly the same as assumed for the calculations using Cone's Formula in the referenced bulletin. However they are similar, more importantly there are very stable controlled conditions. It will be very helpful for you to take some independent stream flow measurements during your field work this season to validate the accuracy of our calculated flows. If necessary we can adjust the flow coefficient used to better match the field conditions. Please contact me when you are planning to do field measurements, I would be interested in taking field measurements for multiple flow levels.

Thank you again for your assistance. Please contact me immediately if you have any questions regarding this letter of compliance responding to the February 20, 2007, Order or the SLCWUA (SLC1) diversion achieving the IDWR requirements.

Sincerely,

David K Bennion
Secretary, SLCWUA

cc: Sherrill Baird
Dean Boyle
Jim Carota
Mary Lucachick

Flow Table - Diversion SLC1 - 1.833 Ft. Weir

Stanley Lake Creek Water Users Association Diversion

Stanley Lake Creek --- Water District 170

DRAFT 4/29/2007

Head in ft. "H"	Crest length (L) 1.5 ft.	1.833 ft.	2.0 ft.
	Q, Flow in cubic feet per second		
0.1	0.158	0.193	0.211
0.11	0.182	0.222	0.242
0.12	0.206	0.252	0.275
0.13	0.232	0.284	0.310
0.14	0.259	0.316	0.345
0.15	0.286	0.350	0.382
0.16	0.315	0.385	0.420
0.17	0.344	0.421	0.459
0.18	0.374	0.458	0.500
0.19	0.405	0.495	0.541
0.2	0.437	0.534	0.583
0.21	0.469	0.574	0.626
0.22	0.502	0.614	0.671
0.23	0.536	0.656	0.716
0.24	0.571	0.698	0.762
0.25	0.606	0.741	0.809
0.26	0.642	0.785	0.857
0.27	0.678	0.830	0.906
0.28	0.715	0.875	0.955
0.29	0.753	0.921	1.006
0.3	0.792	0.968	1.057
0.31	0.830	1.016	1.109
0.32	0.870	1.064	1.162
0.33	0.910	1.113	1.215
0.34	0.951	1.163	1.270
0.35	0.992	1.213	1.325
0.36	1.034	1.265	1.380
0.37	1.076	1.316	1.437
0.38	1.119	1.369	1.494
0.39	1.162	1.422	1.552
0.4	1.206	1.475	1.611
0.41	1.250	1.530	1.670
0.42	1.295	1.585	1.730

Flow Table - Diversion SLC1 - 1.833 Ft. Weir

Stanley Lake Creek Water Users Association Diversion

Stanley Lake Creek --- Water District 170

Head in ft. "H"	Crest length (L) 1.5 ft.	1.833 ft.	2.0 ft.
	Q, Flow in cubic feet per second		
0.43	1.341	1.640	1.791
0.44	1.386	1.696	1.852
0.45	1.433	1.753	1.914
0.46	1.480	1.810	1.976
0.47	1.527	1.868	2.039
0.48	1.575	1.926	2.103
0.49	1.623	1.985	2.168
0.5	1.671	2.045	2.232
0.51	1.720	2.105	2.298
0.52	1.770	2.165	2.364
0.53	1.820	2.227	2.431
0.54	1.870	2.288	2.498
0.55	1.921	2.350	2.566
0.56	1.972	2.413	2.635
0.57	2.024	2.476	2.704
0.58	2.076	2.540	2.773
0.59	2.128	2.604	2.843
0.6	2.181	2.669	2.914
0.61	2.235	2.734	2.985
0.62	2.288	2.800	3.057
0.63	2.342	2.866	3.129
0.64	2.397	2.933	3.202
0.65	2.452	3.000	3.275
0.66	2.507	3.067	3.349
0.67	2.562	3.135	3.423
0.68	2.618	3.204	3.498
0.69	2.675	3.273	3.574
0.7	2.731	3.342	3.649
0.71	2.788	3.412	3.726
0.72	2.846	3.482	3.803
0.73	2.904	3.553	3.880
0.74	2.962	3.624	3.958
0.75	3.020	3.696	4.036

Computed from Cone's Formula: Reference Univesity of Idaho Bulletin 552, Water Measurement